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LEARNING FROM THE PAST IN ORDER TO RELEARN FROM TIME AND FROM SIGNALS THAT CARRY THE FUTURE

The Red Rhinoceros metaphor applied to nearshoring in the Chinese automotive industry in Mexico

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ABSTRACT

Objective: The objective of this study is to present a proposal for exploring urban futures through a chronological reflection framework articulated with PESTEL (Political, Economic, Social, Technological, Environmental, and Legal) analysis, incorporating the interpretation of significant events using metaphors. **Method:** In this regard, futures methodologies are adapted to assign meaning to the past. The methodological proposal integrates chronological reflection, PESTEL analysis, and the use of metaphors as analytical devices to interpret the metamorphosis of risk within urban contexts. The exercise is applied to the analysis of the nearshoring phenomenon in the Chinese automotive sector in Mexico. **Main Results:** The study applies these approaches to urban environments exposed to the impacts of the Chinese automotive industry in Mexico. In doing so, it contributes to new ways of working with traditional planning frameworks and incorporates the metamorphosis of risk through metaphorical interpretation to achieve a reading more closely aligned with local urban complexity in the face of global economic challenges. **Relevance / Originality:** The relevance of this study lies in transferring the methodologies of futures studies to urban analysis, particularly in contexts exposed to global dynamics such as production relocation. Its originality consists in the use of metaphors as analytical tools, as well as in the reinterpretation of the risk metaphor of the Grey Rhinoceros as the Red Rhinoceros, to highlight the impact of the Chinese automotive industry in the Mexican case. **Theoretical / Methodological Contributions:** This theoretical–methodological exercise has been implemented in academic activities and, for the present case, is applied to the analysis of nearshoring in the Chinese automotive sector in Mexico to explore alternative ways of managing territory, particularly considering the global reality of nearshoring. **Social / Management Contributions:** The proposal provides input for territorial analysis and management, as well as for decision-making in uncertain urban contexts affected by nearshoring. It offers tools and methods to rethink how local contexts can respond to global challenges. It is worth noting that this methodology can be adapted to other fields in which decision-making management in complex and uncertain contexts is a priority.

Keywords: Urban futures, Nearshoring, Urban foresight, Urban mobility.

APRENDIENDO DEL PASADO PARA REAPRENDER DEL TIEMPO Y DE LAS SEÑALES PORTADORAS DE FUTUROS

El rinoceronte rojo aplicado al nearshoring en el sector de la industria automotriz China en México

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RESUMEN

Objetivo: El objetivo de este trabajo es presentar una propuesta para explorar futuros urbanos a partir de una cronorreflexión articulada con el análisis PESTEL, que incorpora la interpretación de eventos significativos mediante el uso de metáforas. **Método:** En este sentido, las metodologías para el abordaje de los futuros se adaptan para otorgar significado al pasado. La propuesta metodológica integra la cronorreflexión, el análisis PESTEL y el uso de metáforas como dispositivos analíticos para interpretar la metamorfosis del riesgo en contextos urbanos. El ejercicio se aplica al análisis del fenómeno del *nearshoring* en el sector automotriz chino en México. **Principales Resultados:** El estudio traslada estas aproximaciones a entornos urbanos expuestos a los impactos de la industria automotriz china en México y, con ello, aportar nuevas formas de trabajar la planeación tradicional, así como de incorporar la metamorfosis del riesgo a través de la interpretación de metáforas, con el fin de lograr una lectura más cercana a la complejidad urbana local frente a los desafíos de la economía global. **Relevancia / Originalidad:** La relevancia del estudio radica en trasladar metodologías propias de los estudios de futuros al análisis urbano, particularmente en contextos expuestos a dinámicas globales como la relocalización productiva. La originalidad consiste en el uso de metáforas como herramienta analítica, así como en la reinterpretación de la metáfora del riesgo del *Rinoceronte Gris* como *Rinoceronte Rojo*, con el fin de evidenciar el impacto que la industria automotriz china representa en el caso de México. **Contribuciones Teóricas / Metodológicas:** Este ejercicio teórico-metodológico ha sido implementado en actividades académicas y, para el presente caso, se traslada al análisis del *nearshoring* en el sector automotriz chino en México, con el propósito de explorar otras formas de gestionar el territorio, particularmente ante la realidad global del *nearshoring*. **Contribuciones Sociales / para la Gestión:** La propuesta ofrece insumos para el análisis y la gestión territorial, así como para la toma de decisiones en contextos urbanos inciertos y afectados por el *nearshoring*, aportando herramientas y métodos para repensar cómo desde los contextos locales podemos hacer frente a los desafíos globales. Cabe destacar que esta metodología puede adaptarse a otros ámbitos, en donde la gestión de la toma de decisiones en contexto complejos e inciertos sea una prioridad.

Palabras clave: Futuros urbanos, *Nearshoring*, Prospectiva urbana, Movilidad urbana.

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INTRODUCTION

The study of futures is a priority in international business, particularly when considering the geopolitical conditions that directly influence the decisions shaping the relocation of logistics platforms. Through this process, major producing economies seek to move closer to large consumer markets, thereby shortening distribution times, which can ultimately be decisive in determining the final cost paid by the customer.

Therefore, one of the most pertinent issues within the context of global economies and consumers concerns the urban dimension—namely, the potential local impacts on Mexican cities resulting from production relocation, commonly referred to as nearshoring, particularly in the specific case of the Chinese automotive sector. In this regard, futures studies applied to urban problems lack meaning without a strategic learning process rooted in the past. This implies that, although the sciences of foresight have specialized in designing tools and strategies to assess risks and analyze trends and patterns (to reduce uncertainty and achieve greater assertiveness in decision-making across economic, social, political, and military domains), it is essential to acknowledge the weight and value of a city's past and historical trajectory. Such recognition enables the identification of patterns in urban inflection points and their potential effects on future scenarios shaped by production relocation. In other words, it becomes necessary to weave connections between local micro-histories and global trends in order to attain a broader, more integrated understanding of these phenomena.

The objective of this study is to propose a framework for exploring the urban futures of Mexican cities through a process known as chronological reflection. The process will begin with the pandemic, supported by PESTEL analysis, and will use metaphors to interpret significant events. This approach incorporates the impact of nearshoring and the rapid expansion of the Chinese automotive industry in Mexico—factors that are reshaping the country's territorial dynamics and mobility patterns.

1. THE CONTEXT OF CHINESE EXPANSION AND NEARSHORING

China's expansion in the automotive sector constitutes one of the most significant economic phenomena of recent decades. As noted by Zhuang (2024), the automotive industry is the country's second most important sector, surpassed only by real estate. In twenty years, it has increased its production and commercialization tenfold, consolidating its position as a global-scale player. This accelerated growth helps explain the progressive relocation of its industry toward Latin America and how Mexico is becoming integrated into new patterns of late industrialization.

China represents a paradigmatic case of successful late industrialization. It entered the global market in the 1990s, when the United States, Europe, and Japan dominated automotive production. Yet, it managed to reposition itself strategically. Its early commitment to electromobility enabled it to anticipate the post–fossil fuel transition, shaped by policies such as Norway's 2016 decision to ban the sale of internal combustion vehicles by 2025 (Jiménez, 2016). By that year, Norway had reached a 96% market penetration of electric vehicles (La Vanguardia Barcelona, 2025).

Within this scenario, China ceased to be a marginal producer and became a global leader in manufacturing and sales, dominating the electric vehicle market and incorporating unprecedented logistical chains, such as the proprietary maritime fleet of Build Your Dreams (BYD), capable of transporting up to 7,000 vehicles per voyage (MexicoIndustry, 2024). This process is closely linked to the rise of nearshoring, which positions Mexico as a strategic platform for production relocation and commercial redistribution for the Chinese automotive industry across the continent.

2. CONCEPTUAL AND METHODOLOGICAL FRAMEWORK

2.1. The power of the past

The past provides the most valuable information—through data, figures, and trends—that enables the analysis of generated impacts and, consequently, the identification of patterns. For this reason, it is pertinent to engage with the Spiral Theory of History developed by the Neapolitan philosopher Giambattista Vico (Bacarlett Pérez, 2008, p. 21). Vico's perspective remains relevant both for its critique of the modern society of his time and for its proposal of a conception of history that is neither linear nor cyclical. Instead, it understands each stage as intelligible only within the specific context from which it emerges.

In turn, Michel Foucault, in the late 1960s and early 1970s, developed the concept of the "history of the present" as a method that examines contemporary phenomena as consequences of their roots in the past and, therefore, as forces shaping present-day society. In this sense, Foucault's method investigates the relationship between past and present (Flynn, 2005; Roth, 1981).

Therefore, the analysis and understanding of the past are essential for comprehending—now more than ever—processes of change and assimilation. To this end, two analytical resources are employed: timelines and metaphors. From this perspective, the understanding of conjunctural history plays a strategic role both in analyzing the past and establishing prospective relationships between the present and the future. What remains as a chronological reflection is the need to question the existence or continued relevance of structural history, while also recognizing that micro-histories, taken together, provide the basis for constructing a conjunctural history. Consequently, the fragmentation of time, along with the acceleration of events, that is, dromology, gives rise to a new category for explaining the relationship between events and their temporality.

Timelines become an instrument of diagrammatic reasoning (Champagne, 2016), enabling the juxtaposition of thematic timelines. In this sense, the narrative of the past—grounded in chronological evidence and thematic juxtaposition—enables a visual diagnosis of history, in which the central task is to establish relationships among events through convention, causality, or similarity (Champagne, 2016, p. 19).

This type of relationship among events should lead to an analysis of their impact on processes of change, continuity, or rupture. Likewise, it is pertinent to incorporate the concept of "dromology", developed by Paul Virilio, to include in the analysis the behavior of the speed at which transformations occur. In the case of this study, this notion is associated with the accelerated pace of distribution and commercialization that the Chinese automotive sector has experienced in Mexico since the pandemic.

Although, from a positive perspective, linear historical time is conceived as an ordered succession of events that explain history (Yoloxochitl et al., 2023, p. 371), the challenge lies in disarticulating history into multiple timelines to grasp urban complexity—particularly in the current context—and subsequently rearticulating the structure of temporalities and events. This process makes it possible to explore futures. These timelines may be developed using the PESTEL (Political, Economic, Social, Technological, Environmental, and Legal) methodology to disentangle the complexity of different realities that shape the effects of nearshoring in the Chinese automotive sector on Mexican cities.

2.1.1. Futures methodologies for assigning meaning to the past

To construct the proposal on how to learn from the past, futures studies methodologies are employed to assign meaning to historical processes. The primary reference is Sohail Inayatullah (2008), who develops a framework based on six concepts, six questions, and six pillars—along with their corresponding tools—to construct different possible futures. Building upon this future-oriented approach, adjustment and reinterpretation are proposed for the analysis of the past. Although some of the tools used by Inayatullah (2008) are designed to engage with historical dimensions, his methodology is fundamentally oriented toward the articulation of knowledge to explore alternative futures.

Therefore, this section explains how certain elements of his methodology are revisited and incorporated into a methodological proposal. Empirically and before engaging with Inayatullah's (2008) work, this proposal was first implemented in the summer of 2022. Subsequently, with access to broader theoretical and methodological foundations, it has been possible to further refine this process and assign renewed meaning to the proposal—grounded in what time and the past represent—to engage with futures studies more robustly[1].

1 In the summer of 2022, the course *Future Cities* was implemented for the first time at the Faculty of Architecture of the Universidad Autónoma de Yucatán, where it has been offered on a semester basis ever since. The systematization of this academic exercise made it possible to articulate both the conceptual and methodological processes into a proprietary framework: *The Zoo Risk Method*. This method is extensively developed in the book *Ciudades Futuras: Metáforas, Riesgos y Posibilidades en Tres Tiempos* (Future Cities: Metaphors, Risks, and Possibilities Across Three Temporalities), published in March 2025, where the foresight tools and their modes of application according to each context are presented in detail. See reference: Fernández-Martínez (2024, 2025).

From the proposal of "The Six Pillars: Futures Thinking for Transformation," which is grounded in three visualization methods—analytic scenarios, questioning, and creative visualization—that are triangulated to develop a more comprehensive vision of the future (Inayatullah, 2008, p. 18), three tools are revisited and incorporated into the process of understanding the past.

The first corresponds to the Futures Triangle, which establishes the relationship between the present, past, and future to explore plausible futures. The "pushes" of the present represent the quantitative data reflecting what is currently taking place. The past is explained through the "weight of history," understood as the barriers to overcome or the narratives constructed around a given event. The "pulls" of the future, in turn, constitute a visual representation of the desired future. In this regard, the weight of history constitutes one of the processes that must be developed. With this aim, the layered timeline tool is proposed as a means of visualizing events and establishing relationships among them, that is, engaging in chronological reflection.

The second tool is developed through an inverse reinterpretation of Sohail Inayatullah's (2004, 2009, 2017) methodology of Causal Layered Analysis (CLA), originally designed to create transformative spaces oriented towards alternative futures[2]. This implies that the significant elements of Inayatullah's methodology—conceived to explore futures through a vertical, layered dimension of analysis—can be transferred to the study of the past. Both futures and pasts share a central concern: recognizing the multidimensionality and vertical depth of reality, rather than focusing solely on its horizontal spatiality.

Consequently, a reinterpretation and adaptation of Sohail Inayatullah's (2009, 2017) CLA is proposed to undertake a chronological reflection of the past. The four layers of analysis—litany, systemic causes, discourse or worldview, and myths or metaphors—are represented through the metaphor of an iceberg, where the litany constitutes the visible surface layer, and myths and metaphors form the deepest stratum.

Litany refers to the official description of the problem, the unquestioned reality, and that which is broadly perceived; it is usually what is communicated through the media, dominates major headlines, and may remain disconnected from other perspectives and viewpoints.

Systemic causes represent short-term analyses of one or multiple variables. This layer explores the historical behavior of these variables and draws upon public policy reports in order to identify trends and patterns.

Discourse or worldview involves discerning the deeper assumptions that underlie the problem. At this stage, it is essential to understand the issue from multiple perspectives and to cultivate critical thinking.

Myths or metaphors entail the construction of emotional and often unconscious narratives surrounding the issue; solutions emerge through the creation of new narratives.

From these four layers, it becomes possible to approach a problem through an analysis of its context, understood as being constructed across multiple levels and dimensions of reality. This analysis can be conducted through the PESTEL framework[3], which encompasses Political, Economic, Social, Technological, Environmental, and Legal factors, as well as the incorporation of metaphors to assign meaning to each event (Table 1).

The challenge in analyzing past events lies in avoiding a purely linear approach or a positivist chronological reflection, and instead incorporating a multilayered analysis that allows movement upward and downward within each event. In this way, depth,

2 Sohail Inayatullah's methodology of Causal Layered Analysis (CLA) represents a theoretical–methodological research and application framework that integrates multiple ways of knowing to create transformative spaces oriented toward alternative futures, rather than attempting to predict the future (Inayatullah, 2009, 2017).

3 The origin of the PEST analysis is primarily attributed to Francis J. Aguilar, who in 1967 published the book *Scanning the Business Environment*. In this work, he introduced a methodology for scanning the business environment and analyzing external factors that could affect an organization. Initially, the PEST framework included four dimensions: Political, Economic, Social, and Technological factors.

Subsequently, as the model was refined and expanded to encompass additional relevant areas, two further dimensions were incorporated—Environmental and Legal—giving rise to the PESTEL framework as it is known today. While this expansion responded to the growing importance of environmental and regulatory factors within the business environment, the PESTEL analysis can be adapted to the study of urban issues and can even specialize each of its dimensions according to the research focus, incorporating themes such as gender, culture, or infrastructure.

Table 1. PESTEL methodology applied to urban issues

Factors	Description	Examples in Urban Issues: Red Rhinoceros approach, nearshoring, and the expansion of the Chinese automotive industry in Mexico
Political	Factors related to urban policies and local governance.	Nearshoring places Mexico at the center of geopolitical tensions between the United States and China, generating regulatory pressures and potential trade restrictions. **Urban impact:** National and binational decisions may either accelerate or constrain automotive investments, thereby affecting infrastructure development, mobility systems, and territorial planning in recipient cities such as Mérida.
Economic	Factors that affect the urban economy and the city's economic conditions.	The Chinese automotive industry operates with production costs estimated to be 20–30 percent lower. This increases motorization rates and attracts manufacturing plants associated with nearshoring. **Urban impact:** accelerated growth of the vehicle fleet; increased demand for industrial land; pressure on urban services; and the transformation of economic corridors. This dynamic also stimulates investment in infrastructure, real estate development, land value appreciation, and property tax revenues.
Social	Factors derived from the social and demographic characteristics of the urban population.	The Chinese automotive market increases accessibility to electric and hybrid vehicles, but it also introduces new labor dynamics and the potential for technological dependency. **Urban impact:** shifts in mobility patterns, inequality in access to charging infrastructure, and increased pressure on already saturated urban systems.
Technological	Factors involving the development and adoption of urban technologies.	China leads in the production of batteries, electric platforms, and automotive software, thereby shaping global technological standards. **Urban impact:** the need for expanded charging infrastructure, more robust electrical grids, and workforce reskilling to operate advanced technologies. This dynamic also accelerates the development of smart city initiatives, ICT infrastructure, intelligent mobility solutions, and renewable energy innovations.
Environmental	Factors related to the urban environment and sustainability.	The electrification of the market may reduce local emissions; however, it remains dependent on an energy matrix that is still largely based on fossil fuels. **Urban impact:** increased electricity demand, risks of grid saturation, and new pressures on resources such as water and lithium. This also has implications for air quality, green spaces and urban sustainability, water management, climate change mitigation, and urban adaptation strategies.
Legal	Factors related to urban laws and regulatory frameworks.	Mexico's regulatory framework is advancing more slowly than the expansion of the Chinese automotive sector and the requirements imposed by USMCA. **Urban impact:** regulatory gaps hinder the orderly management of vehicle fleet growth, the regulation of emissions, the assurance of safety standards, and the planning of adequate infrastructure. This also affects traffic and transportation regulations, as well as urban safety policies.

meaning, and interpretative significance are conferred upon the construction of the past.

Within this framework, timelines operate as a visual resource for establishing multilayered analyses, enabling chronological reflection in both vertical and horizontal dimensions. This proposal is grounded in the premise that the past contains the fundamental, strategic, and priority data necessary for the creation of alternative futures. Thus, learning from the past and relearning from time become essential conditions for exploring futures and, consequently, for guiding action in the present.

From this perspective, it becomes possible to construct thematic layers derived from the PESTEL methodology to analyze a specific urban environment—or, as in the case of nearshoring and the expansion of the Chinese

automotive sector in Mexico—to establish relationships among events, identify patterns, and recognize behavioral trajectories over time. This approach enables not only a deeper understanding of present complexity but also the development of a multilayered vision applied to futures studies, thereby enriching the prospective interpretation of urban processes undergoing transformation.

Considering the above, events can be mapped onto timelines to obtain a visual representation of existing inflection points and, above all, to achieve an integral and holistic understanding of social, economic, political, technological, and environmental dynamics, as well as their impacts on urban contexts. In this regard, the following research questions are proposed:

How can the speed and dynamics of nearshoring and the accelerated expansion of the Chinese automotive sector—with its economic, technological, and logistical transformations—be translated into urban structures that are immobile, permanent, or incapable of adapting at the same pace?

How can we identify, interpret, and respond to the impacts of the dromological shock produced by the interaction between the PESTEL dimensions associated with nearshoring and the Chinese automotive industry, and urban–architectural inflection points that cannot adapt at the same speed?

How can these emerging dynamics—productive, territorial, logistical, and mobility-related—be integrated into global relocation processes so that the city can anticipate, absorb, and channel their effects, rather than responding belatedly to them?

2.2. The power of metaphors for learning from the past

The metaphors employed constitute, in themselves, expressions of the times we inhabit—times marked by risk and uncertainty. As a rhetorical device, metaphor enables the transfer of meaning from a figurative image to a real phenomenon, establishing relationships of similarity or analogy that facilitate understanding. In this way, metaphors become powerful tools for interpreting complex dynamics and rendering visible patterns that might otherwise remain unnoticed.

Sohail Inayatullah also draws upon metaphors or myths to explore futures, using them as narratives that seek to frame and appropriate events. In this study, five fundamental metaphors are employed[4]: the Black Swan, the Black Elephant, the Grey Rhinoceros, the Black Jellyfish, and a proprietary metaphor derived from this analysis: the Red Rhinoceros.[5]

2.2.1. The Black Swan: what we do not know we do not know — unknown unknowns

The concept of the Black Swan was coined by Nassim Nicholas Taleb in 2007 (2010) to refer to rare, unexpected, and unpredictable events. In nature, the appearance of a black swan carries high impact precisely because it is unforeseen; prior experience provides no reliable information regarding its occurrence, and its rarity contributes to its unpredictability (Izquierdo, 2018, p. 2).

Likewise, the reflection offered by Izquierdo (2018) is particularly relevant when noting that "none of this prevents us, a posteriori, from attempting to explain Black Swans by trying to demonstrate the opposite—that they were in fact foreseeable" (Izquierdo, 2018, p. 2). This is precisely the spirit underlying the work with timelines and metaphors: to analyze events from a critical distance to recognize those signals carrying the future that were already indicating what was approaching (Tables 2 and 3).

2.2.2. The Black Elephant: We know what we know — known knowns

The second metaphor corresponds to the "Black Elephant." This expression gained prominence

4 To explain how these metaphors are structured, the "Johari Window" model is employed. This communication model is used to enhance mutual understanding among individuals and is organized into four quadrants. The term "Johari" derives from the names of its creators, Joseph Luft and Harrington Ingham, who developed the model in 1955 (Mind Tools Team, 2017) (Table 2).

5 The analysis of phenomena through these metaphors forms part of *The Zoo Risk Method*, a proprietary foresight methodology that employs animal imagery to identify, interpret, and anticipate risks and signals of change. Each metaphor—the Black Swan, the Black Elephant, the Grey Rhinoceros, the Black Jellyfish, and the Red Rhinoceros—enables the classification of different types of uncertainties and impacts, facilitating a deeper and more strategic reading of urban and territorial processes.

Table 2. Johari Window Quadrants

KNOWN KNOWNS	KNOWN UNKNOWNS
UNKNOWN KNOWNS	UNKNOWN UNKNOWNS

Source: AVENEAR (2024).

through an editorial by Thomas Friedman published in The New York Times in 2014, entitled *Stampeding Black Elephants*. In that piece, Friedman (2014) cited environmentalist and investor Adam Sweidan, who publicly used the expression for the first time during the World Parks Congress (IUCN, 2014) (Tables 2 and 3).

A Black Elephant, as explained by London-based investor and environmentalist Adam Sweidan, is a combination of "a Black Swan" (an improbable and unexpected event with enormous repercussions) and "the elephant in the room" (a problem visible to everyone, yet one that no one wishes to address), despite the awareness that it will one day generate consequences of a magnitude comparable to those of a Black Swan (Friedman, 2014).

However, in the works of Sardar and Sweeney (2019), as well as in that of Prieto (2020), it is noted that the term is attributed to Vinay Gupta as early as 2009. Gupta, a consultant in disaster and risk management, acknowledges that the expression originated during a small group meeting.

In turn, Canova (2011) quotes Vinay Gupta directly to explain what a Black Elephant is as follows:

A "black elephant" is a combination of "the elephant sitting in the room," which everyone knows is important but is a taboo that no one will talk about, and "black swan," which is considered an extreme or unlikely event that undermines prior risk management strategies. The black elephant has been defined as "an event which is extremely likely and widely predicted by experts, but people attempt to pass it off as a black swan when it finally happens" (Canova, 2011, p. 254).

Similarly, Sardar and Sweeney (2019) explain how Vinay Gupta's metaphor serves to interpret events that were anticipated by experts at the time, such as the 2008 financial crisis and the 2020 pandemic:

An event that is extremely likely and widely predicted by experts, but people attempt to pass it off as a black swan when it finally happens. Usually, the experts who had predicted the event – from the economic crisis to pandemic flu – go from being marginalized to being lionized when the problem finally rears its head (Sardar & Sweeney, 2019, p. 124).

2.2.3. The Grey Rhinoceros: We know there are things we do not know—or prefer to ignore — known unknowns

The third metaphor corresponds to Michele Wucker, who in 2016 published her book *The Gray Rhino: How to recognize and act on the obvious dangers we ignore*. However, she had already publicly introduced the metaphor in 2013 at the World Economic Forum (Izquierdo, 2018, p. 6). Below is the explanation that Wucker (2016) provides regarding this metaphor:

It may still be pawing the ground and snorting, or it may already be charging toward you, but it is a metaphor for something that gives you a choice. […] Thus, it is a metaphor for how prone we are to ignoring obvious dangers. Yet it differs from its cousin, "the elephant in the room," because, by definition, that refers to something about which no one says or does anything, thereby normalizing inaction. The Grey Rhino, by contrast, is something that someone is talking about—sometimes many people are—but you still cover your ears […] saying, "I don't want to hear it."(e-Speaker, 2021) (Tables 2 and 3).

2.2.4. The Black Jellyfish: We do not know what we know—or what we might know — unknown unknowns

The fourth metaphor is that of the "Black Jellyfish," which, according to Sardar and Sweeney (2019, pp. 125–126), are part of postnormal phenomena—developments that are not easily anticipated within the "unthought future," yet are already present. In this sense, they represent the postnormal potential of that future through the figure of the Black Jellyfish, which, like Black Elephants and Black Swans, carry high impact. However, the distinction lies in their normalization: they gradually become part of everyday reality, and their scalability may generate systemic instability.

Table 3. Synthesis of risk metaphors according to the Johari window

KNOWN KNOWNS	KNOWN UNKNOWNS
Predetermined Forces ***We know what we know***	**Uncertainty** ***We know there are things we do not know***
Highly probable, with low levels of response. The phenomenon is known, as are its associated risks and impacts. It includes objective facts, megatrends, and drivers of change. There is available evidence. A Black Elephant is a potential high-impact event that lies beyond the realm of regular expectations, yet is ignored despite existing evidence (Izquierdo, 2018, p. 4).	Foreseen risk, but with low response. The phenomenon itself may not be fully understood, yet the associated risks are recognized. Known uncertainties. We are aware that megatrends evolve, but we do not know how or when. The reason we fall into this error is that obvious problems often fail to receive sufficient attention. The Grey Rhinoceros differs from the Black Elephant in that, in the former case, people talk about it but take no action, whereas in the latter case, it is neither discussed nor acted upon (Wucker, 2016).
UNKNOWN KNOWNS ***(Unknown Knowledge)*** **Bias** ***We do not know what we know—or what we might know.***	**UNKNOWN UNKNOWNS** **Black Swan / Wild Cards** ***We do not know what we do not know***
Unexpected and underestimated. The phenomenon is known, but the associated risks are perceived as “unforeseen” or “unexpected.” Forms of knowledge that are familiar, yet not clearly perceived. This includes ongoing changes whose future impact remains uncertain. “Emerging” competencies, the analysis of weak signals of change, signs of discontinuities, and early warning systems. Black Jellyfish refer to “events of minor significance and spatially dispersed, which, when coinciding in time, may trigger a large-scale disruptive event” (Izquierdo, 2018, p. 5).	Improbable and unexpected. Both the phenomenon and its associated risks are unknown. Unknown unknowns that lie beyond our imagination or existing knowledge; blind spots. The concept of the Black Swan was coined by Nassim Nicholas Taleb (2010) in 2007 to refer to rare, unexpected, and unpredictable events.

Source: Adapted from AVENEAR (2024), Futuros Deseables (2023) y Postnormal Times (2025)[6].

6 Originally conceived by Sardar and Sweeney in their publication *The Three Tomorrows* (2015), the collection of postnormal potentialities initially consisted of three metaphors: the Black Elephant, the Black Swan, and the Black Jellyfish. The fourth metaphor, the Grey Rhinoceros, is not officially part of this collection, but it is sometimes incorporated to broaden the analytical spectrum.

The metaphor of the Black Jellyfish seeks to explain how climate change is exerting a dramatic effect on the world's water systems.

For example, the continuing rise in ocean temperatures and corresponding acidity levels is creating conditions for jellyfish blooms to become more and more common. These blooms have forced shutdowns at coastal power plants around the world, including the Oskarshamn plant in Sweden in 2013 (the site of one of the world's largest nuclear reactors) (Sweidan et al., 2021).

Therefore, this metaphor illustrates how seemingly small elements can generate a significant impact when they occur at larger scales and across multiple overlapping systems over time. In other words, it demonstrates how lower-scale phenomena can mutate and interconnect with other complex, even contradictory systems and, in the absence of clear evidence, evolve into "unthought" possibilities. Thus, they refer to unknown knowledge: issues that are believed to be known and understood, yet prove to be far more complex and uncertain than expected (Sardar & Sweeney, 2019, p. 126). In this sense, they may resemble Black Swans. Consequently, Black Jellyfish refer to "events of minor significance and spatially dispersed, which, when coinciding in time, may trigger a large-scale disruptive event" (Izquierdo, 2018, p. 5) (Tables 2 and 3).

2.2.5. The Red Rhinoceros: Known unknowns in the face of Chinese commercial and technological expansion

The phenomenon of nearshoring and the accelerated expansion of the Chinese automotive industry in Latin America can be understood through an adaptation of Michele Wucker's (2016) Grey Rhino metaphor, which refers to highly probable and high-impact risks that, despite being visible, are often ignored. However, in the Chinese case, it is pertinent to introduce a variation of this metaphor to refer to a Red Rhinoceros—one that symbolizes the distinctive combination of industrial scale, state strategy, and technological penetration speed that characterizes China.

In this sense, the Red Rhinoceros may represent an evident, accelerated, and structural phenomenon, whose massive and sustained entry of Chinese automotive companies into Mexico—alongside the transition toward the production and commercialization of electric vehicles—constitutes not only an evolving risk for the Mexican economy, but also for the articulation of mobility and energy systems. Hence the urgency in building domestic capacities and developing urban, economic, and energy policies that can transform this risk into a long-term strategic advantage.

Therefore, unlike the Grey Rhinoceros, the Red Rhinoceros integrates geopolitical and technological dimensions driven by China's state-led late industrialization, generating structural asymmetries between producing nations and recipient countries, as exemplified by the case of China and Mexico.

This proposed metaphor of the Red Rhinoceros represents an evident risk–opportunity dynamic: on the one hand, it promises investment flows, affordable electric mobility, and the reconfiguration of supply chains; on the other, it generates geopolitical tensions, technological dependency, and regulatory pressures in recipient countries.

2.3. Application to a specific case: methodological framework for analyzing the Red Rhinoceros, nearshoring, and the Chinese automotive industry in Mexico

This methodological framework provides a strategic reading of nearshoring and the rapid expansion of the Chinese automotive industry in Mexico through the metaphor of the Red Rhinoceros, as part of *The Zoo Risk Method*. This approach enables the identification of visible yet neglected risks, the recognition of emerging patterns, and the anticipation of urban, economic, regulatory, and energy impacts within a context of accelerated global reconfiguration driven by nearshoring and the growing presence of Chinese automotive firms. The Red Rhinoceros—conceptually inspired by Michele Wucker's (2016) Grey Rhino—characterizes probable, high-impact risks. Its purpose is to strengthen strategic planning, foresight practices, public policy design, and urban and business decision-making by providing a framework for recognizing signals and constructing forward-looking scenarios.

2.3.1. Step 1: Identifying the phenomenon

The phenomenon is identified in the convergence of two global processes: on the one hand, nearshor-

ing, which drives the relocation of production supply chains toward Mexico; and, on the other, China's late industrialization, whose accelerated advancement has enabled it to transition from a marginal player to a global leader in the manufacturing and sale of vehicles.

This growth, combined with China's technological and logistical capacity, has resulted in the rapid commercial expansion of Chinese automotive companies in Mexico, where sales, model offerings, and distribution networks have increased exponentially. The interaction among production relocation, Chinese competitiveness, and the transformation of the Mexican market sheds light on a structural phenomenon that demands analysis from a foresight perspective.

In this regard, it is essential to determine the scope of nearshoring in Mexico and to map the arrival of Chinese automotive companies such as BYD, Chirey, MG Motor, JAC Motors, and Geely, among others.

2.3.2. Step 2: Recognizing visible signals

Four visible signals are identified that help explain the recent behavior of the Chinese automotive sector in Mexico, and that can be linked to the "pushes of the present," according to the Futures Triangle proposed by Sohail Inayatullah (2008):

The rapid surge in the opening of dealerships since the pandemic, accompanied by sustained growth in sales.

The accelerated closure of sales outlets during 2025 and the decline in commercialization of certain brands since 2024, revealing internal restructuring processes.

The deep penetration of Chinese electric vehicle technology, which has transformed the market through competitive pricing and a broad product offering.

The significantly lower costs of Chinese vehicles, which have enabled them to position themselves below traditional competitors and capture broad segments of demand.

According to Rivera (2025), since their entry into the Mexican market in 2017, Chinese automotive brands have steadily increased their presence. The most significant surge in dealership openings began in 2021 and continued at an accelerated pace through 2024. During this period, 759 dealerships were established nationwide, while by September 2025, a total of 91 cumulative closures had been recorded. In 2023, one out of five light vehicles sold in the country was of Chinese origin, with General Motors being the principal importer. Since 2016, more than a dozen brands from the Asian country have entered the Mexican market (Amador, 2024).

Mexico currently has 21 automotive assembly plants (Méndez, 2025), including the facility of JAC Motors in Hidalgo, which marks the early presence of the Chinese automotive industry in the country (Figure 1). In addition, investment projects have been announced by Changan Automobile, which is considering an investment ranging from 500 million to 3 billion U.S. dollars to establish an electric vehicle manufacturing plant in the Bajío region—particularly in Guanajuato or San Luis Potosí (GPI News, 2024). Similarly, Dongfeng Motor Corporation, Shacman, and BYD have maintained plans to install manufacturing facilities in Mexico despite ongoing trade tensions with the United States (Alegría, 2025).

Source: Méndez (2025).

Figure 1. Location of Automotive Assembly Plants in Mexico

However, this expansion process has begun to show signs of adjustment. Between March and September 2025, 79 dealership closures of Chinese brands were recorded, resulting from internal restructuring processes and from a market that is beginning to exhibit signs of saturation (Rivera, 2025). The most affected brands have been Jetour, with 12 closures, and Omoda, with 67 dealerships being shut down, despite the fact that most of these outlets opened during the expansion surge between 2020 and 2024. Nevertheless, these automakers continue to operate in Mexico, now adopting a more cautious approach focused on optimizing resources, consolidating operations, and adapting to local dynamics within a market that is clearly undergoing transformation.

The Chinese automaker BYD began operations in Mexico at the end of 2023. Its presence started to consolidate in 2024, when it officially recorded the sale of 40,000 vehicles nationwide. During the first seven months of 2025, the brand doubled these figures. With this cumulative performance, BYD surpassed 80,000 total sales in Mexico by the first week of August 2025. It currently operates a network of more than 80 showrooms (points of sale) located across the country's main states (González, 2025).

The accelerated growth of the electric vehicle market in Mexico is closely linked to the strategy of Chinese brands, whose models are offered at prices below the production costs of many of their global competitors. This price advantage—supported by economies of scale, technological subsidies, and vertically integrated control over supply chains—has enabled Chinese vehicles, particularly electric models, to enter the Mexican market with a cost–benefit ratio that is virtually unattainable for traditional manufacturers. As a result, their adoption has increased significantly, reshaping the automotive landscape and pressing the domestic industry to accelerate its technological transition.

2.3.3. Step 3: Chronological reflection of nearshoring

Based on data from the National Institute of Statistics and Geography (INEGI)—specifically from the dataset *Retail Sales and Production of Light Vehicles by Brand, Model, Segment, and Country of Origin*—information was compiled for the period between 2020 and October 2025, to identify the sales behavior of Chinese-brand vehicles in Mexico (Table 4). It is worth noting that no records for the brand BYD were identified in this database. This dataset was subsequently analyzed and organized chronologically as part of the chronological reflection process, allowing for the observation of patterns, variations, and trends that contribute to understanding the evolution of the Chinese automotive market and its impact on urban and territorial processes.

Between 2020 and 2025, the Chinese automotive market in Mexico experienced accelerated and profoundly transformative expansion. Sales volume increased from 5,473 to 51,562 units, nearly a tenfold growth within five years (Table 4)[7]. This trend confirms

Table 4. Retail Sales of Chinese Light Vehicles by Segment in Mexico[8].

Year	Sub compacts	Compacts	SUVs	Pick-ups	Luxury vehicles	Total
2020	689	0	3,158	1,626		5,473
2021	589	1,461	4,342	3,176		9,568
2022	2,201	2,444	16,952	7,834		29,431
2023	3,893	3,063	51,952	9,807		68,715
2024	4,423	2,785	52,339	16,337	503	76,387
2025	3,960	2,439	28,624	16,522	17	51,562
	15,755	12,192	157,367	55,302	520	241,136

Source: National Institute of Statistics and Geography (INEGI, 2025).

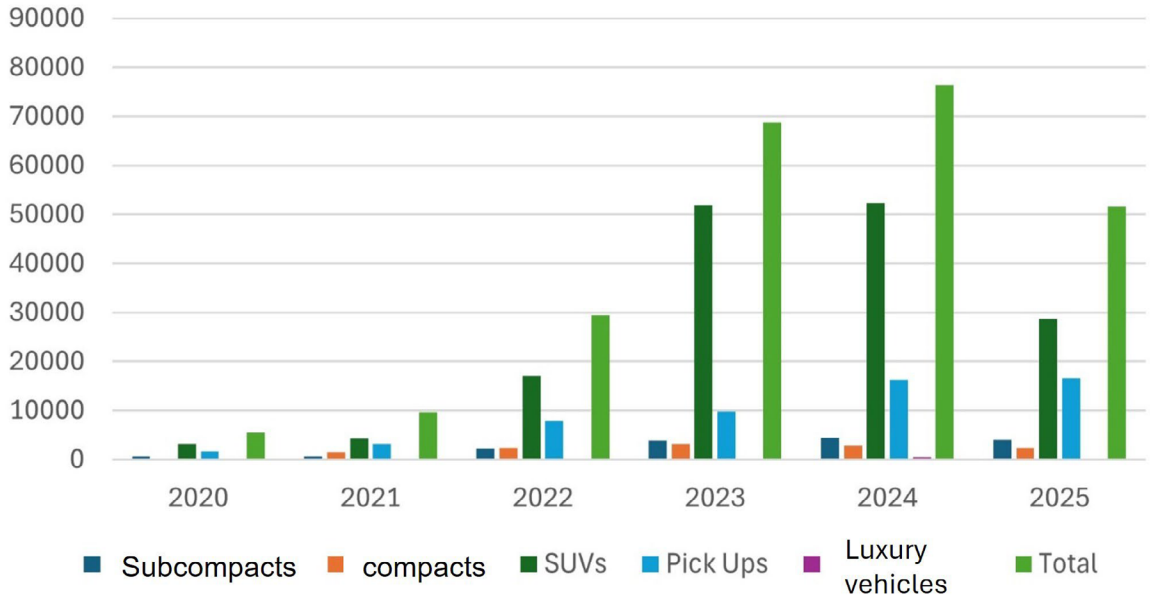
7 To these figures, the 80,000 units sold by BYD during the 2024–2025 period must be added.

8 The National Institute of Statistics and Geography (INEGI) database does not include information regarding the brand BYD.

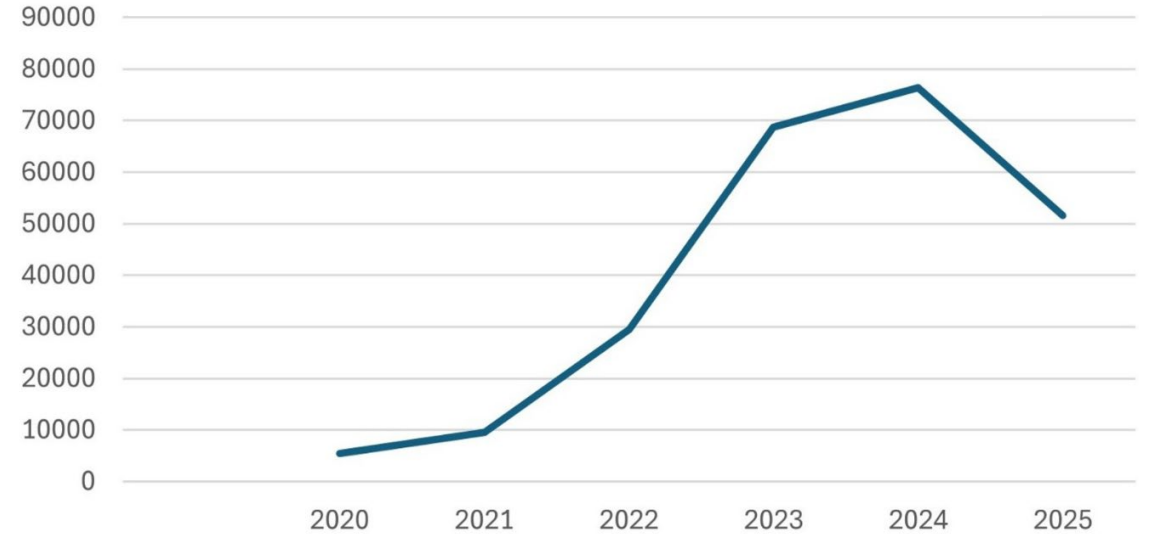
the consolidation of China as a dominant player in the light-vehicle market, owing to its capacity to compete simultaneously in price, design, technology, and availability. It also demonstrates the direct impact of nearshoring and the reconfiguration of global supply chains, which have facilitated its rapid expansion and positioning in Mexico.

The data confirm that the Mexican consumer has shifted toward larger vehicle segments, particularly SUVs, where growth has been extraordinary, enabling China to position itself as the dominant player in this market in Mexico. Pick-up trucks have also maintained consumer preference, possibly because they respond to specific sectors linked to logistics, commerce, and construction (Figures 2 and 3).

With regard to luxury vehicles, their presence in the Mexican market remains marginal, with only 503 units registered in 2024 and just 17 in 2025. These figures suggest that 2024 represented a year of



Source: National Institute of Statistics and Geography (INEGI, 2025).
Figure 2. Chinese Automotive Sales in Mexico



Source: National Institute of Statistics and Geography (INEGI, 2025).
Figure 3. Trend of the Chinese automotive market in Mexico

experimentation for Chinese brands in this segment, while the sharp decline in 2025 points to a strategic correction—or even a temporary withdrawal from this niche—within a market that did not respond with the same intensity as in other segments (Table 4 and Figures 2 and 3).

With respect to the behavior of brands and segments by year, the following trends can be observed. In 2020, JAC Motors dominated virtually all categories, particularly SUVs, while Motornation maintained a limited but diversified presence.

By 2021, growth became notable: SUVs consolidated their role as the dominant segment, JAC's pick-up sales doubled—in line with the momentum generated by nearshoring—and compact vehicles began to strengthen their position in the market.

In 2022, a turning point occurred with the aggressive entry of Chirey and Omoda, particularly in the subcompact and pick-up segments, which redistributed the leadership previously concentrated in JAC Motors. The year 2023 marked the exponential acceleration of the Chinese automotive ecosystem: Chirey dominated the light urban market, JAC maintained its relevance within a more competitive environment, and the arrival of Great Wall Motor and Jetour anticipated a scenario of market saturation in the following years.

By 2024, sales of brands such as Chirey, Jetour, and Omoda began to decelerate, a trend that coincides with the dealership closures recorded in 2025. Finally, in 2025, the market exhibited a significant reconfiguration: Changan Automobile emerged as a new dominant player; JAC Motors remained strong in the compact and pick-up segments linked to nearshoring; Great Wall Motor consolidated its presence; Chirey and Omoda maintained the sales volume, albeit without their previous explosive growth, while Jetour virtually exited the market.

The contraction observed in 2025 can be explained by a combination of factors: market saturation following several years of accelerated expansion; financial and inventory adjustments undertaken by manufacturers; potential tax increases or logistical changes affecting operating costs; and growing internal competition among Chinese brands themselves, which began competing for the same segments within an increasingly demanding market environment (Table 4 and Figures 2 and 3).

2.3.4. Step 4: PESTEL analysis of nearshoring and the Chinese automotive industry in Mexico

2.3.4.1. P — Political

In the political sphere, tensions persist between the United States and China over technological control and national security. These tensions translate into increasing U.S. pressure to monitor Chinese investments in the region under the framework of the United States–Mexico–Canada Agreement (USMCA).

Domestically, Mexican states and municipalities compete to attract manufacturing plants in the absence of a cohesive national industrial policy, while the risk of sanctions or trade restrictions linked to electric vehicle rules of origin continues to grow. Strategically, Mexico must anticipate scenarios of Chinese dominance, U.S. protectionism, or negotiated equilibrium, and move toward a clearer and more proactive industrial policy—similar to that implemented by South Korea between the 1970s and 1990s—that fosters technological capabilities rather than limiting itself to the passive reception of foreign investment.

2.3.4.2. E — Economic

In the economic sphere, Mexico is consolidating its position as an export platform to the United States, while Chinese vehicles are entering the market with production costs estimated to be 20 to 30 percent lower than those of Japan, Korea, or the United States. The International Council on Clean Transportation (ICCT) identifies here a clear Red Rhinoceros signal: between 2021 and 2024, electric vehicle prices declined by 37 percent, while internal combustion vehicle prices increased by 24 percent. The price gap—which previously exceeded a threefold difference—has now narrowed to 64 percent, largely driven by the growth of BYD. In 2024, its battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) reached an average price of 876,000 pesos, after increasing sales from 1,000 units in 2023 to 40,000 in a single year (Olvera, 2025).

This dynamic generates pressure on local suppliers that have not yet fully adapted to electromobility and creates direct competition with traditional Original Equipment Manufacturers (OEMs) established in the country, such as Nissan, Toyota, General Motors, and

Kia. The situation presents an opportunity by opening the door to new auto parts clusters oriented toward electric technologies; however, it also entails a risk, as Mexican suppliers could be displaced or absorbed by highly integrated and more competitive Chinese supply chains.

2.3.4.3. S — Social

In the social sphere, the expansion of Chinese automotive firms generates employment, albeit under wage structures and labor conditions that differ from those of traditional manufacturers. It also drives changes in mobility patterns, with a growing use of electric and hybrid vehicles. This is accompanied by a public perception that combines price accessibility with concerns regarding durability and the availability of spare parts—particularly when some electric brands do not include spare tires (Garcés, 2023) or when, as previously noted, dealership closures have occurred as part of possible internal restructuring processes within Chinese companies. All of this, compounded by the tariffs imposed by the United States, creates a complex scenario. At its core, a central tension remains: whether this process will strengthen local labor capabilities or, conversely, increase the country's technological dependency.

2.3.4.4. T — Technological

The entry of Chinese automakers accelerates the adoption of electric technologies, lithium iron phosphate (LFP) batteries, and digital driving platforms. Their highly integrated ecosystem places pressure on manufacturers already established in Mexico to update processes and technological capabilities. During the first half of 2025, while sales of internal combustion vehicles in Mexico declined by 0.2 percent year-over-year, electric and hybrid vehicle sales increased by 40.3 percent, reaching 43,656 units—growth driven primarily by Chinese brands (Olvera, 2025).

According to ICCT, by the end of 2024, BYD and JAC Motors accounted for 52 percent and 7 percent of the BEV market, respectively, surpassing even Tesla, which ranked second with 14 percent. In the PHEV segment, BYD dominated with 73 percent of the market, far above BMW and Volvo, both with just 5 percent. Between 2021 and 2024, the number of BEV and PHEV models available in Mexico doubled, increasing from 53 to 107 models. During this period, Tesla and JAC remained among the top-selling manufacturers, with JAC being the only brand that assembles all of its BEVs in Mexico (Olvera, 2025).

At the same time, the technological gap is widening. While China dominates battery production, vehicle software, and critical components, Mexico is advancing more slowly in charging infrastructure, technical certification, and workforce reskilling. The central tension lies in whether the country will be able to absorb and scale these technologies or remain subordinated to external technological dependence—an outcome that also carries implications for the urban dimension, particularly concerning the infrastructure required for charging networks and energy conditioning systems. With Chinese brands offering models priced below 600,000 pesos (approximately 35,000 U.S. dollars), the Mexican market is rapidly approaching a tipping point at which electric mobility will cease to be an option and become an inevitable dominance.

2.3.4.5. E — Environmental

The advancement of Chinese electric vehicles offers potential benefits in reducing urban emissions, if it is accompanied by adequate energy infrastructure. However, significant challenges persist: Mexico's electrical grid is not expanding at the same pace as electrification, the national energy matrix continues to depend heavily on fossil fuels, and there is a risk of generating new pressures on resources such as lithium and water. While the transition may contribute to cleaner cities, without comprehensive planning, it could reproduce environmental externalities—albeit under a different mobility model.

2.3.4.6. L — Legal / Regulatory

Mexico's regulatory framework is advancing more slowly than China's commercial expansion. Regulatory gaps persist in areas such as electromobility standards, fiscal incentives, vehicle inspection schemes for electric cars, and quality regulations governing batteries and automotive software. In addition, Mexico operates under the pressure of USMCA, which limits Chinese content in exports to the

United States, thereby creating legal uncertainty for future manufacturing plants (Morales, 2022). The regulatory challenge is twofold: to ensure orderly competitive conditions while simultaneously aligning with international standards so as not to become trapped between the competing agendas of the United States and China.

2.3.5. Step 5: Critical Moments (Metaphors of The Zoo Risk Method)

2.3.5.1. Red Rhinoceros

The massive entry of Chinese SUVs and pick-ups between 2020 and 2024 rapidly transformed the Mexican market, displacing traditional manufacturers and generating growing dependence on technologies, platforms, and supply chains controlled by China. This explosive growth constitutes the most evident—yet simultaneously overlooked—signal of an unfolding risk: market saturation, accelerated urban impacts, and technological vulnerability, whose forward momentum demands anticipatory action.

Black Jellyfish

The decline in sales and the closure of Chinese automotive dealerships in Mexico in 2025 reveal the presence of less visible yet deeply influential factors: contraction in the automotive market, regulatory changes, fiscal variations, pressures derived from USMCA, internal realignments within nearshoring dynamics, and commercial adjustments within Chinese automakers themselves. These forces operate as Black Jellyfish: silent, dispersed, and difficult to perceive, yet capable of abruptly altering growth trajectories.

Black Elephant

The exponential growth of the vehicle fleet in Mérida is a phenomenon that predates by several decades the entry of Chinese automotive brands into the Mexican market and, in itself, constitutes a warning signal regarding the structural fragility of urban mobility in the city. This dynamic can be related to the "weight of history," according to the Futures Triangle proposed by Sohail Inayatullah (2008). From 2000 to 2020, Mérida quadrupled its number of automobiles, while its population grew 1.5-fold only (Abreu, 2022). This reveals a sustained pattern of accelerated motorization occurring independently of international market supply and deeply associated with local dynamics of territorial expansion, urban sprawl, and the absence of efficient mobility alternatives.

Precisely because this problem predates the recent expansion—and acknowledging the limitations of the present study—it becomes essential to contrast the historical growth of the vehicle fleet with recent automotive market data, particularly the expansion of Chinese brands between 2020 and 2025. Only by placing both trends in dialogue is it possible to assess the magnitude of the challenge: on the one hand, an already saturated urban base; on the other, a growing supply of more affordable, electric, or low-cost vehicles that accelerates motorization and multiplies pressures on infrastructure, energy systems, emissions, and urban space.

Understanding this coexistence—a preexisting structural problem alongside a new pressure derived from automotive globalization and nearshoring—is essential for interpreting the phenomenon from a foresight perspective and for designing urban policies capable of anticipating, rather than merely reacting to, transformations already underway.

FINAL CONSIDERATIONS

In the global context of production relocation, or nearshoring, addressing urban scenarios becomes indispensable for establishing short-, medium-, and long-term strategies. This exercise must be undertaken following methodologies that can map territorial complexity, reconstruct historical evolution, and identify the signals carrying the future that are embedded in the metaphors of the Black Elephant, the Black Jellyfish, and the proposed Red Rhinoceros, to prevent the accumulation of Black Swans. These images make it possible to understand how probability, impact, and the speed of phenomena shape the response capacity of communities.

In a globalized and technologized world subjected to increasingly intense temporal pressures, the metamorphosis of risk is inherent to contemporary reality. For this reason, futures studies become an indispensable field for generating innovative methodologies—such as micro-histories, chronological reflections, and the metaphors of *The Zoo Risk Method*—that enable

the interpretation of complex phenomena through new analytical lenses.

Analyzing nearshoring requires acknowledging the collision between two systems operating at different speeds: urban structures shaped by historical inertia and bureaucratic processes, and global dynamics of innovation, consumption, and mobility that evolve with accelerated obsolescence. In this sense, Mérida exemplifies a critical scenario: its vehicle fleet expanded exponentially long before the arrival of Chinese automotive brands, revealing a preexisting structural vulnerability. When this historical trajectory is superimposed upon the massive entry of Chinese SUVs and pick-ups, the city faces unprecedented pressure on mobility systems, energy demand, emissions, and urban land use.

For this reason, it is essential to analyze patterns of late industrialization and the speed at which the Chinese automotive industry is expanding under the momentum of nearshoring. Only through such examination is it possible to determine whether the interplay among openness, regulation, and local capabilities will transform the advance of the Red Rhinoceros—a visible, accelerated, and high-impact risk—into a development opportunity or into a source of vulnerability for Mexico and for cities such as Mérida.

From this perspective, the Red Rhinoceros functions as a strategic lens to recognize risk in motion and underscores the urgency of strengthening domestic capacities in the governmental, regulatory, energy, industrial, urban, and mobility domains. Only through anticipatory tools will it be possible to plan and negotiate intelligently, design robust public policies, and regulate impacts before they become irreversible. Ultimately, transforming this external pressure into a sustainable advantage will depend on the collective capacity to understand the risk and to act in synchrony with the speed of the phenomenon.

In summary, this article began with the problem of understanding how Mexican cities—particularly those subjected to accelerated pressures of production relocation such as nearshoring—can reinterpret their own past in order to anticipate emerging risks and opportunities. To this end, it set out to develop a methodological approach integrating chronological reflection with CLA, the PESTEL model, and the strategic use of risk metaphors, proposing a multilayered reading of the urban territory. The method presented demonstrates that the articulation of these tools makes it possible to reconstruct historical patterns, structural tensions, and risk dynamics that often remain invisible in conventional analyses focused solely on the present. It also underscores the importance of mapping the speed at which events unfold; that is, incorporating a dromological perspective on phenomena can contribute to a more nuanced understanding of their future behavior.

Although the empirical application was exploratory, the results demonstrate the model's potential to identify driving forces, anticipate pathways of urban transformation, and support decision-making in contexts of high uncertainty. This approach carries relevant implications both for theory—by creatively reversing the orientation of foresight to read the past—and for practice, by offering a replicable analytical foundation for urban planning, public policy design, and territorial management through the reinterpretation of phenomena using risk metaphors.

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