

FROM CODE TO CULTURE: A SEMIOTIC ANALYSIS OF DIGITAL RESISTANCE IN INDONESIAN OPEN-SOURCE COMMUNITIES

KODE HINGGA BUDAYA: ANALISIS SEMIOTIKA PERLAWANAN DIGITAL
OLEH KOMUNITAS *OPEN-SOURCE* INDONESIA

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Abstract: *This article builds on a study of the BlankOn Linux movement in Indonesia, examining how local open-source communities perform digital resistance through semiotic and ideological practices. Using Roland Barthes' semiotic theory, Stuart Hall's representation theory, and Antonio Gramsci's concept of hegemony, the research analyzes community-produced artifacts—logos, naming conventions, website design, and documentation—to uncover how they encode counter-hegemonic meanings. Data were collected through image analysis, discourse analysis of digital texts, and email interviews with community members. Findings show that BlankOn fuses local-nationalist values, such as the promotion of Indonesian language and cultural identity, with global open-source principles like gift culture and collaborative production. This hybrid identity challenges the dominance of proprietary software ecosystems, positioning the movement as both a technological innovator and a cultural-political actor. The analysis reveals that resistance in BlankOn is enacted less through direct confrontation and more via symbolic strategies that naturalize alternative technological ideologies.*

Key Words: *Digital resistance, Semiotics, BlankOn Linux, Ideology, Open-source*

Abstrak: *Artikel ini mengkaji gerakan BlankOn Linux di Indonesia untuk memahami bagaimana komunitas open-source lokal menunjukkan perlawanan digital melalui praktik-praktik semiotik dan ideologis. Berlandaskan teori semiotika Roland Barthes, teori representasi Stuart Hall, serta konsep hegemoni Antonio Gramsci, penelitian ini menganalisis artefak komunitas, seperti logo, konvensi penamaan, desain situs web, dan dokumentasi, untuk mengungkap bagaimana makna-makna tandingan terhadap arus utama dikonstruksi. Data diperoleh melalui analisis gambar, analisis wacana terhadap teks digital, serta wawancara melalui email dengan anggota komunitas. Hasil penelitian menunjukkan bahwa BlankOn menggabungkan nilai-nilai nasionalis-lokal, seperti penggunaan bahasa Indonesia dan identitas budaya, dengan prinsip-prinsip global open source seperti "gift culture" dan produksi kolaboratif. Identitas hibrid ini menantang dominasi ekosistem perangkat lunak proprietary, memposisikan gerakan sebagai inovator teknologi sekaligus aktor kultural-politik. Perlawanan yang dilakukan bukan melalui konfrontasi langsung, melainkan strategi simbolik yang menormalisasi ideologi teknologi alternatif.*

Kata-Kata Kunci: *Perlawanan digital, Semiotika, BlankOn Linux, Ideologi, Open source*

INTRODUCTION

In recent decades, a new arena of digital technology has been established where social, cultural, and political negotiations unfold. Within this sphere, digital resistance, i.e. the use of technological tools to challenge dominant socio-technical systems, has emerged as



a significant practice across the globe. Local technology communities, particularly those involved in open-source development, occupy a unique position and create their own bubble in these negotiations; they not only produce technological artifacts but also embed ideological statements within them. In Indonesia, the BlankOn Linux community exemplifies this phenomenon. Founded in 2004, BlankOn set out to create a Linux distribution specified for Indonesian users, such as the provision of national/local languages, local cultural identities, and flexible software for locals to provide an alternative media platform for civil society (Hidayanto et al, 2022; Lim, 2003). Over time, the community's activities evolved beyond software development, becoming a symbolic arena where contestations over technological sovereignty, cultural identity, and global digital trends intersect (da Rimini, 2010).

The strategic embedding of local identity into BlankOn's digital products demonstrates that resistance in technology is not limited to technical incompatibility with the systems. Instead, it involves design of signs, symbols, and narratives that articulate alternative visions of society and technology (Franklin, 2013). This form of resistance is deeply intertwined with questions of cultural autonomy, linguistic preservation, and national pride, e.g. values that resonate within broader postcolonial discourse in Indonesia. In the context of global digital capitalism, where proprietary software vendors such as Microsoft dominate market infrastructures, such efforts represent both practical and symbolic challenges to the hegemony of closed-source paradigms.

Despite the growth of open-source software (OSS) in Indonesia, research has mainly focused on its technical and economic dimensions such as code quality, licensing models, and adoption rates, rather than on its ideological and cultural dimensions. Research on local OSS movements tends to frame them as functional alternatives to proprietary software, with insufficient examination of how they serve as sites of ideological negotiation and identity construction (Choi et al, 2015; Devan & Tullio, 2008). Studies on global OSS communities have acknowledged cultural and political undercurrents (Kelty, 2008; Coleman, 2013), but these insights have not been substantially applied in Indonesian contexts. Consequently, the symbolic practices of Indonesian OSS communities remain underexplored, especially regarding how they leverage visual, textual, and discursive elements to position themselves within global and local ideological landscapes.

In particular, there is a lack of empirical research that integrates semiotic analysis with ideological critique to unpack the layered meanings embedded in the digital artifacts of local technology communities. While prior works have examined digital activism and resistance in broader political movements (Wolfson, 2012; Li & Prasad, 2018), few have scrutinized how grassroots technological projects in Indonesia—operating outside formal political structures—engage in counter-hegemonic practices. The absence of such inquiry leaves a gap in understanding how communities like BlankOn resist not only through code but also through culture, shaping discourses around technological independence and self-reliance.

This study addresses the gap by investigating the BlankOn Linux movement as a case of digital resistance in Indonesia, analyzing its semiotic and ideological strategies. The research is grounded in three interrelated theoretical frameworks. First, Roland Barthes' semiotic theory provides tools for decoding the denotative and connotative meanings of signs in BlankOn's digital artifacts, enabling an exploration of how visual and

textual elements generate cultural myths. Second, Stuart Hall's theory of representation offers a lens for examining how the community encodes and circulates meanings, as well as how audiences might decode them differently, revealing contested ideological spaces. Third, Antonio Gramsci's concept of hegemony frames the analysis of how BlankOn negotiates between dominant global software paradigms and alternative local visions, situating the community's work as a form of counter-hegemonic praxis. By synthesizing these frameworks, the study conceptualizes digital resistance as both a symbolic and material practice (Simanungkalit et al, 2025; Pertiwi et al, 2023).

The significance of this inquiry extends beyond the case of BlankOn. It contributes to a richer understanding of how local technology communities in the Global South navigate the pressures of globalization, technological standardization, and cultural homogenization. In doing so, it also responds to calls within media and cultural studies to examine digital cultures from non-Western perspectives, foregrounding the agency of communities that operate outside dominant innovation hubs. Moreover, by situating the analysis within Indonesia's socio-political context—marked by postcolonial identity politics and the strategic adoption of global technological trends—the study offers insights into how open-source movements can become vehicles for broader ideological projects.

This article aims to examine how the BlankOn Linux community constructs its identity through semiotic resources embedded in its digital artifacts. In addition, it also analyzes how these artifacts articulate ideological positions that resist proprietary software hegemony. Lastly, it explores the interplay between local cultural values and global open-source ideologies in shaping BlankOn's counter-hegemonic narratives. Through these objectives, the study seeks to bridge the analytical gap between technical and cultural understandings of open-source movements in Indonesia, offering a model for examining digital resistance that is sensitive to both its symbolic and practical dimensions.

METHOD

The study adopted a qualitative research design rooted in interpretive paradigms to capture the symbolic and ideological dimensions of the BlankOn Linux movement. This approach was selected because the focal point of this study was not to measure variables quantitatively but to interpret meanings embedded in visual and textual artifacts and to understand community members. The inquiry was guided by semiotic analysis, informed by Roland Barthes' concepts of denotation, connotation, and myth, alongside Stuart Hall's encoding/decoding model and Antonio Gramsci's theory of hegemony. These theoretical lenses allowed the analysis to traverse from micro-level sign interpretation to macro-level ideological positioning, situating the BlankOn community within broader socio-political and cultural contexts (Simanungkalit et al, 2025).

The participants were purposively selected from active members of the BlankOn Linux community. They included developers, designers, and coordinators who had direct involvement in the production and its promotional materials. Demographically, participants varied in age from their 20s to late 40s, reflecting both younger and senior members. Most held professional or academic backgrounds in information, computer, and technology (ICT) or related fields, and were distributed across several Indonesian regions, though predominantly in Java. This demographic spread reflected the community's reach beyond a single urban center, while also indicating its concentration

in regions with stronger internet and tech infrastructure. Participants' roles within the community influenced the depth of their contributions, with some providing insights on visual identity decisions, others explaining technical-ideological linkages, and several offering historical perspectives on the movement's evolution.

Data collection relied on three primary sources. First, visual materials—including the official BlankOn logos across various versions, release wallpapers, and user interface screenshots—were systematically gathered from the community's repositories, websites, and promotional channels. Second, textual materials such as website content, release notes, naming rationales for software versions, and community forum posts were compiled to capture the discursive construction of identity and ideology. Third, email interviews with selected community members were conducted to elicit explanations, reflections, and intentions behind design choices and ideological stances. The interviews were semi-structured, allowing for consistent thematic coverage while permitting respondents to elaborate freely. The triangulation of visual, textual, and interview data enhanced the credibility and richness of the analysis.

The data analysis followed a sequential process. Visual artifacts were first examined for their denotative elements—shapes, colors, typography—before moving to connotative associations and the identification of underlying myths in the Barthesian sense. Textual materials underwent discourse analysis to reveal patterns in word choice, thematic emphases, and ideological framing, drawing on Hall's encoding/decoding framework to interpret how messages were constructed and potentially received. Interview data were coded thematically to link participant perspectives with the semiotic and discursive patterns found in the artifacts. This integrative analysis allowed for the identification of counter-hegemonic narratives and hybrid ideological constructions that merged local cultural nationalism with global open-source ideals.

Ethical considerations were integral throughout the study. Permission to use and analyze community-produced materials was obtained in accordance with the community's open-source licensing practices, and explicit informed consent was secured from interview participants. Anonymity was maintained by omitting personally identifying information in the presentation of findings, unless participants explicitly requested attribution in recognition of their public community roles. The research was conducted with respect for the collaborative ethos of the open-source movement, ensuring that the analysis would not misrepresent or exploit the community's work but rather contribute to scholarly and public understanding of its significance.

FINDINGS AND DISCUSSION

The section is organized into three interconnected themes. First, the semiotic construction of BlankOn's identity through its visual and linguistic elements. Second, the representation of ideology embedded in its digital artifacts and discourse. Third, the intersection of local identity and global technological movements, synthesizing semiotic and ideological insights to reveal the project's hybrid cultural and political positioning.

Semiotic Construction of Identity

The visual and verbal identity of the BlankOn Linux project plays a central role in addressing its social positioning. As a locally-developed open-source distribution, BlankOn's brand identity is not merely a marketing tool but a medium of cultural expression as well as political stance. Analysis of its logo, color schemes, mascots, and

release naming conventions reveals a conscious fusion of global technological aesthetics with Indonesian cultural identities. This fusion operates on both denotative and connotative levels, producing what Barthes (1972) would call myths—cultural narratives that naturalize ideological positions.

At the denotative level, the BlankOn's logo takes the form of a stylized circle, visually resonant with the image of a compact disc or a loading icon, instantly associating the project with digital technology and software media. Its clean, geometric lines and minimalist design conform to contemporary global design trends, aligning BlankOn with established visual codes of the technology sector. The dominant use of deep blue conveys attributes such as stability, trust, and professionalism, qualities frequently reinforced in global tech branding (Morrison & Buhalis, 2023).

Connotatively, however, these same design choices are embedded with meanings specific to Indonesia's cultural and political context. The circular motif is evocative of unity and inclusivity, mirroring the national motto *Bhinneka Tunggal Ika* (Unity in Diversity). Blue, in this reading, extends beyond a corporate aesthetic; it carries the symbolic resonance of peace, sovereignty, and the archipelagic nation's maritime identity. Such layering of meanings reflects Hall's (1997) argument that representation is not a direct reflection of reality but an active process of meaning construction, in which symbols are invested with culturally specific associations.

The integration of local identity becomes even more explicit in the community's use of mascots and thematic release identities. Early releases featured the mascot "Tepus," inspired by local flora, which served not only as a friendly visual signifier but also as a culturally rooted symbol that connected the technological product to the Indonesian ecological environment. Subsequent releases adopted names tied to geographic and cultural markers, such as *Meuligoe* (transl. Acehnese for "palace") and *Uluwatu* (a Balinese temple complex), that function as semiotic anchors to diverse regions and traditions within the archipelago. While ostensibly functioning as version identifiers, these names perform symbolic labor, reinforcing cultural pride and geographic inclusivity within the national frame (Kelty, 2008; Coleman, 2013).

Language choice in branding and interface design amplifies this identity work. BlankOn's consistent use of Bahasa Indonesia across its website, installation guides, and graphical user interfaces diverges from the convention in global open-source distributions, where English typically dominates. Denotatively, this linguistic choice enhances accessibility for domestic users (Indonesians); connotatively, it asserts the legitimacy of the Indonesian language as a medium for high-tech communication, subtly challenging linguistic hierarchies in global technology discourse (Aji et al, 2022; Li & Prasad, 2018). From a Barthesian perspective, this linguistic policy contributes to a myth of technological sovereignty, where the operating system becomes emblematic of a self-reliant nation able to define its own digital tools in its own language (Puspita et al, 2023; Adonis, 2019).

Barthes' (1972) concept of myth is particularly useful in unpacking how these semiotic strategies evolve ideologically. In BlankOn's case, the culturally-inflected design choices, the circle for unity, the national language for accessibility, become naturalized as simply "what an Indonesian OS looks like." This naturalization obscures the ideological labor involved in rejecting default Western-centric norms in software branding, replacing them with a locally-resonant aesthetic that simultaneously claims global technical competence.

Such semiotic work is not an isolated branding exercise but a subtle form of digital resistance. As Stewart (2007) observes, local technology actors often domesticate global ICT symbols to align with local cultural narratives, creating a hybrid yet compact identity that both participates in and resists global technological culture. In BlankOn's case, hybridity is achieved not by rejecting global design conventions outright, but by infusing them with cultural and linguistic markers that shift their ideological valence. The result is a brand that is legible within the global open-source ecosystem while maintaining a distinctly Indonesian voice.

The strategy extends into the interplay between visual and verbal signs (de Souza, 2005), such as the use of particular visual motif of the logo reinforced verbally in promotional narratives that frame BlankOn as "*bangga buatan Indonesia*" ("proudly made in Indonesia"), positioning "the Indonesian OS" as both a technological product and a cultural artifact at the same time. This dual framing resonates with Gramsci's (1971) notion of counter-hegemony, in which subordinate groups challenge the dominance of ruling paradigms not only through direct opposition but by creating alternative cultural entities and practices that embody their values. By embedding nationalist and local narratives into its semiotic repertoire, BlankOn offers an implicit critique of proprietary software ecosystems dominated by multinational corporations, such as Microsoft, without engaging in overtly confrontational rhetoric.

Importantly, this semiotic construction also aligns with global open-source ideologies, particularly the "gift culture" ethos (Kelty, 2008; Bergquist & Ljungberg, 2001; Raymond, 1999). By situating itself within a global network of collaborative software production, while simultaneously asserting a culturally specific identity, BlankOn performs what can be described as "situated globalism" (Wolfson, 2012)—a position from which it can contribute to global technical commons while resisting cultural homogenization (Zeitlyn, 2003). This alignment allows the community to bridge local and global audiences, fostering participation from Indonesian users while retaining credibility in the broader open-source movement (Von Krogh & Spaeth, 2007).

Thus, the semiotic construction of BlankOn's identity operates at multiple, intersecting levels, namely functional (communicating reliability and professionalism to a tech-savvy audience), cultural (embedding symbols, language, and narratives that affirm Indonesian identity), and ideological (naturalizing a vision of technological sovereignty that challenges proprietary and Western-centric software hegemony). The result is a hybrid brand that simultaneously reflects and shapes the socio-political context of its production. By examining these semiotic layers, we can better understand how local technology communities mobilize visual and verbal signs not only to differentiate their products but to enact symbolic resistance within the global digital order.

Representation of Ideology in Digital Artifacts

Building on the semiotic construction of identity discussed earlier, the ideological dimension of BlankOn Linux becomes particularly visible in its official discourse—encompassing website texts, documentation, and release notes. These materials not only provide technical information but also encode broader ideological messages (Yue et al, 2025), reflecting the community's positioning in relation to nationalism, technological independence, and the collaborative ethos of the open-source movement. Hall's (1997) encoding/decoding model is useful for unpacking how these ideological messages are constructed and interpreted (Song, 2025). In this framework, the BlankOn development

team (as message producers) encodes meanings into digital artifacts, which are then decoded by users and observers, who may adopt a dominant-hegemonic, negotiated, or oppositional reading depending on their context and perspective.

Nationalism and Cultural Assertion

Official website texts frequently reference BlankOn as “bangga buatan Indonesia” (“proudly made in Indonesia”), a phrase that is both descriptive and ideologically loaded. Denotatively, it identifies the product’s origin; connotatively, it positions the operating system within the nationalist discourse of self-reliance in technology. This aligns with Gramsci’s (1971) notion of counter-hegemony, where the creation of alternative institutions—here, a national Linux distribution—serves to challenge the dominance of foreign proprietary software (Lim, 2017). Release notes often include acknowledgments to Indonesian contributors and references to local cultural icons, further reinforcing the product as a cultural as well as technological achievement.

Technological Independence

A recurrent ideological thread in documentation is the emphasis on independence from proprietary ecosystems. Phrases such as “*sistem operasi bebas dan terbuka*” (“free and open operating system”) and explicit mentions of avoiding dependence on multinational vendors encode an ideological stance favoring sovereignty over technological infrastructure and collaborative ethos (Stewart & Gosain, 2006). This reflects the wider discourse in global free software communities about autonomy, but reframes it within an Indonesian national context. The documentation often highlights the use of locally developed applications, further embedding this ideological position.

Collaborative Ethos and Gift Culture

Alongside nationalist narratives, BlankOn’s discourse embeds the collaborative ethos central to the open-source movement. Community guidelines, developer documentation, and mailing list archives frequently reference *gotong royong*—the Indonesian concept of mutual cooperation—as both a cultural value and a practical mode of production. This linguistic and conceptual alignment with open-source’s “gift culture” (Raymond, 1999) serves as a bridge between local cultural practices and global collaborative norms, enabling a negotiated position in the open-source discourse (Kelty, 2008).

Table 1.
Encoding/Decoding Dynamics

Ideological Code	Encoding in Digital Artifacts	Dominant-Hegemonic Reading	Negotiated Reading	Oppositional Reading
Nationalism	Use of national language, cultural references, slogans like “ <i>bangga buatan Indonesia.</i> ”	Users see BlankOn as a symbol of national pride and technological self-reliance.	Users appreciate local branding but still prefer global distributions for technical reasons.	Users reject nationalist framing, viewing tech as global and apolitical.
Technological Independence	Emphasis on avoiding	BlankOn seen as a strategic move	Users agree with independence	Users dismiss independence

	proprietary software, highlighting locally developed apps.	toward digital sovereignty.	but still use some proprietary tools for convenience.	narrative as impractical in a globalized tech market.
Collaborative Ethos	References to <i>gotong royong</i> , open participation guidelines, crediting contributors.	Viewed as an embodiment of local values harmonizing with global open-source culture.	Users value collaboration but see it as idealistic given resource constraints.	Users doubt the sincerity or practicality of such collaboration in competitive tech development.

This dynamic suggests that while the encoding of ideology is deliberate and consistent, the decoding process is contingent on user identities, experiences, and priorities. For some, BlankOn's national and collaborative narratives are compelling; for others, they are secondary to technical performance or compatibility.

Negotiating Global Open-Source Discourse

BlankOn's ideological positioning is not purely oppositional to global norms. Instead, it engages in what Hall (1997) would term a negotiated reading of global open-source discourse—adopting principles of openness, collaboration, and decentralization, but embedding them in a localized narrative frame. This strategy allows the community to assert a distinct identity while participating in global networks, a form of what Wolfson (2012) describes as “situated globalism.”

For instance, release documentation often acknowledges upstream contributions from global projects like Debian, while simultaneously highlighting the customization and localization work done by Indonesian developers. This dual acknowledgment encodes a message of interdependence rather than isolationism: BlankOn is part of the global commons, yet distinct in its cultural and ideological commitments.

Symbolic Framing in Documentation and Release Notes

The symbolic framing in BlankOn's release materials often juxtaposes technical descriptions with cultural metaphors. Technical changes may be described using language drawn from Indonesian geography or mythology, subtly reinforcing the link between the product and national identity. This blending of registers supports Barthes' (1972) concept of myth by creating a seamless connection between the functional and the cultural, making the ideological dimension appear natural and self-evident.

Implications for Digital Resistance

The ideological coding within BlankOn's discourse represents a form of symbolic resistance against the hegemony of global proprietary software markets. Rather than adopting an explicitly confrontational tone, the community engages in what Scott (1990) calls “everyday forms of resistance”—embedding alternative visions of technology within the mundane formats of release notes, documentation, and interface text. By naturalizing local cultural markers and political stances within these artifacts, BlankOn shapes user expectations and normalizes the idea that open-source technology can be both globally compatible and locally grounded.

The analysis of BlankOn Linux's semiotic construction of identity and its ideological representation in digital artifacts reveals a consistent strategic orientation: to assert a culturally grounded yet globally connected identity (Lim, 2014). This intersectional positioning situates BlankOn not simply as a technical alternative to proprietary systems, but as a socio-technical movement that blends local cultural signifiers with the global ethos of open-source collaboration.

Hybridization as a Strategic Position

Hybridization here refers to the simultaneous adoption and adaptation of global technological norms alongside the assertion of local cultural specificity. As Hall (1991) notes, cultural identity in a globalized world is not static or isolated but constantly in dialogue with wider flows of influence. BlankOn's branding, linguistic policy, and discourse demonstrate an ability to speak both "languages" of technology: the universalist, English-dominated vocabulary of open-source, and the culturally rooted, nationalist register of Indonesian self-reliance.

From the semiotic perspective, BlankOn's logo, mascots, and release naming conventions adopt design codes recognizable to global Linux users—minimalist lines, abstract geometric forms—while infusing them with Indonesian language, local flora and fauna, and regional place names. This dual register allows the brand to be legible to international open-source audiences without alienating domestic users who might feel excluded by purely foreign-facing aesthetics. From the ideological perspective, the project articulates a stance of technological independence that is intelligible within global debates on software freedom while firmly anchored in local discourses of national sovereignty.

Negotiating the Global Open-Source Ethos

BlankOn's engagement with the open-source movement exemplifies what Wolfson (2012) calls "situated globalism"—a mode of participation in transnational networks that retains local agency and cultural specificity. In its community documentation, BlankOn aligns itself with core open-source principles such as transparency, collaborative development, and decentralization. However, these principles are reframed through the lens of Indonesian cultural values like *gotong royong*, which not only reinforces a familiar frame for local contributors but also introduces a distinctive conceptual contribution to the global discourse.

This negotiation is not without tension. On one hand, the use of upstream projects like Debian reflects a dependency on global infrastructure; on the other, the local customization of software, language, and user interface asserts autonomy. The acknowledgment of these upstream dependencies in release notes can be read as a pragmatic recognition of interdependence, avoiding the pitfall of isolationism while maintaining ideological integrity.

Semiotics of Belonging and Difference

The hybrid positioning also operates through what Barthes (1972) terms the "myth" of naturalized cultural meaning. By embedding Indonesian motifs and language in what might otherwise be culturally neutral (or Western-centric) digital forms, BlankOn produces a myth of belonging—a representation in which technology appears inherently

aligned with local cultural identity. This myth fosters a sense of collective ownership among users, transforming the operating system from a mere tool into a shared cultural artifact.

Yet this sense of belonging is always in dialogue with a myth of difference. By visibly marking itself as Indonesian in a global ecosystem, BlankOn signals its distinctiveness from both proprietary and open-source projects that lack such cultural embedding. This duality—belonging to a global movement yet standing apart as culturally specific—is central to BlankOn’s appeal and to its ideological function as a form of digital resistance.

Counter-Hegemony in a Networked World

From a Gramscian perspective, BlankOn’s hybrid strategy constitutes a form of counter-hegemonic practice. Rather than rejecting global norms outright, the community selectively incorporates them into a framework that serves local priorities. This is a pragmatic form of resistance, one that recognizes the impossibility of technological autarky in a networked world while still contesting the cultural and economic dominance of proprietary software vendors.

This counter-hegemonic orientation is evident in the encoding of nationalist narratives into technical discourse. Documentation and promotional materials frame BlankOn as a pathway toward *kemandirian teknologi* (technological self-reliance), a goal that resonates both with postcolonial narratives of independence and with contemporary concerns about digital sovereignty. By situating itself as a national project within an international movement, BlankOn creates a discursive space in which global collaboration and local control are not seen as mutually exclusive.

Cultural Capital in the Global Commons

Participation in the global open-source ecosystem is not only about code contribution but also about accruing cultural capital (Bourdieu, 1986) within that commons. BlankOn’s distinct branding and localized approach enhance its visibility in a crowded field of Linux distributions. This visibility, in turn, can attract both domestic contributors proud of the project’s cultural grounding and international collaborators interested in its unique positioning. The project thus leverages cultural capital—its status as an authentically local yet globally connected initiative—to secure a place in the open-source commons that is more than just technical.

Implications for Local Technology Movements

BlankOn’s hybrid positioning offers a potential model for other local technology movements seeking to navigate the tension between global integration and cultural specificity. The case demonstrates that it is possible to achieve technological credibility in global arenas without relinquishing local identity, provided that both semiotic and ideological strategies are consciously aligned. This alignment requires some aspects, namely symbolic consistency to that visual, linguistic, and narrative elements reinforce one another in conveying the desired hybrid identity. Another is ideological coherence that articulates a clear stance on key issues (e.g., sovereignty, collaboration) that is legible to both local and global audiences. The last is discursive adaptability that can translate local cultural values into terms recognizable in global discourse, and vice versa.

Despite its strategic strengths, hybrid positioning also entails challenges. The use of nationalist discourse may resonate domestically but risk being perceived as parochial or exclusionary in some international contexts. Similarly, reliance on upstream projects like Debian, while pragmatic, may be seen as undermining claims of technological independence. Navigating these tensions requires continual negotiation, both within the community and in its external communications.

Moreover, the reception of BlankOn's encoded messages is not uniform. As the encoding/decoding model suggests, some users may fully embrace the nationalist and collaborative narratives (dominant-hegemonic reading), others may selectively accept them while prioritizing other concerns such as software compatibility (negotiated reading), and still others may reject the ideological framing altogether (oppositional reading). This diversity of interpretations means that the project's ideological impact is always partial and contingent.

The intersection of local identity and global technological movements in BlankOn Linux illustrates the possibilities and complexities of hybrid cultural production in the digital age. Through the interplay of semiotic design and ideological discourse, BlankOn constructs a brand and a community that are simultaneously Indonesian and open-source, nationalist and collaborative, distinctive yet globally connected. This synthesis is not static but dynamic, evolving with shifts in both the local socio-political context and the global open-source landscape. By understanding BlankOn as a hybrid actor, we can better appreciate the nuanced ways in which local technology communities participate in global movements—not as passive recipients of global norms, but as active producers of culturally situated alternatives. This perspective opens avenues for further research into how such communities balance competing demands of technical excellence, cultural representation, and ideological commitment in an increasingly interconnected world.

CONCLUSION

This study examined the BlankOn Linux project as a case of digital resistance in the Indonesian open-source landscape, focusing on the semiotic construction of identity, the ideological encoding in its digital artifacts, and its hybrid positioning between local identity and global technological movements. Drawing on Barthes' semiotics, Hall's representation and encoding/decoding model, and Gramsci's concept of hegemony, the analysis shows that BlankOn's strategies go beyond technical branding to become deliberate cultural and political acts.

The first key finding is that BlankOn's visual and linguistic choices—logo, color schemes, mascots, release names, and primary use of Bahasa Indonesia—operate on both denotative and connotative levels. These elements align with global open-source design norms while embedding local cultural motifs and narratives. In Barthesian terms, they produce a myth of Indonesian technological identity, naturalizing the link between digital tools and national cultural values. The second finding reveals that BlankOn's discourse in official websites, documentation, and release notes encodes a layered ideological stance. It blends nationalism (pride in locally developed technology), technological independence (resistance to proprietary systems), and a collaborative ethos (framing *gotong royong* in line with open-source's gift culture). Through Hall's model, these messages emerge as open to multiple readings—dominant-hegemonic, negotiated, or oppositional. The third finding shows that BlankOn negotiates between local rootedness and global participation. It adopts open-source principles like transparency and

decentralization, reframing them through Indonesian cultural concepts. This hybridization, akin to Wolfson's (2012) "situated globalism," makes BlankOn relevant to both domestic and international audiences, while building cultural capital in the global open-source commons.

This research contributes to digital resistance studies by demonstrating how local technology communities can enact counter-hegemonic practices through symbolic and discursive strategies, not only direct confrontation. It extends semiotic analysis in digital contexts by showing how global and local sign systems can be intentionally fused to assert cultural autonomy. It also enriches studies of open-source in the Global South, highlighting the role of ideological framing and cultural representation in shaping technology adoption and identity. For Indonesia, the findings suggest that technological independence movements gain strength by integrating cultural narratives into technical discourse, making resistance relatable and aspirational. Globally, BlankOn shows that localized adaptations can diversify and strengthen the open-source ecosystem, proving that resistance can be collaborative while still challenging dominant norms.

This study is limited by its reliance on publicly available artifacts and email interviews. Future research could employ ethnographic methods, compare similar projects across Southeast Asia, or examine how hybrid positioning evolves alongside shifts in global and domestic technological landscapes. In sum, BlankOn Linux illustrates that in the 21st century, digital resistance is as much about the politics of representation as it is about code—turning software into both a cultural statement and a platform for reimagining technological sovereignty.

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