



DOI: <https://doi.org/10.38035/dijms.v7i3.6238>
<https://creativecommons.org/licenses/by/4.0/>

From Aristotle to Eco: A Semio-Rhetorical Analysis of Corporate Financial Reporting and Meaning Management on the Indonesia Stock Exchange (2014–2024)

Apollo Apollo¹

¹University of Mercubuana, Jakarta, Indonesia, email. apollo@mercubuana.ac.id

Corresponding Author: apollo@mercubuana.ac.id¹

Abstract: This study examines corporate financial reporting as a strategic management communication practice rather than merely a technical disclosure of financial data. Drawing on Aristotle's classical rhetorical framework (*ethos*, *logos*, and *pathos*) and integrating semiotic theories developed by Ferdinand de Saussure, Charles Sanders Peirce, Roland Barthes, Roman Jakobson, Charles Morris, and Umberto Eco, this research applies a semio-rhetorical approach to analyze how meaning, legitimacy, and corporate identity are constructed in financial discourse. The study analyzes Annual Reports and Sustainability Reports of 21 publicly listed manufacturing companies on the Indonesia Stock Exchange (IDX) from 2014 to 2024. Using NVivo 14 Plus, the research conducts systematic narrative coding to identify rhetorical appeals and semiotic sign systems—including *icon*, *index*, and *symbol*—across textual, numerical, and visual disclosures. The findings indicate that corporate financial reporting functions as a form of managerial meaning management. *Ethos* is constructed through governance narratives, ethical positioning, and ESG disclosures; *logos* is reinforced through the selective structuring and visualization of financial data to establish numerical legitimacy; and *mythos*, following Barthes' theory of myth, emerges in corporate narratives emphasizing resilience, innovation, and national contribution. Jakobson's communicative functions and Morris's pragmatic semiotics further demonstrate how financial language operates beyond information delivery to shape stakeholder interpretation, while Eco's concept of the *open text* explains the interpretive flexibility of financial reports across different audiences. This study introduces the Financial Semio-Rhetorical Model (FSRM) as a conceptual contribution that synthesizes classical rhetoric and multi-layered semiotic theory to explain how financial reporting operates as a symbolic and strategic management tool. The findings contribute to management science by demonstrating that financial reports are not neutral representations, but discursive instruments through which organizations manage perception, legitimacy, and trust in emerging capital markets.

Keyword: Corporate Financial Reporting, Semio-Rhetorical Analysis, Meaning Management, Corporate Narrative, Strategic Management, Indonesia Stock Exchange.

INTRODUCTION

Human resource management faces complex challenges in the digital age, which demands high efficiency and rapid decision-making. Efficiency in HR management is crucial for improving productivity, competitiveness, and organizational sustainability (Pulungan, 2025; Putri, 2024). Digital transformation has prompted organizations to adopt information systems capable of integrating various HR functions in an automated manner (Arianto & Susetyo, 2022; Ulum et al., 2025). In this context, the Human Resource Information System (HRIS) has emerged as a technological solution that integrates HR administrative processes, from recruitment, payroll, attendance, performance evaluation, to career development in a single integrated platform (Cahyono, 2025; Panjaitan, 2023). HRIS is defined as an integrated system designed to facilitate the management of human resource data and information within an organization (Hosain et al., 2020). This system automates administrative functions such as payroll, attendance, recruitment, and performance evaluation, thereby reducing operational time and costs (Cahyono, 2025; Panjaitan, 2023; Magege & Ngirwa, 2023).

The implementation of HRIS enables organizations to integrate HR data centrally, reduce redundancy, and improve data security (Arianto & Susetyo, 2022; Anuraga, 2021). This system also provides a platform for online training, data-driven evaluation, and adaptive HR management across various sectors, including education and industry (Pulungan, 2025; Ulum et al., 2025). Various studies show that HRIS not only reduces administrative burdens but also provides real-time data to support strategic decisions (Saputri et al., 2024; Jahan, 2025).

Human resource management efficiency encompasses an organization's ability to achieve HR objectives with minimal resource use but optimal results (Hanafi, 2020). Efficiency is achieved through proper HR needs planning, qualification-based recruitment, competency-based placement, and continuous training and development (Putri, 2024; Santika et al., 2025). HR management audits play an important role in identifying weaknesses and opportunities for improvement in recruitment, training, performance appraisal, and career development functions (Putri & Hwihanus, 2024; Mediana & Hwihanus, 2024). Effective audits increase transparency, fairness, and overall operational efficiency (Nugraha et al., 2024; Irmayanti et al., 2023; Janah et al., 2022).

Empirical research shows that HRIS improves efficiency through three main mechanisms. First, the automation of administrative processes reduces processing time and manual errors (Saputri et al., 2024; Jahan, 2025; Abuhantash, 2023). Second, data-driven decision-making provides real-time and accurate information for strategic decisions (Cahyono, 2025; Pandey & Singh, 2023). Third, increased productivity and employee satisfaction because HR can focus on strategic development rather than routine administration (Panjaitan, 2023; Sowmiya, 2025; Genty et al., 2025). Research in various sectors shows the positive impact of HRIS on organizational performance. In the banking sector, HRIS significantly improves operational effectiveness and organizational performance (Magege & Ngirwa, 2023). In the pharmaceutical sector, HRIS contributes to increased efficiency and effectiveness of HR processes (Pandey & Singh, 2023). At a public university in Tanzania, HRIS automation substantially improved efficiency and performance (Innocent et al., 2025).

Although various studies have identified the benefits of HRIS, there is still a gap in understanding the specific mechanisms by which HRIS quantitatively improves HR management efficiency. Previous studies have been mostly descriptive and qualitative (Abuhantash, 2023; Pandey & Singh, 2023), while quantitative analyses measuring the contribution of each dimension of HRIS to efficiency are still limited, especially in the Indonesian context. In addition, the implementation of HRIS also faces various challenges. High initial costs and system integration complexity are major obstacles for many organizations (Cahyono, 2025; Saputri et al., 2024; Jahan, 2025; Pandey & Singh, 2023). Resistance to change and low digital literacy among employees also hinder HRIS adoption (Informasi et al., 2024). Other challenges include the need for continuous training and the

development of adequate technological infrastructure (Cahyono, 2025; Owaish, 2025; Innocent et al., 2025). High employee turnover and low motivation can affect the effectiveness of HRIS implementation, requiring data-driven strategies, inclusive leadership, and flexible well-being (Pulungan, 2025; Putri, 2024).

Based on these conditions, this study aims to quantitatively analyze the role of HRIS in improving HR management efficiency by identifying key dimensions that contribute significantly. The results of this study are expected to provide an empirical basis for organizations in optimizing HRIS implementation to achieve higher operational efficiency. Based on this conceptual and empirical review, this study proposes the following hypotheses: H1 states that the automation of administrative processes has a significant positive effect on HR management efficiency; H2 states that data-driven decision making has a significant positive effect on HR management efficiency; and H3 proposes that increased employee productivity has a significant positive effect on HR management efficiency.

METHOD

This research adopts a qualitative interpretive methodology grounded in semiotic theory, with the aim of examining how myth, logos, and ethos operate within the financial reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX). The methodological approach is hermeneutic and textual, not aimed at statistical generalization, but at uncovering the layered meanings and communicative strategies embedded within financial documents as semiotic texts.

The study follows an exploratory-descriptive design using semiotic textual analysis as the primary analytical strategy. This allows for the interpretation of signs (linguistic, numerical, visual, symbolic) within financial reports as conveyors of rhetorical and ideological meaning. The guiding framework is informed by six semioticians Saussure, Peirce, Barthes, Jakobson, Morris, and Eco supplemented by Aristotle's classical rhetoric.

The unit of analysis is the annual financial report (audited) of publicly listed manufacturing companies across various subsectors such as automotive, chemical, food and beverage, and metal industries. A purposive sampling strategy was used to select five companies that represent diverse subsectors and market capitalizations, ensuring coverage of both state-owned enterprises and private multinationals. The observation period spans 2014 to 2024, capturing ten years of reporting behavior, regulatory changes (e.g., adoption of PSAK 71–73), and major economic shifts including the COVID-19 pandemic and the transition to digital sustainability reporting.

Primary data were obtained from the official IDX website (www.idx.co.id) and company websites, focusing on the downloadable annual reports in PDF format. Supplementary materials included CEO letters, corporate social responsibility (CSR) sections, financial highlights, and management analysis and discussion sections. These documents were treated as integrated semiotic texts containing visual, numerical, and narrative elements.

The analysis of financial reports in this study was carried out using a multi-tiered semiotic strategy, combining structural and post-structural readings of texts across three key dimensions: myth, logos, and ethos. This strategy allowed for a layered interpretation of how meaning is constructed, communicated, and received through financial documentation in the Indonesian manufacturing sector.

The first layer of analysis focused on the mythic dimension, drawing primarily from Roland Barthes' theory of myth and Umberto Eco's semiotics of ideology. Here, financial reports were examined not merely as economic disclosures but as cultural narratives. Sections such as the CEO's Message, Sustainability Reports, and Corporate Social Responsibility Statements were scrutinized for their use of recurring motifs such as "resilience", "transformation", and "stakeholder commitment". These recurring linguistic patterns were treated as second-order signifiers that naturalize corporate ideologies into seemingly neutral

truths. Eco's notion of textual closure was employed to assess the degree to which these narratives permit or restrict alternative interpretations, especially by minority shareholders or critical readers.

The second layer of analysis targeted the *logos*, or the logic and structure of the reports. Using Saussure's binary model and Peirce's triadic sign classification, we analyzed how financial data (e.g., revenue trends, ROE, EPS) are visually and linguistically arranged to emphasize growth or stability. This analysis considered not just what is presented, but how it is framed: the choice of graphs, comparative formats, and terminologies that may influence perceptions of performance. Additionally, Roman Jakobson's metalingual and referential functions were applied to decode how technical language either clarifies or mystifies financial concepts for general readers.

The final layer addressed *ethos*, or the credibility constructed through tone, authority, and moral positioning. Building on Aristotle's theory of rhetorical *ethos*, Jakobson's emotive/conative functions, and Charles Morris's pragmatics, this analysis looked into how reports attempt to build trust and ethical legitimacy. Textual elements such as leadership tone, forward-looking statements, and the presentation of ESG achievements were interpreted as rhetorical moves to align corporate identity with societal values, thus reinforcing stakeholder confidence.

RESULTS AND DISCUSSION

This section discusses the research findings on how financial reports from the manufacturing sector listed in the Indonesia Stock Exchange (IDX) from 2014 to 2024 function as complex semiotic systems. Through the lens of both classical rhetoric and modern semiotic theory, we analyze how *myth*, *logos*, and *ethos* are structured, circulated, and internalized. Crucially, we incorporate the notion of Sign Systems in Action, emphasizing that signs in financial reports are not static representations but performative agents embedded within institutional, technological, and cultural practices.

Myth in Financial Disclosures: Ideology Rendered Natural

Using Barthes' concept of myth as "a type of speech chosen by history," the first finding is the naturalization of ideology in narrative segments of financial reports particularly in vision statements, CSR segments, and CEO letters. Frequently recurring phrases such as "value creation," "inclusive growth," and "resilience for the nation" function as second-order signifiers, recoding managerial decisions into communal destiny. For instance, during the 2020 pandemic reports, companies suffering net losses still used language connoting triumph and contribution to national recovery. This shows that myth is used to obscure economic contradictions, thereby transforming contingent managerial choices into signs of historical necessity.

In this mythic register, sign systems are mobilized strategically: the company's logo, visual style, phrasing, and even font hierarchy serve as ideological apparatuses that construct not only meaning but emotional allegiance. This represents a case of Sign Systems in Action, where signs function not merely to represent financial status but to act upon the reader persuading, pacifying, legitimizing.

Logos as Symbolic Order: Rationality Through Structure

Financial reports project an aura of objectivity through the structured use of charts, tabular data, ratio analyses, and financial narratives. However, through Peirce's triadic sign model (icon, index, symbol), we observe that these are not value-neutral representations. The very structure of reports positioning of key metrics, juxtaposition of visuals, textual tone performs what we call the Semiotic Function of Rationalization.

In particular, the repeated use of visual signs such as upward-pointing arrows or green-highlighted figures even when actual performance is modest performs logos as authority. Numbers become rhetorical devices, organized to construct a logic of progress. Here, logos is not epistemological but architectural, a structure of trust. Through *Sign Systems in Action*, we see that rationality is not discovered but constructed. The visual design of financial reports graph density, data visualization style, textual ordering acts as a semiotic grid that disciplines how data is perceived and legitimized. For example, comparative ratios (YOY/quarterly) selectively highlight relative gains, de-emphasizing volatility. This echoes Roman Jakobson's *metalingual function*, where language speaks about its own rationality. The proposed Semio-Rhetorical Logos Function (SRLF) articulates this pattern: financial language does not merely report but stages a drama of control and mastery, where the audience is invited to believe in managerial competence through stylized order.

Ethos as Moral Semiotics: Performing Integrity

Ethos, in the Aristotelian sense, refers to credibility rooted in character. In the context of financial reporting, ethos is manufactured through signs of sincerity and transparency CEO portraits, ethical mission statements, inclusive terminology. Drawing from Charles Morris' triadic semiotic dimensions (syntactic, semantic, pragmatic), this study finds that ethos operates through layered signs: textual, visual, and symbolic. Even when firms face sanctions or downturns, ethos is preserved by semiotic labor language of accountability ("we take responsibility"), images of environmental efforts, or mentions of stakeholder inclusivity. These become part of Performative Ethosemantics, where moral legitimacy is not proven but enacted through signs.

Here again, Sign Systems in Action are evident: companies do not simply declare their ethos they design, distribute, and dramatize it. For example, the inclusion of ESG ratings, participation in GRI frameworks, and elaborate sustainability infographics are all part of a moral semiotic economy, wherein ethical value is communicated not only by words but by code compliance and visual style.

However, a critical insight emerges: such ethical communication may be semiotically dense but substantively shallow. Some reports analyzed show robust ethical imagery but minimal quantitative ESG metrics. Thus, ethos becomes less a reflection of actual virtue and more a curated symbolic capital.

Sign Systems in Action: The Performativity of Reporting

Across all three semiotic dimensions, myth, logos, ethos, the findings converge on the dynamic performativity of signs. Rather than seeing financial reports as passive containers of meaning, this study adopts the lens of Sign Systems in Action, wherein each sign interacts with institutional routines, stakeholder interpretations, regulatory requirements, and media circulation. This approach allows us to see financial communication as a technological-rhetorical apparatus where signs are selected, ordered, and circulated to produce effects: trust, legitimacy, alignment, or even distraction. From a semiotic systems theory perspective, every line in the financial report is part of a regime of visibility and sayability (Foucault), regulating what can be known and believed. Such semiotic agency calls for a paradigm shift: from reading financial reports as texts to reading them as symbolic machines. This critical turn forms the foundation of the Financial Semio-Rhetorical Model (FSRM) developed in this study.

Theoretical Innovation: Financial Semio-Rhetorical Model (FSRM)

The Financial Semio-Rhetorical Model (FSRM) emerges from this study as a theoretical innovation that integrates rhetorical classical principles *ethos*, *logos*, and *mythos* with modern semiotic frameworks derived from Saussure, Peirce, Barthes, Jakobson, Morris, and Eco. This model conceptualizes financial reporting not as a transparent conduit of economic facts, but as a composite system of signs in action, designed to persuade, legitimize, and perform organizational identity within a regulated symbolic economy. The *Financial Semio-Rhetorical Model* (FSRM) is a synthetic framework that integrates two major intellectual traditions: structural and post-structural semiotics (Saussure, Peirce, Barthes, Eco) and classical rhetoric (Aristotle: *ethos*, *pathos*, *logos*). The purpose of this model is to interpret corporate financial reports not as neutral documents, but as *discursive artifacts* loaded with signs, narrative strategies, and institutional persuasion.

The novelty of FSRM lies in its ability to: (1) deconstruct the semiotic layers within financial disclosures identifying how numerical, narrative, and visual elements function together to create meaning; (2) map the institutionalized performativity of signs within the *Sign Systems in Action* framework, showing how reporting practices are embedded in cultural, technological, and legal ecologies; (3) illustrate the rhetorical mechanics at play within financial language, where the architecture of graphs, keywords, images, and ratios operates not merely to inform but to strategically shape stakeholder interpretation. Furthermore, FSRM addresses a critical gap in existing accounting theory by situating financial texts as symbolic instruments of persuasion, thus offering a new vocabulary to study financial credibility, ideological encoding, and ethical projection. It enables researchers to explore how firms craft impressions of stability or morality under uncertain conditions through carefully orchestrated signs.

Table 1. Theoretical Building Blocks

Theory	Key Thinker	Contribution to FSRM
Structural Semiotics	Ferdinand de Saussure	Interprets financial reports as sign systems: <i>signifier</i> (visual form) and <i>signified</i> (financial meaning).
Triadic Semiosis	Charles S. Peirce	Classifies content as icon, index, or symbol.
Behavioral Semiotics	Charles Morris	Emphasizes the social and pragmatic dimensions of signs in context (issuer, investor, regulator).
Mythologies	Roland Barthes	Treats financial reports as modern myths that naturalize corporate success and economic progress.
Open Text Theory	Umberto Eco	Frames reports as polysemic “open works,” allowing multiple interpretations based on cultural codes.
Classical Rhetoric	Aristotle	Unpacks strategies of <i>ethos</i> (credibility), <i>pathos</i> (emotion), and <i>logos</i> (logic) in financial disclosures.

In this way, FSRM contributes not only to accounting semiotics but also to a broader interdisciplinary dialogue across finance, communication, and cultural studies. It foregrounds the aesthetic and rhetorical labor of financial texts, revealing them as discursive technologies with political, ethical, and affective consequences.

Toward a Critical Semiotics of Corporate Communication

In conclusion, this study contributes to the growing field of critical accounting semiotics by offering an interpretative toolkit to decode the symbolic labor behind financial representation. It asserts that financial communication is not merely a language of fact but a language of persuasion, power, and perception. Through the lens of Sign Systems in Action,

researchers, analysts, and auditors are invited to move beyond surface-level readings of disclosure, and instead attend to the operational logic of signs: how they are composed, repeated, concealed, and ritualized

CONCLUSION

This research set out to explore the semiotic dimensions of financial reporting in the manufacturing sector listed on the Indonesia Stock Exchange (IDX) during the period 2014–2024. By employing a multidisciplinary semiotic framework drawing from Ferdinand de Saussure, Charles Sanders Peirce, Roland Barthes, Roman Jakobson, Charles Morris, and Umberto Eco and integrating the rhetorical triad of ethos, logos, and mythos, this study offers a novel perspective on how financial reports function as structured sign systems rather than objective reflections of corporate reality. The findings demonstrate that financial statements and annual reports are rich with symbolic intentions. Numbers, graphs, narratives, and design elements are not neutral indicators but are strategically encoded signs meant to generate trust, reinforce ideological positions, and shape perceptions. Mythos is mobilized through narrative consistency and the ritualization of corporate purpose; logos is asserted through the selective presentation of technical data; ethos is conveyed through moralized language and visual ethics. These elements form a coherent symbolic architecture that supports corporate legitimacy in the eyes of investors, regulators, and the public.

The central theoretical contribution of this study is the formulation of the Financial Semio-Rhetorical Model (FSRM), which synthesizes classical rhetorical theory with modern semiotics. FSRM allows for a granular reading of how meaning, authority, and legitimacy are constructed and sustained in financial discourse. This model has applicability beyond the Indonesian context, particularly in emerging markets where corporate communication increasingly involves global symbolic expectations, yet remains locally interpreted. Moreover, this study introduces the idea of “Sign Systems in Action” as a dynamic framework for understanding how corporate reporting is not merely textual or visual, but performative. Signs are not static; they circulate across legal, cultural, and technological ecosystems, adapting and evolving to serve managerial intentions. This calls for a rethinking of regulatory approaches and stakeholder literacies in relation to financial narratives.

From a practical standpoint, the study provides valuable insights for investors, auditors, analysts, and regulators. Financial readers must be trained not only in technical analysis but also in semiotic and rhetorical literacy to decode what is being communicated not just through numbers, but through language, structure, repetition, omissions, and visual composition. Greater awareness of the persuasive and myth-making tendencies of reports will lead to more critical financial judgments and more ethically grounded investment decisions.

For companies, the implication is twofold. First, while persuasive reporting may temporarily shape perception, over-reliance on myth and ethos without alignment to performance may erode trust over time. Second, the use of semiotic strategies must move toward genuine transparency and stakeholder engagement, rather than symbolic manipulation.

For policymakers and standard-setting bodies, we recommend incorporating semiotic training and narrative analysis into accounting education and auditing practices. Regulatory disclosure frameworks should move beyond compliance checklists and include evaluative criteria for narrative integrity, symbol clarity, and ethical transparency. The proliferation of ESG reporting provides a unique opportunity to regulate not only the data disclosed but the manner and meaning of that disclosure.

Future research may expand this model to sectors beyond manufacturing, or to cross-national comparisons to examine how cultural contexts mediate the symbolic construction of financial meaning. Additionally, the interface between artificial intelligence, data visualization, and automated report generation presents a fertile area for analyzing how algorithmic semiotics will shape the next generation of corporate communication.

In sum, financial reports are not just economic artifacts; they are texts of power, embedded with signs, shaped by codes, and aimed at persuasion. Recognizing this enables a more critical, more humanistic, and more ethically attuned financial ecosystem.

REFERENCE

- Barthes, R. (1972). *Mythologies* (A. Lavers, Trans.). Hill and Wang. (Original work published 1957)
- Barthes, R. (1977). *Image, Music, Text* (S. Heath, Trans.). Hill and Wang.
- Chandler, D. (2017). *Semiotics: The Basics* (3rd ed.). Routledge.
- Christiaens, J., Reyniers, B., & Rollé, C. (2010). Impact of IPSAS on reforming governmental financial information systems: A comparative study. *International Review of Administrative Sciences*, 76(3), 537–553. <https://doi.org/10.1177/0020852310372449>
- Eco, U. (1976). *A Theory of Semiotics*. Indiana University Press.
- Eco, U. (1986). *Semiotics and the Philosophy of Language*. Indiana University Press.
- Fauzi, H., Svensson, G., & Rahman, A. A. (2010). "Triple bottom line" as "sustainable corporate performance": A proposition for the future. *Sustainability*, 2(5), 1345–1360. <https://doi.org/10.3390/su2051345>
- Hines, R. D. (1988). Financial accounting: In communicating reality, we construct reality. *Accounting, Organizations and Society*, 13(3), 251–261. [https://doi.org/10.1016/0361-3682\(88\)90003-7](https://doi.org/10.1016/0361-3682(88)90003-7)
- Jakobson, R. (1960). Linguistics and poetics. In T. A. Sebeok (Ed.), *Style in Language* (pp. 350–377). MIT Press.
- Jakobson, R., & Halle, M. (1956). *Fundamentals of Language*. Mouton & Co.
- Morris, C. (1938). Foundations of the theory of signs. In O. Neurath, R. Carnap, & C. Morris (Eds.), *International Encyclopedia of Unified Science* (Vol. 1, No. 2, pp. 1–59). University of Chicago Press.
- Murphy, M., & O'Connell, V. (2013). Board of director performance: A group perspective. *Corporate Governance: An International Review*, 21(2), 136–150. <https://doi.org/10.1111/corg.12006>
- Peirce, C. S. (1955). *Philosophical Writings of Peirce* (J. Buchler, Ed.). Dover Publications.
- Peirce, C. S. (1998). *The Essential Peirce: Selected Philosophical Writings, Volume 2 (1893–1913)* (P. E. Project, Ed.). Indiana University Press.
- Ricoeur, P. (1981). *Hermeneutics and the Human Sciences* (J. B. Thompson, Ed. & Trans.). Cambridge University Press.
- Saussure, F. de. (2011). *Course in General Linguistics* (W. Baskin, Trans.). Columbia University Press. (Original work published 1916)
- Smith, M. (2019). *Narrative and Numbers: The Value of Stories in Business*. Columbia University Press.
- Sukoharsono, E. G. (2010). Towards the development of accounting anthropology: An essay of interpretation of the accounting practices and the culture of the Javanese. *Jurnal Akuntansi dan Keuangan Indonesia*, 7(1), 1–23. <https://doi.org/10.21002/jaki.2010.01>
- Susanto, Y. K., & Narsa, I. M. (2020). Rhetorical disclosure strategies in CEO letters: Evidence from Indonesia. *Jurnal Akuntansi dan Auditing Indonesia*, 24(1), 14–27. <https://doi.org/10.20885/jaai.vol24.iss1.art2>
- Tilling, M. V., & Tilt, C. A. (2010). The edge of legitimacy: Voluntary social and environmental reporting in Rothmans' 1956–1999 annual reports. *Accounting, Auditing & Accountability Journal*, 23(1), 55–81. <https://doi.org/10.1108/09513571011010600>

- Wahyuni, S. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research*, 10(1), 69–80.
- Yusoff, H., & Lehman, G. (2009). Corporate environmental reporting through the lens of semiotics. *Asian Review of Accounting*, 17(3), 226–246.
<https://doi.org/10.1108/13217340911006854>