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The Ontology of Car Condition in Used Car Transactions: A Critical Realist Perspective

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Abstract

Used car transactions involve uncertainty because appearance, documents, and sellers' statements provide incomplete access to a vehicle's condition. Existing explanations emphasize information asymmetry, credence goods, and consumer protection, with less attention to the ontological nature of car condition. This study developed an account of that nature by integrating Roy Bhaskar's critical realism and John Searle's social ontology. A qualitative philosophical approach combined library research and conceptual analysis, followed by application of the framework to a transaction involving a 2012 Toyota Fortuner. The analysis conceptualizes car condition as a relationship between physical condition and functional standards, involving two ontological layers: physical reality and institutional status. Physical condition exists independently of human knowledge, while institutional status emerges through collective recognition and constitutive rules. Perceptual access is distinguished from these layers as an epistemic relationship through which buyers and sellers interpret physical characteristics and institutional representations. The case illustrates how manipulated representations and contractual provisions may influence transaction practices despite discrepancies with physical reality or legal validity. The resulting framework complements information asymmetry and credence-goods theories by clarifying the distinctions among material reality, institutional arrangements, and access to knowledge about them. It provides a conceptual basis for understanding how vehicle condition is constituted and interpreted in used car transactions, although its applicability requires empirical examination.

Keywords: Car Condition; Critical Realism; Institutional Facts; Social Ontology; Used Car Transactions

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INTRODUCTION

The used car market presents a persistent problem of quality uncertainty because the actual condition of a vehicle cannot always be fully determined through ordinary observation before a transaction takes place. Unlike products whose quality can be directly inspected, used cars may contain mechanical deterioration, concealed defects, or undocumented histories that are difficult for prospective buyers to identify. This situation reflects the information asymmetry described by Akerlof (1970), in which sellers possess comparatively better information about product quality than buyers, potentially undermining market confidence and efficiency. In the context of used car transactions, the role of intermediaries also becomes significant because dealerships may reduce information asymmetry through their expertise and screening activities, although their involvement does not automatically guarantee that every aspect of vehicle quality is accurately represented (Biglaiser et al., 2020).

The difficulty of assessing vehicle quality becomes more complex when certain characteristics cannot be adequately evaluated even after a product has been purchased or examined. Dulleck & Kerschbamer (2006) explain this problem through the concept of credence goods, in which consumers depend on expert knowledge to assess qualities that remain difficult to verify independently. This condition is particularly relevant to used cars because buyers may rely on sellers, mechanics, inspection reports, and certification documents to determine whether a vehicle meets their expectations. Research on consumer trust in China's business-to-consumer used car platforms also demonstrates the importance of consumer knowledge, online purchasing experience, third-party certification, and technological conditions in shaping trust (Li et al., 2023). Although these studies provide valuable explanations of information asymmetry, quality verification, and consumer trust, they primarily address how vehicle quality is communicated, assessed, and protected rather than examining the more fundamental question of what constitutes the condition of a car.

This study argues that car condition should not be understood as a single fact that can be equated with physical appearance, available documentation, or an individual's perception. A vehicle has a material condition that exists regardless of whether its characteristics are known or recognized by the parties involved in a transaction. At the same time, its condition is evaluated in relation to particular functional standards, such as safety, roadworthiness, and suitability for its intended use. Furthermore, documents, inspection certificates, advertisements, and contractual statements may assign institutional meanings to

a vehicle that do not necessarily correspond to its actual physical state. Consequently, the central problem is not merely the unequal distribution of information but also the possibility that physical reality, institutional representations, and individual perceptions may become inconsistent. Examining this problem therefore requires an ontological perspective that distinguishes the existence of an object from the knowledge and social representations constructed about it.

Critical realism provides an appropriate philosophical foundation for examining this distinction. Bhaskar (1975) argues that reality cannot be reduced to human knowledge or experience because objects, structures, and mechanisms exist independently of how they are understood. His distinction between the intransitive dimension of reality and the transitive dimension of knowledge makes it possible to distinguish a vehicle's actual physical condition from the descriptions, interpretations, and claims produced by buyers, sellers, and other parties. This distinction is particularly relevant to technical artifacts because their characteristics involve both physical structures and functional properties. Kroes (2010) explains that technical artifacts possess a dual nature: they are physical structures while simultaneously having functions related to human intentions. Accordingly, the condition of a car cannot be adequately defined solely by its material characteristics without considering the functional standards against which those characteristics are evaluated.

However, the physical and functional dimensions of a vehicle do not fully explain the institutional status attached to it through ownership documents, inspection certificates, advertisements, and contractual agreements. To address this dimension, Searle's (1995) social ontology provides an additional conceptual foundation. Searle explains that institutional facts emerge through collective intentionality, constitutive rules, and the assignment of status functions. Within used car transactions, institutional status may establish rights, obligations, and expectations that influence how buyers and sellers interpret and respond to a vehicle's condition (Elpandha et al., 2026; Miller & Wasson, 2026). Nevertheless, such status does not necessarily guarantee the accuracy of claims concerning its physical state. Building on these theoretical perspectives, this study proposes an ontological framework that distinguishes two layers of reality, physical condition and institutional status, from perceptual access, which functions as a mediated relationship through which individuals interpret the vehicle's physical characteristics and institutional representations. The proposed framework also examines how an institutional status that is legally invalid may nevertheless continue to influence practical conduct when the parties treat it as valid.

Based on this theoretical problem, the study aims to formulate the ontological nature of car condition in used car transactions by examining the relationship between physical reality, institutional status, and perceptual access. Specifically, it seeks to explain the distinction between the vehicle's physical condition and its socially assigned institutional status, analyze how these dimensions become accessible to buyers and sellers through various forms of representation, and examine the implications of their potential inconsistency for transaction practices, price formation, and consumer protection. The proposed framework is further examined through conceptual objections and applied to a documented case involving a used Toyota Fortuner 2012 transaction. Rather than presenting an empirically validated model, this study offers a conceptual contribution that complements existing explanations of information asymmetry and credence goods by clarifying the ontological relationships underlying the assessment and representation of vehicle condition.

METHODS

Research Approach and Design

This study employed a qualitative-philosophical approach using library research and conceptual analysis to examine the ontological nature of car condition in used car transactions. Rather than investigating consumer behavior through field observations or statistical measurements, the study focused on examining philosophical assumptions, theoretical concepts, and the relationships among different dimensions of reality. Critical realism served as the primary philosophical orientation, particularly Bhaskar's (1975) distinction between the intransitive dimension of reality and the transitive dimension of knowledge. This distinction provided the analytical basis for differentiating the physical condition of a vehicle from the representations and interpretations produced by individuals and institutions. The research design followed a conceptual theory-synthesis approach, integrating complementary theoretical perspectives to develop a coherent framework for understanding a specific phenomenon. Jaakkola (2020) emphasizes that conceptual research requires an explicit research design, justified theoretical selection, and a transparent explanation of how theoretical perspectives contribute to the development of new conceptual understanding.

Sources and Selection of Literature

The research materials consisted of primary philosophical works, relevant scholarly publications, and Indonesian legal documents. The literature was selected according to its relevance to five interconnected areas: critical realism and social ontology, the philosophy of technical artifacts, phenomenology and semiotics, information economics in used car markets, and consumer protection law. International literature was identified through Google Scholar and publishers' websites, while Indonesian scholarly publications were consulted through the Garuda portal, SINTA, and individual journal websites. The literature search employed relevant terms and combinations, including "hidden defects in used cars," "critical realism," "institutional facts," "credence goods," and "Peircean semiotics." Primary sources included Bhaskar's works on critical realism, Searle's writings on social ontology, Peirce's semiotic framework, the Indonesian Civil Code, and Law No. 8 of 1999 concerning Consumer Protection. Secondary sources consisted of national and international journal articles addressing the theoretical and practical dimensions of used car transactions. Selection was based on conceptual relevance, theoretical contribution, and the extent to which each source supported the research objectives. This approach recognizes that literature-based research requires a deliberate process of identifying, evaluating, and synthesizing relevant scholarly knowledge rather than relying on an unstructured collection of references (Rizza et al., 2026; Snyder, 2019).

Theoretical Framework and Conceptual Analysis

The analysis employed several theoretical perspectives with distinct but complementary functions. Bhaskar's (1975) critical realism provided the primary ontological foundation for distinguishing physical reality from knowledge about that reality. Searle's (1995) social ontology was used to examine institutional facts, collective intentionality, and the assignment of status functions through socially recognized rules. The philosophy of technical artifacts informed the analysis of the relationship between a vehicle's physical structure and its functional standards, while phenomenology and Peircean semiotics provided supporting concepts for examining how physical characteristics become accessible through perception and signs. These perspectives were not treated as interchangeable theories but were assigned specific analytical roles according to their conceptual relevance. The integration followed the principles of conceptual framework development, in which related concepts are organized into a coherent network to explain a phenomenon from

multiple theoretical dimensions (Jabareen, 2009). Accordingly, the analytical framework was developed through conceptual interpretation and theoretical synthesis rather than empirical variable measurement.

Analytical Procedures and Case Application

The analysis was conducted through four successive stages. First, key concepts from the selected literature were identified, classified, and compared according to their relevance to the ontological dimensions of car condition. Second, the concepts were interpreted to determine the nature of each element, particularly the distinction between physical condition, institutional status, and perceptual access. Third, the resulting conceptual framework was constructed and examined through three theoretical objections: whether credence-goods theory already provides a sufficient explanation, whether Bhaskar's critical realism can be combined with Searle's social ontology, and whether car condition can be reduced entirely to its physical characteristics. Each objection was evaluated through conceptual consistency, theoretical compatibility, and the explanatory capacity of the proposed framework. Fourth, the framework was applied to a documented case of a 2012 Toyota Fortuner transaction at a used car showroom in Padang Lawas, as reported by Djamaris et al. (2025). The case was selected because its documented circumstances involved three elements relevant to the study: problematic physical conditions, manipulated representations through the odometer, and institutional status expressed through contractual clauses. The case was examined comparatively using three analytical perspectives: information asymmetry, credence-goods theory, and the proposed ontological framework. This application served to illustrate the explanatory relevance of the conceptual framework rather than to establish empirical generalizability. The use of critical realism to examine practical ethical and social problems also has methodological precedent in Adiputra et al. (2023).

Analytical Scope and Research Ethics

The study was limited to conceptual and documentary materials and did not involve primary data collection, interviews, surveys, or direct vehicle inspections. Consequently, the findings were derived from philosophical interpretation (Akapova et al., 2026), scholarly literature (Kiebuzinski & Motyl, 2025; Schwartz, 1994), legal provisions (Alghamdi, 2025; Dhiab & Kaoud, 2026), and a previously documented transaction case (Islam, 2026; Taylor & Peter, 2026). The Toyota Fortuner case was treated as an illustrative analytical source rather than independent empirical evidence, and the legal assessment of its contractual

clauses was distinguished from any judicial determination. The principal analytical scope concerned business-to-consumer transactions, particularly those involving used car dealerships, while private transactions between individuals were considered only as a comparative context. To maintain analytical transparency, theoretical interpretations were distinguished from reported case facts and applicable legal provisions. The study therefore presents a conceptual framework that requires further empirical examination in different transaction settings. Its methodological orientation follows the principle that conceptual contributions must make their theoretical assumptions, analytical procedures, and intended explanatory scope explicit (Jaakkola, 2020).

RESULTS

The Ontological Structure of Car Condition: Two Layers and One Relation of Access

The conceptual analysis identifies that car condition cannot be adequately understood as a single physical attribute or as a subjective judgment produced during a sales transaction. Instead, it represents a relationship between the vehicle's physical state and particular functional standards, such as roadworthiness, safety, and suitability for its intended use. This relationship involves two distinct ontological layers: physical condition and institutional status. Perception, in contrast, does not constitute a third layer of reality but functions as a relation through which individuals gain access to and interpret the vehicle's physical characteristics and institutional representations.

The first ontological layer concerns the vehicle's physical condition, which exists independently of whether its characteristics are known or recognized by buyers and sellers. It includes material structures, component deterioration, mechanical defects, chassis conditions, and traces of previous damage. Within Bhaskar's (1975) critical realist framework, these characteristics belong to the intransitive dimension of reality because their existence does not depend on an individual's knowledge of them. A vehicle may contain mechanical deterioration even when the seller is unaware of it or the buyer considers it to be in good condition. Therefore, the absence of identified defects cannot be equated with the absence of physical defects.

The second ontological layer concerns institutional status, which emerges through collectively recognized rules, declarations, and institutional arrangements. Examples include ownership documents, inspection certificates, warranty statements, and contractual

provisions. These elements do not constitute physical characteristics of the vehicle; rather, they assign socially recognized functions, rights, obligations, and expectations to it. Following Searle's (1995, 2010) social ontology, institutional status exists through collective recognition and constitutive rules. Nevertheless, institutional recognition does not necessarily establish the factual accuracy of claims concerning the vehicle's physical condition.

Perceptual access occupies a different analytical position because it concerns how individuals interpret the two ontological layers through available information and representations. Buyers may assess a vehicle through its external appearance, inspection reports, odometer readings, advertisements, and statements made by sellers. These forms of access belong to the transitive dimension because they depend on knowledge, interpretation, and available representations. Consequently, perception may provide useful information while remaining incomplete or misleading. Table 1 presents the conceptual distinction among the three elements identified in this study.

Table 1. Two Ontological Layers and One Relation of Access in Used Car Transactions

Element	Ontological or analytical status	Examples in used car transactions	Conceptual foundation
Physical condition	Intransitive ontological layer; material structures and dispositions exist independently of knowledge	Component deterioration, chassis condition, mechanical defects, previous damage, and actual mileage	Critical realism (Bhaskar, 1975)
Institutional status	Ontological layer constituted through collective recognition and institutional rules	Ownership documents, inspection certificates, warranty statements, and contractual clauses	Social ontology (Searle, 1995, 2010)
Perceptual access	Transitive relation through which individuals interpret physical and institutional realities	Vehicle appearance, advertisements, odometer readings, inspection reports, and seller statements	Phenomenology, semiotics, and information economics (Peirce, 1932; Akerlof, 1970)

Source: Developed by the authors based on Bhaskar (1975), Searle (1995, 2010), Peirce (1932), and Akerlof (1970).

Table 1 demonstrates that the three elements cannot be treated as equivalent forms of existence. Physical condition represents a material reality that remains independent of observation, whereas institutional status exists through socially recognized rules and collectively assigned functions. Perceptual access does not create another ontological layer because it concerns the relationship between individuals and the realities they attempt to understand. The distinction also clarifies the position of functional standards:

roadworthiness, safety, and suitability for use serve as evaluative criteria for assessing the relationship between physical characteristics and intended functions, rather than constituting an independent ontological layer. Thus, a vehicle's condition is determined neither exclusively by its physical appearance nor by its institutional designation, but by the relationship between its actual physical state and the functional standards applied to it.

Physical Condition and the Role of Functional Standards

The analysis further identifies that physical condition alone is insufficient to determine whether a vehicle can be considered suitable for a particular purpose. A vehicle consists of material structures and components, but its evaluation also requires standards concerning what those structures are expected to accomplish. This distinction follows the dual nature of technical artifacts, which combines physical composition with functional characteristics (Kroes & Meijers, 2006). A vehicle may possess an intact external appearance while containing mechanical components that are unsuitable for certain operational demands.

Functional standards provide the criteria through which physical characteristics acquire evaluative significance. For example, the same degree of mechanical deterioration may have different implications depending on whether the vehicle is intended for ordinary urban transportation, long-distance travel, or commercial transportation. Consequently, the assessment of condition requires consideration of both the material characteristics of the vehicle and the functions expected from it. The designation of a vehicle as being in good or poor condition is therefore an evaluative judgment about the relationship between its physical state and relevant functional requirements, rather than a separate physical or institutional fact.

This distinction also separates historical information from present physical condition. Previous accidents, maintenance records, replacement components, and actual mileage are historical facts that may help explain the vehicle's current characteristics. However, historical records do not automatically establish the present condition of every component. Their significance depends on whether the recorded events have produced material effects that remain relevant to the vehicle's current state. Accordingly, the ontological assessment of car condition must distinguish historical evidence, existing physical characteristics, and functional standards rather than combining them into a single undifferentiated category.

Institutional Status as a Separate Ontological Layer

Institutional status constitutes a second ontological layer because it establishes socially recognized meanings, rights, and obligations associated with a vehicle. Ownership documents, inspection certificates, warranty provisions, and contractual agreements do not physically alter the vehicle merely by existing. Nevertheless, they can influence how the vehicle is classified, valued, transferred, and accepted within a transaction. According to Searle (1995, 2010), institutional facts emerge through collective intentionality and constitutive rules that assign particular status functions to objects, individuals, or social arrangements.

An inspection certificate stating that a vehicle has passed a particular examination, for instance, establishes an institutional representation of its condition within the scope of the inspection conducted. Such a certificate may provide buyers with a reason to trust the vehicle and may create expectations concerning the responsibility of the institution issuing it. However, the certificate itself does not constitute the vehicle's physical condition. Its reliability depends on the procedures, criteria, and evidence through which the institutional claim was established. Therefore, institutional status may be formally recognized while its underlying claim about physical reality remains inaccurate or incomplete.

The relationship between institutional status and physical condition becomes problematic when institutional claims are inconsistent with material reality. A vehicle may possess documentation or a contractual designation suggesting that it is suitable for use, even though its actual physical characteristics do not meet the relevant functional standards. The institutional status may continue to influence the behavior of buyers and sellers despite this inconsistency. This distinction is particularly important in transactions involving contractual clauses because the existence of a written agreement and its legal validity are not identical matters. A clause may be treated as binding by the parties in practice even when its legal enforceability is questionable or excluded by applicable law.

The Seller's Position: Access, Ignorance, and the Production of Institutional Status

The proposed framework also reveals that the seller's position cannot be explained solely through the assumption that sellers always possess complete knowledge of a vehicle's actual condition. Their access to physical reality remains part of the transitive dimension because it depends on experience, inspection, maintenance records, and information received from previous owners. An individual selling a privately owned vehicle may have substantial

knowledge of its operational history, whereas a dealership purchasing vehicles from different sources may possess only partial information. Therefore, the seller's knowledge should not automatically be treated as identical to the vehicle's actual physical condition.

This distinction also requires separating genuine ignorance from deliberate ignorance. Genuine ignorance occurs when a seller does not know about a defect that has not become apparent or has not been identified through available inspection procedures. Deliberate ignorance, by contrast, may arise when a seller avoids conducting an examination or obtaining relevant information despite having an opportunity to do so. Both situations produce limitations in knowledge, but they differ in terms of the seller's conduct and responsibility. The distinction is relevant because responsibility for hidden defects does not necessarily depend on whether the seller has actual knowledge of every physical problem.

In the Indonesian civil law context, Article 1506 of the Indonesian Civil Code establishes the seller's obligation to bear responsibility for hidden defects even when the seller was unaware of them, subject to the applicable legal provisions and exceptions. From an ontological perspective, this arrangement connects legal responsibility to the condition of the object rather than exclusively to the seller's subjective knowledge. The relevant physical defect exists independently of whether the seller recognizes it. Thus, the distinction between the transitive dimension of knowledge and the intransitive dimension of physical reality provides a basis for understanding why legal responsibility may extend beyond the seller's actual awareness.

Furthermore, sellers do not merely occupy a position within the information structure of a transaction; they also participate in producing institutional status. Advertisements, product descriptions, inspection statements, and contractual provisions may establish expectations about the vehicle and the obligations of the parties. These statements can acquire different institutional and legal consequences depending on the applicable rules. In this context, the seller's contractual declarations may assign particular responsibilities or attempt to transfer risks to the buyer. However, the existence of such declarations does not automatically establish their legal validity or their correspondence with physical reality. Institutional status therefore becomes an important mechanism through which representations influence the practical organization of used car transactions.

Mediation and the Chain of Representations

The analysis identifies inspection services, third-party certification, and digital platforms as mediating mechanisms that provide buyers with additional access to vehicle information. These mechanisms may reduce the distance between buyers and the vehicle's actual physical condition by producing reports, photographs, technical assessments, and other forms of documentation. Bauer et al. (2022) demonstrate that multi-party certification can improve the alignment between quality signals and actual product quality in markets characterized by information asymmetry. Similarly, Li et al. (2023) identify the importance of third-party certification and other factors in shaping consumer trust in used car e-commerce platforms.

Nevertheless, mediation does not eliminate the distinction between physical reality and knowledge about that reality. Each inspection, certificate, photograph, or digital record constitutes another representation that depends on the procedures and information available to the party producing it. An inspection report may accurately describe the components examined while failing to identify defects outside the inspection's scope. Likewise, photographs may provide information about a vehicle's appearance without revealing its internal mechanical condition. The reliability of a representation therefore depends on the scope, competence, transparency, and traceability of the process through which it is produced.

This situation creates a chain of representations connecting the vehicle's physical condition to the buyer's understanding. The chain may involve the vehicle owner, dealership, inspection service, certification institution, digital platform, and prospective buyer. Each intermediary contributes information but may also introduce limitations or errors. Consequently, the central issue is not simply whether a buyer receives information, but whether the entire chain of representations provides a sufficiently reliable connection to the underlying physical condition. Treating an inspection report or certificate as identical to the vehicle's actual condition constitutes what this study identifies as the reification of representation. This analytical distinction emphasizes that representations may provide access to reality without becoming reality itself.

Application of the Framework: The 2012 Toyota Fortuner Case

The proposed framework was applied to a documented dispute involving the sale of a 2012 Toyota Fortuner at Syahran Motor showroom in Padang Lawas, North Sumatra.

Djamarisa et al. (2025) report that the vehicle experienced engine problems associated with an oil leak that subsequently affected the transmission. The transaction also involved the replacement of several original spare parts with other brands and the discovery that the odometer reading had been reduced. Furthermore, the sales agreement contained provisions stating that the buyer would bear responsibility for damage occurring after the agreement was signed and would not be entitled to return the vehicle or request a refund.

According to the reported account, the seller relied on the contractual provisions to reject the buyer's request to return the vehicle. During mediation, the seller agreed to cover only half of the repair costs. These circumstances demonstrate that the transaction involved more than a disagreement over the distribution of information. It also involved a discrepancy between the vehicle's physical condition, the representations available to the buyer, and the institutional status established through the sales agreement.

From the perspective of the proposed framework, the case can be classified into three analytical elements. First, the physical layer consists of the vehicle's mechanical deterioration, replacement components, and actual mileage, all of which exist independently of the buyer's knowledge. Second, the institutional layer consists of the sales agreement and its risk-transfer provisions, which establish claims concerning the rights and obligations of the parties. Third, perceptual access involves the odometer reading, vehicle appearance, and other representations through which the buyer evaluates the vehicle before completing the transaction.

The odometer provides a particularly relevant illustration of the relationship between representation and physical reality. In Peirce's (1932) semiotic framework, the odometer reading functions as a representamen, the actual distance traveled constitutes its object, and the buyer's understanding of the vehicle's usage history functions as its interpretant. Under ordinary circumstances, the odometer operates as an index because its reading is causally connected to the vehicle's movement. However, reducing the displayed mileage disrupts this indexical relationship without changing the actual distance previously traveled. The displayed number consequently continues to appear as an indication of actual mileage even though its relationship with the underlying physical history has been manipulated. The buyer may therefore treat the representation as if it were the physical fact itself.

The contractual provisions provide another illustration of the distinction between institutional existence and legal validity. The agreement established a practical basis for the

seller's refusal to accept responsibility for the vehicle's condition. However, Djamarisa et al. (2025) interpret the risk-transfer clause as legally invalid under Article 18(3) of Law No. 8 of 1999 concerning Consumer Protection. This assessment must be understood as the authors' legal analysis rather than a reported judicial determination. Nevertheless, the case illustrates how a contractual status may continue to influence the conduct of the parties even when its legal validity is disputed. Table 2 compares the explanatory contributions of information asymmetry, credence-goods theory, and the proposed ontological framework in interpreting the documented circumstances.

Table 2. Comparative Explanation of the 2012 Toyota Fortuner Case

Documented facts	Information asymmetry	Credence-goods theory and enforcement	Proposed ontological framework
1. The odometer reading was reduced	The seller possesses information about actual mileage that is unavailable to the buyer	Quality-related fraud is difficult for buyers to verify independently	The indexical relationship between the odometer representation and actual mileage is disrupted, although the reading continues to appear as an index
2. Original spare parts were replaced with other brands	Information about component replacement is not equally distributed	The buyer cannot independently verify certain quality characteristics	The vehicle's physical condition exists independently of the buyer's access to information
3. The agreement contained a clause transferring responsibility for subsequent damage to the buyer	Does not directly explain the institutional status of the clause	Can be interpreted as an attempt to avoid liability and enforcement	The contractual declaration establishes an institutional claim concerning the distribution of obligations, although its legal validity remains questionable
4. The seller refused to take back the vehicle by referring to the agreement	Does not directly explain why the contractual provision continued to guide conduct	Enforcement difficulties may allow disputes to persist without immediate legal consequences	A legally disputed institutional status may continue to influence practical conduct when treated as valid by the parties
5. The seller agreed to cover half of the repair costs during mediation	Does not directly explain the institutional and normative basis of the settlement	A compromise may reflect the costs and difficulties associated with pursuing enforcement	The settlement reflects a practical outcome between the contractual position asserted by the seller and the physical condition underlying the buyer's claim

Table 2 demonstrates that the three analytical perspectives offer complementary explanations of the documented dispute, but their explanatory emphases differ. Information asymmetry adequately explains the unequal distribution of information concerning the odometer and replacement components, while credence-goods theory highlights the difficulty of verifying quality and enforcing responsibility. The proposed ontological framework retains these explanations but provides an additional distinction concerning the relationship between physical reality, institutional status, and perceptual access. Its contribution becomes particularly apparent in the contractual dispute and the seller's subsequent conduct. The framework explains how a contractual provision can continue to influence practical decisions even when its legal validity is disputed, thereby distinguishing the institutional effectiveness of a declaration from its legal enforceability. The case therefore illustrates the analytical usefulness of separating material conditions, institutional arrangements, and representations rather than treating them as a single category of transaction information.

DISCUSSION

The discussion interprets the findings by examining the ontological relationship between physical condition, institutional status, and perceptual access in used car transactions. It situates the proposed framework within critical realism and social ontology to clarify how material reality differs from socially constructed representations and individual perceptions. Furthermore, this section evaluates the theoretical contributions, practical implications, and limitations of the framework in addressing quality uncertainty and consumer protection in the used car market.

The Ontological Significance of Car Condition in Used Car Transactions

The findings demonstrate that car condition should be understood as an ontological relationship between physical reality and functional standards rather than as a singular attribute determined by visual appearance or subjective judgment. From a critical realist perspective, the actual condition of a vehicle exists independently of whether buyers, sellers, or inspection institutions recognize it. Bhaskar (1975) emphasizes that reality cannot be reduced to human knowledge because the existence of objects and their properties is not dependent on their observation. This distinction challenges the assumption that a vehicle's condition can be adequately established through the information available during a

transaction. A car may appear mechanically sound while containing defects that remain undiscovered, demonstrating that the absence of observable problems does not necessarily indicate the absence of physical deterioration. In this regard, the distinction between reality and knowledge becomes essential for understanding why the actual condition of a used car cannot be equated with the information disclosed by its seller.

Nevertheless, the physical characteristics of a vehicle cannot be interpreted independently of the functions for which it was designed and used. Kroes & Meijers (2006) explain that technical artifacts possess a dual nature because they combine physical structures with functions associated with human purposes. This perspective is further developed by Kroes (2010), who argues that structural and functional properties are distinct but interconnected dimensions of technical artifacts. Applied to used car transactions, a vehicle's physical components provide the material foundation for evaluating its condition, while functional standards such as roadworthiness, safety, and operational suitability establish the criteria for determining whether those components perform their intended purposes. Consequently, a vehicle may remain physically intact in certain aspects while failing to satisfy particular functional requirements. The designation of a car as being in good or poor condition should therefore be understood as an evaluative judgment concerning the relationship between its material characteristics and expected functions, rather than as an independent physical property or an institutional label.

The distinction between physical reality and institutional status further demonstrates that the condition of a vehicle cannot be determined exclusively through documents, certificates, or contractual declarations. Searle (1995) explains that institutional facts emerge through collective intentionality and socially recognized rules that assign particular status functions to objects and social arrangements. In used car transactions, ownership documents, inspection certificates, and warranty statements may establish institutional recognition and create expectations concerning the vehicle. However, such recognition does not automatically guarantee that institutional claims accurately correspond to the vehicle's actual physical condition. Searle (2006) further distinguishes observer-independent phenomena from institutional realities that depend on collective recognition, demonstrating that socially constructed facts can possess objective institutional consequences without becoming identical to material facts. Therefore, a vehicle's institutional designation as inspected, certified, or guaranteed must be distinguished from the physical condition that such designations attempt to represent. The ontological significance of this distinction lies in

recognizing that institutional status can influence transaction decisions while remaining potentially inconsistent with the material reality of the vehicle.

Furthermore, perceptual access should be understood as an epistemic relationship through which individuals interpret physical characteristics and institutional representations, rather than as a third ontological layer. Merleau-Ponty (2012) emphasizes that perception is embodied and situated, meaning that individuals encounter the world through their particular capacities and experiences rather than through an entirely detached observation. In the context of used car transactions, buyers interpret vehicle conditions through visual appearances, inspection reports, odometer readings, and statements provided by sellers, but these representations do not necessarily disclose the complete physical reality. Peirce's (1931–1936) semiotic framework provides an additional explanation because signs mediate the relationship between objects and their interpreters, allowing information about physical reality to be communicated without making the sign identical to the object itself. Accordingly, perceptual access remains dependent on the availability and reliability of signs, as well as the interpretive competence of the observer. This distinction reinforces the central argument that physical condition and institutional status constitute two ontological layers, whereas perception functions as a fallible means of accessing and interpreting them. The separation of these elements provides a more precise understanding of why discrepancies between actual vehicle conditions and transaction representations can persist even when buyers receive information through formal documents and observable indicators.

Integrating Critical Realism and Social Ontology: A Complementary Theoretical Framework

The integration of critical realism and social ontology provides a complementary theoretical foundation for understanding the different forms of reality involved in used car transactions. Although Bhaskar and Searle approach ontology from different philosophical traditions, their perspectives share an important premise: the existence of physical reality cannot be reduced to human representations of it. Bhaskar (1975) distinguishes the intransitive dimension of reality from the transitive dimension of knowledge, emphasizing that objects and their properties exist independently of the theories through which they are understood. Similarly, Searle (1995) maintains that the external world exists independently of human perception, while recognizing that certain social realities emerge through collective intentionality and institutional recognition. These positions provide a basis for examining

physical vehicle conditions and socially constituted institutional statuses without treating them as identical forms of existence. Rather than attempting to reconcile every philosophical difference between the two thinkers, this study employs their compatible ontological commitments to construct a framework specifically suited to used car transactions.

The complementary function of Bhaskar's critical realism lies in establishing the ontological independence of a vehicle's physical condition from the knowledge possessed by buyers and sellers. Mechanical deterioration, structural damage, and component defects remain material realities regardless of whether they have been identified or disclosed. This position prevents the reduction of physical condition to the information available during a transaction, a problem associated with what Bhaskar (1975) identifies as the epistemic fallacy: the reduction of questions concerning what exists to questions concerning what can be known. However, critical realism alone does not sufficiently specify how documents, certificates, and contractual arrangements acquire socially recognized meanings and consequences. This dimension is addressed through Searle's (2010) account of institutional reality, particularly collective intentionality, constitutive rules, and status functions. Through these mechanisms, an object or arrangement can acquire institutional significance that cannot be explained solely by its physical properties. In a used car transaction, ownership documents and contractual provisions therefore constitute institutional facts that establish rights and obligations without determining whether the vehicle's mechanical condition corresponds to the claims associated with it.

The relationship between these perspectives becomes clearer when institutional status is examined as a socially constituted reality that can influence practical conduct. Searle (1995) explains that institutional facts depend on collective recognition, while their status functions generate deontic powers in the form of rights, duties, and obligations. This argument is compatible with the broader realist understanding of social structures developed by Elder-Vass (2010), who emphasizes that social structures possess emergent causal powers arising from the relations among their constituent members. Applied to used car transactions, contractual clauses and institutional documents may influence the decisions of buyers and sellers even though they do not physically modify the vehicle. For example, a contractual provision transferring responsibility for vehicle defects may guide the parties' conduct because they recognize and act upon its stated obligations (Danylchenko, 2026; Yunita et al., 2026). Nevertheless, its practical influence must be distinguished from its legal validity. This distinction demonstrates that institutional status can produce observable social consequences

without necessarily corresponding to physical reality or possessing enforceable legal authority. The integration of Bhaskar and Searle thus makes it possible to explain both the independent existence of vehicle conditions and the socially mediated mechanisms through which transaction-related rights and obligations are established.

Accordingly, the proposed framework should be understood as a division of theoretical functions rather than a complete synthesis of Bhaskar's and Searle's philosophical systems. Critical realism provides the ontological foundation for identifying physical reality independently of knowledge, whereas social ontology explains the constitution and practical operation of institutional facts. Their complementary use also clarifies why perceptual access should remain analytically separate from both ontological layers: knowledge, advertisements, inspection reports, and contractual interpretations belong to the domain through which individuals encounter and interpret physical and institutional realities. This approach does not resolve deeper differences concerning the causal powers of social structures, the relationship between natural and social reality, or the precise conditions under which institutional facts emerge. Instead, it establishes a limited but coherent theoretical integration that addresses the specific ontological problem examined in this study. The resulting framework explains used car condition through the interaction of material reality and institutional arrangements while recognizing that both remain accessible to transaction participants through fallible forms of knowledge and representation.

Beyond Information Asymmetry and Credence Goods: The Role of Institutional Status

Information asymmetry theory provides an essential explanation of quality uncertainty in used car transactions, particularly regarding the unequal distribution of information between sellers and buyers. Akerlof (1970) demonstrates that when buyers cannot distinguish between high-quality and low-quality products, uncertainty may undermine market confidence and reduce incentives for sellers to offer higher-quality goods. This explanation remains relevant to used car transactions because sellers may possess more extensive information about vehicle histories, mechanical defects, and previous repairs than prospective buyers. However, information asymmetry primarily addresses the distribution of knowledge and its consequences for market behavior rather than the ontological distinction between the actual condition of an object and the institutional representations attached to it. Consequently, although the theory explains why buyers may make decisions based on

incomplete information, it does not independently clarify how documents, contractual declarations, and institutional classifications acquire social significance or influence the interpretation of vehicle condition. The present study therefore extends the analytical discussion beyond unequal access to information by examining the different forms of reality involved in the transaction.

Credence-goods theory provides a more specific explanation of situations in which consumers cannot independently verify the quality or appropriateness of a product or service, even after receiving professional assistance. Dulleck & Kerschbamer (2006) explain how informational advantages held by experts may create opportunities for fraud, overcharging, and inappropriate provision of services, particularly when liability and verifiability mechanisms are insufficient. This perspective is relevant to used car transactions because buyers frequently depend on sellers, mechanics, and inspection institutions to evaluate vehicle characteristics that cannot be adequately assessed through ordinary observation. Nevertheless, the explanatory focus of credence-goods theory remains primarily concerned with informational incentives, verification problems, and institutional mechanisms that discipline seller behavior. Balafoutas & Kerschbamer (2020) further demonstrate that the functioning of credence-goods markets depends on institutional conditions, including liability, reputation, competition, and the availability of more precise diagnostic technologies. These contributions establish that institutions are important for reducing market inefficiencies, but they do not necessarily provide an ontological account of how institutional statuses themselves are constituted and how their practical influence may persist despite questions concerning their legal validity.

The additional explanatory contribution of the proposed framework becomes apparent when institutional representations are examined separately from physical conditions and legal enforceability. In the documented Toyota Fortuner 2012 case, the contractual clause transferring responsibility for subsequent vehicle damage to the buyer continued to influence the seller's conduct despite the legal objection raised against the clause under Indonesian consumer protection legislation. Information asymmetry explains the unequal access to information concerning the vehicle, while credence-goods theory helps explain the difficulties associated with verification and the enforcement of consumer protection mechanisms. However, neither perspective fully specifies why a contractual provision that is considered legally invalid may nevertheless continue to guide the practical decisions of the parties. Searle (2010) offers an additional explanation through the concept of institutional

facts, which exist through collective recognition and the assignment of status functions. A contractual declaration can therefore acquire practical significance when the parties recognize and act upon the obligations it appears to establish, even though its legal validity remains contestable. The distinction is not that social recognition makes an invalid clause legally valid, but that institutional recognition can generate practical consequences independently of its legal enforceability. This distinction constitutes a specific explanatory contribution of the proposed ontological framework.

Accordingly, the proposed framework should complement rather than replace information asymmetry and credence-goods theories. Its contribution lies in distinguishing three analytically different questions: what physically exists in the vehicle, what institutional status is assigned through socially recognized arrangements, and how buyers and sellers gain access to these realities through available representations. This distinction also clarifies the limitations of relying exclusively on information disclosure or inspection procedures because improved access to information does not automatically guarantee the accuracy of institutional claims or the legal enforceability of contractual provisions. Experimental research by Dulleck et al. (2011) demonstrates the importance of liability, verifiability, reputation, and competition in improving the performance of credence-goods markets, while the proposed framework adds an ontological perspective for examining the status of the institutional arrangements through which these mechanisms operate. Therefore, the theoretical contribution of this study is not a new economic model of information asymmetry but a conceptual clarification of the relationship between material reality, institutional status, and perceptual access. By introducing this distinction, the framework provides an additional analytical basis for understanding why discrepancies between actual vehicle conditions and socially recognized transaction representations may persist even when information and formal agreements are available.

Theoretical and Practical Implications for Used Car Transactions and Consumer Protection

The proposed ontological framework has practical implications for how used car sellers and dealerships communicate vehicle conditions to prospective buyers. Since physical condition cannot be equated with its institutional representations, sellers should provide information that distinguishes verified physical characteristics from claims based on documents, previous inspections, or personal assessments. This distinction is particularly

important in advertisements, vehicle descriptions, and sales negotiations because representations concerning mileage, accident history, component replacement, and mechanical condition may directly influence purchasing decisions (Azara et al., 2026). Under Article 7 of Indonesia's Law No. 8 of 1999 concerning Consumer Protection, business actors are required to provide accurate, clear, and honest information regarding the condition and guarantees of goods, while Article 8 prohibits trading goods that do not correspond to the conditions or guarantees stated in their descriptions. Accordingly, transparency should not be understood merely as providing documents but as ensuring that the information communicated maintains a reliable relationship with the vehicle's actual physical condition.

The framework also has implications for vehicle inspection, certification, and price formation. Inspection institutions and independent mechanics should clearly distinguish between components that have been examined, conditions that have been verified, and aspects that remain outside the scope of their assessment. Such distinctions can reduce the risk of treating inspection certificates as absolute guarantees of vehicle quality. Furthermore, transaction prices should ideally reflect the relationship between actual physical condition, functional suitability, and the reliability of available institutional representations. A vehicle with a favorable certification status but substantial undisclosed defects may be valued according to its representations rather than its material condition. Research on consumer protection in Indonesian used car transactions highlights the importance of legal protection when buyers encounter defects and discrepancies in the vehicles they purchase (Achmadi et al., 2025; Ikromi & Sutrisno, 2024). Therefore, independent inspections, transparent maintenance histories, and clearly documented defect disclosures are important mechanisms for improving the reliability of information and reducing the distance between represented and actual vehicle conditions.

From a legal perspective, the distinction between institutional recognition and legal validity is particularly relevant to contractual responsibility and consumer remedies. Standard contractual clauses that transfer business actors' responsibilities to consumers or prevent the return of purchased goods may conflict with Article 18 of Law No. 8 of 1999, which prohibits specified unfair standard clauses and declares qualifying prohibited clauses void by law. Article 19 further establishes the business actor's responsibility to provide compensation for consumer losses resulting from goods or services traded (Rahmadhina & Izzadi, 2026; Santoso & Marlinah, 2024). These provisions demonstrate that the existence of a signed agreement does not automatically establish the legal enforceability of every contractual

clause. Nevertheless, as illustrated by the documented used car transaction examined in this study, a disputed contractual provision may continue to influence the parties' practical decisions when it is treated as authoritative. The proposed framework therefore emphasizes the importance of consumer awareness, transparent contractual drafting, and accessible dispute-resolution mechanisms so that institutional representations do not become substitutes for actual consumer rights.

Theoretical Objections, Research Limitations, and Future Directions

The proposed framework faces three principal theoretical objections. The first questions whether credence-goods theory already provides a sufficient explanation of quality uncertainty and disputes in used car transactions. This objection is partly accepted because information asymmetry and verification difficulties adequately explain problems involving hidden defects and manipulated information (Dulleck & Kerschbamer, 2006). However, the proposed framework contributes an additional ontological distinction by explaining how institutional statuses, including legally invalid contractual provisions, may continue to influence practical conduct when treated as authoritative. The second objection concerns the compatibility of Bhaskar's critical realism and Searle's social ontology. Although their philosophical traditions differ, this study employs them through a limited division of theoretical functions: Bhaskar (1975) explains the independence of physical reality from knowledge, whereas Searle (1995, 2010) explains the constitution of institutional facts through collective recognition. This complementary approach does not attempt to reconcile their entire philosophical systems. The third objection suggests that car condition can be reduced entirely to physical characteristics. However, physical condition must be evaluated in relation to functional standards and intended purposes, consistent with the dual nature of technical artifacts described by Kroes and Meijers (2006). Therefore, the proposed framework maintains that material reality and functional standards are interconnected but analytically distinct.

Despite its theoretical contribution, this study has several methodological limitations. First, its qualitative-philosophical design relies on literature and conceptual interpretation rather than primary empirical data, meaning that the proposed relationships have not been tested through interviews, surveys, or direct vehicle inspections. Second, the application of the framework is limited to one documented Toyota Fortuner 2012 transaction, which serves

as an illustrative case rather than evidence of general patterns across the used car market. Third, the analysis primarily concerns business-to-consumer transactions and does not comprehensively examine private vehicle sales, digital marketplaces, or institutional vehicle auctions. Consequently, the explanatory scope of the framework remains conceptual and should not be interpreted as an empirically validated model. These limitations establish the boundaries within which the findings and theoretical contributions should be understood.

Future research could empirically examine the relationships among physical condition, institutional status, and perceptual access across different used car transaction settings. Particular attention could be directed toward hidden defects, contractual disputes, vehicle certification, and consumer trust. Comparative studies could also investigate whether the practical influence of institutionally recognized but legally disputed statuses varies according to consumer knowledge, seller reputation, and the availability of independent inspection mechanisms. Furthermore, research involving dealerships, private sellers, and digital marketplaces could assess how different institutional arrangements influence the accuracy of vehicle representations and the protection of consumer rights. Such investigations would help evaluate the explanatory capacity of the proposed framework and identify the circumstances under which discrepancies between physical reality and institutional representations become most consequential.

CONCLUSION

This study concludes that the condition of a car in used car transactions cannot be understood as a single fact determined by physical appearance, institutional documentation, or individual perception. Instead, it represents a relationship between physical condition and functional standards, involving two distinct ontological layers: physical reality and institutional status. Physical condition exists independently of human knowledge, whereas institutional status emerges through collective recognition, constitutive rules, and socially assigned functions. Perceptual access does not constitute a third ontological layer but functions as an epistemic relationship through which buyers and sellers interpret these two dimensions. This distinction demonstrates that the actual condition of a vehicle may differ from the information and institutional representations presented during a transaction.

The principal theoretical contribution of this study lies in integrating Bhaskar's critical realism and Searle's social ontology through complementary analytical functions.

While information asymmetry and credence-goods theories explain unequal information, quality uncertainty, and difficulties in verification, the proposed framework provides an additional explanation of how institutional statuses may influence practical conduct independently of their legal validity. The documented Toyota Fortuner 2012 transaction illustrates this distinction through the discrepancy between the vehicle's physical condition, manipulated representations, and contractual provisions that continued to influence the parties' conduct despite questions concerning their legal validity. Accordingly, the framework extends existing explanations of used car transactions by clarifying the ontological relationships among material reality, institutional arrangements, and perceptual access.

Nevertheless, this study remains a conceptual contribution that has not been empirically validated and is primarily concerned with business-to-consumer used car transactions. Future research should examine the proposed framework through empirical investigations involving used car dealerships, private sellers, and digital marketplaces. Particular attention should be given to the relationships between hidden defects, institutional representations, contractual responsibility, and consumer trust. Such investigations would help determine the explanatory applicability of the framework across different transaction settings and contribute to a more comprehensive understanding of vehicle quality assessment and consumer protection in the used car market.

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