


## ARTICLE

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## MARKET-MAKING RESEARCH: A THEORETICAL SYSTEMATIZATION


*Estudos de construção de mercado: uma sistematização teórica*

**Cassio Eduardo Cândido Souza<sup>1</sup>**

 0000-0002-8935-2680


✉ cassioecsouza@gmail.com

**Paulo Henrique Montagnana Vicente Leme<sup>1</sup>**

 0000-0003-4174-5642


✉ paulo.leme@ufla.br

**Elisa Reis Guimarães<sup>1</sup>**

 0000-0003-4917-5218

✉ elisa.rguimaraes@ufla.br

**Gustavo Nunes Maciel<sup>1</sup>**

 0000-0002-2404-6535

✉ gustavonunesmaciel@yahoo.com.br

<sup>1</sup> Universidade Federal de Lavras

### ABSTRACT

The market-making studies propose a singular approach to markets based on the search to explain the formation and functioning of markets from a performative perspective. Considering actors, their actions and tools, markets are constituted and programmed to operate in a given way, and the purpose of the proposed theoretical model is to observe what these elements are and how they interact in a social context so that this given functioning in fact occurs. Because there is a dense literature on the topic, understanding all of its concepts and premises can be challenging. Thus, two market analysis perspectives are exposed: (i) translational, which observes how markets evolve as a structure, and (ii) inscriptional, aimed at understanding how market practices transpose from a market actor's point of view to another.

**KEYWORDS:** Constructivist market studies, market-making theory, market practices, market arrangements, performativity, socioeconomy.

### RESUMO

Os estudos de construção de mercado propõem uma abordagem singular sobre os mercados a partir da busca em explicar a formação e o funcionamento dos mercados sob uma perspectiva de performatividade. Considerando os atores, suas ações e ferramentas, os mercados são constituídos e programados para operar de uma determinada forma, e o propósito do modelo teórico proposto é observar o que são esses elementos e como eles interagem em um contexto social para que esse dado funcione de fato. Por haver uma densa literatura sobre o assunto, entender todos os seus conceitos e premissas pode ser desafiador. Assim, duas perspectivas de análise de mercado são expostas: (i) translacional, que observa como os mercados evoluem como uma estrutura, e (ii) de inscrição, que visa compreender como as práticas de mercado se transpõem do ponto de vista de um ator de mercado para outro.

**PALAVRAS-CHAVE:** Estudos de mercado construtivistas, construção de mercado, práticas de mercado, arranjos de mercado, performatividade, socioeconomia.

## 1 Introduction

Market-making research is a theoretical model that has been used to analyze the attributes that constitute markets from a more dynamic perspective, with a focus on understanding how these attributes are configured to enable the existence of the markets themselves. This model aims to identify the actions performed by the actors that compose the market, helping to understand how markets are configured and organized in their functioning.

This theoretical approach assumes that no market is constant but that every market is ever-changing and accepts this dynamism as an inherent part of the market, offering possibilities to view the elements of this dynamism through the analysis of interactions among the factors that compose it. Considering that this approach has its origins in actor-network theory, social relations and interactions have relevance in the conception of markets; however, the focus is directed toward the practices and actions conducted by the actors rather than to the identity and function of these actors.

Briefly, market-making theory proposes that markets are formed not only by the actors that compose them but also by the market practices they conduct, causing transformations in the market, assuming that all markets can exist, focusing on understanding the movements that occurred for a given market to materialize. This model has proven useful to explain the practical operation of markets, attributing the transmission of transformations along a market configuration as a key element for these markets to be constantly transformed by the actions of their actors.

Although this theoretical model is attributed to Michel Callon, several other authors have contributed to the enrichment of this model by adding new elements and concepts to understand the making of markets. However, considering the range of seminal works that compose the conception of this theory, understanding them individually is a challenge for those who wish to apply this model in their fields of study, which may hinder popularization of the model among researchers.

Considering the challenge of interpreting such a dense and rich literature, the overall objective of this paper is to present an integrative review to propose a systematization of the central concepts formulated by market-making research, reinforcing the methodological possibilities of the theoretical model when proposing two theoretical perspectives for analyzing market-making. The justification for this work lies in the difficulty of integrating these concepts in a logical way and attributing the correct terminologies to processes that occur along market-making.

In addition to this introduction, this paper presents a theoretical framework for market-making research, followed by a glossary with the terminologies used in this theoretical model, and presents two theoretical perspectives for analyzing markets.

## 2 Theoretical Framework

### 2.1 Market-making research and its origin

Market-making research has actor-network theory as a theoretical background, which considers social relations as a constituent and structure of markets (Callon & Law, 1997). According to actor-network theory, any and all technology, material, space or rule of our society is based on socio technical arrangements that connect actors in networks whose interaction gives rise to these objects.

Actor-network theory arises from the need to understand events that transcend organizations, accepting uncertainties as part of this social context, explaining, for example, how strategic alliances between firms and/or elements of cooperation occur in various social organization forms (Andrade, 2004)

The integration of actor-network theory and market-making research occurs in the evolution of the understanding of market development from the socio technical perspective (Latour, 1996) to the structural perspective (Callon & Muniesa, 2005). The divergent point between actor-network theory and market-making research is that actor-network theory seeks to understand markets from the perspective of interaction and structure whereas market-making research seeks to understand markets from a performative point of view.

For market-making research, it is possible for every market to exist as long as the movements necessary to materialize this market occur for this to happen. The premise that every market can exist is the concept of *multiplicity*, while the understanding of which movements occurred for a particular version of these multiple markets to materialize is *performativity*.

Market-making research, therefore, seeks to better explain how markets perform and uses social relationships that occur within the context of a market to shape this same market, enabling other interactions based on these relationships. Social relations are relevant because market-making research understands that a market cannot have all its characteristics because at least part of these characteristics are mutable (Kjellberg & Helgesson, 2007).

To understand performativity as the object of market-making research, it is necessary to discuss the concept of economization. For Çaliskan and Callon (2009), economizing a good means making it economical with all the necessary attributes to be traded in a market, which thus makes it necessary to price it and establish trade circuits and value networks that 'render things economically commensurable and exchangeable' (Muniesa, Millo, & Callon, 2007, p. 3).

In the context of *economization*, understanding factors such as price calculation methodologies, reactions and consequences of competition among actors, profit allocation methods, among others, is especially important because all of these factors influence market performativity, making it possible and real, or not. When these economic goods are brought into formal price calculation spaces, they are said to be abstracted goods, and this *abstraction* is facilitated by several device that actors can develop, implement or even remove from the analyzed market.

Market-making research is interested in explaining the processes of goods economization, how they are abstracted and how the actions of the actors that are part of the market assist in these processes. In market-making research, the actor is a secondary figure – more important are the actions that these actors perform in the market that contribute to its performativity, determining how the economic goods are transacted in that context.

In general, a good or service that has value in a given market can be analyzed under this theoretical lens, and it will be possible to observe how the actor or actors inserted in this market interact so that this good is economized and to understand the reason why certain market structures are implemented to enable the sale of this good or service.

## 2.2 Translation chains and inscriptions

Market dynamism, from the perspective of market-making research, derives from the transformations that are transported along the market. Two concepts are important to

understand how the transportation of transformations occurs in this theoretical context: translations and inscriptions.

When actors perform actions in the market, these actions do not occur in isolation but rather interact with one another through translations, which are the vehicle through which these transformations and modifications are transported from an action of a certain nature to another action of a distinct nature in the market context (Kjellberg & Helgesson, 2007).

*Translation chains* are the product of this sequence of transformations caused in the market, representing how these translations can be observed in terms of market operation dynamics. In the conception of Kjellberg and Helgesson (2007), these translation chains can be descriptions, methods of measurement, measures, results, rules and tools, and interests, and these are the vehicles by which transformations in the market are visible when we consider actions of a distinct natures.

In contrast, when considering actions of the same nature but of different actors, it is a question of *inscriptions*, which refer to the transportation of this action to the perspective of another actor with another vision and analysis perspective, allowing the latter to assimilate it or dissociate it in a certain way (Latour, 1996). Inscriptions are an observable trail of how the actions of a given nature conducted by actors are converted into other actions of the same nature by other actors.

These transports refer, therefore, to the environment through which these modifications are transported within the market, whether the nature of the actions of these actors is different or similar. The actions of the actors are called market practices, and their nature is related to their classification.

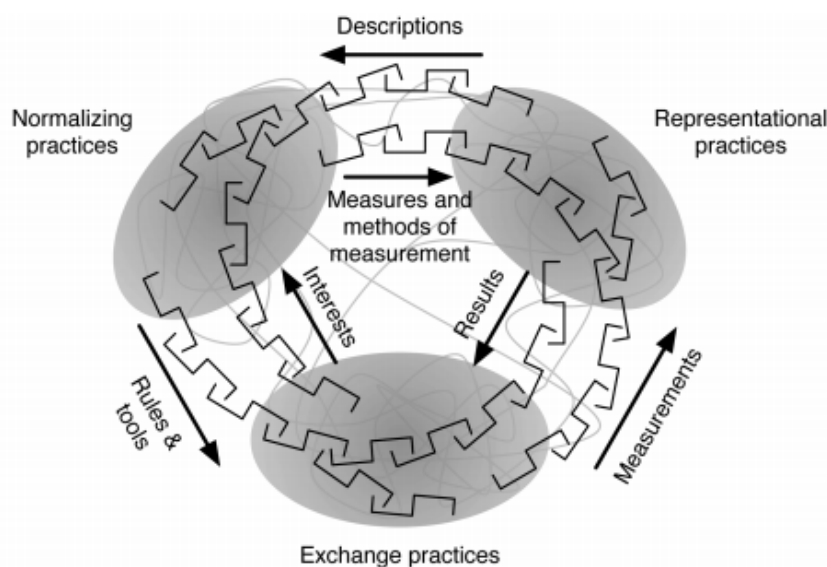
### 2.3 Market practices, structuring practices and market devices

Market-making research seeks to explain how goods are economized and to understand what actions actors take to ensure that these goods are actually converted into economic goods and placed in a market context. To address this gap, we have the contribution of Kjellberg and Helgesson (2007), who coined the term market practices, which are actions conducted by actors that shape the market as it is.

The actions of market actors are *market practices*, activities that give meaning to the actors that belong to this market and that transform the market, and it is proposed that it is possible to distinguish the actions performed by these actors from their social interactions (Kjellberg & Helgesson, 2007). The aforementioned authors propose three categories of market practices: representation, normative and transaction (Figure 1).

*Representational practices* are related to how the market is portrayed in practice, describing the generic way that this market should operate, and are relevant for constructing correlations with the real space-time that the market represents. *Normalizing practices* represent the methods and guidelines on how the market should be formed and reformulated, relating to the direction of the market, competition among actors, voluntary adherence rules and the strategy of actors to achieve their objectives within the market context. *Exchange practices* represent all aspects of the consummation of the economic exchange that takes place in the market, considering *calculation*, product specification, advertising and other activities that assist in effecting the economic exchange (Kjellberg & Helgesson, 2007).

Figure 1 – Market Practices



Source: Kjellberg and Helgesson (2007, p. 151).

However, there are practices that do not fit into the nomenclature proposed by Kjellberg and Helgesson (2007). *Structuring practices* are described by Leme and Rezende (2016) as practices that (i) help to make a market from the point of view of operation and functioning, supporting the stabilization of the market as such.

Souza (2019) argues that structuring practices also play a role in (ii) catalyzing the effectivity of inscription processes, enabling market practices to be assimilated or dissociated, and (iii) resources to strengthen or weaken coordination relationships within the market, enabling the emergence of new market practices based on these new coordinations.

If market practices represent the actions of market actors toward its representations, norms and transactions, then structuring practices represent actions toward the construction of market functioning. *Market devices* are mechanisms that help actors take action and are derived from Michel Foucault's notion of *dispositif*, denoting that this object is endowed with agency and can either demand actions from actors or perform actions by itself.

Market devices were theorized by Muniesa, Millo & Callon (2007), who define them as the means by which the agencies of actors are materialized and resources with which actors can be stimulated to take a certain action, being physical objects, textual objects or materials that aid in the economization and abstraction of a good in the market.

A distinction is necessary. Market practices are related to what occurs in a given market, and market devices are what carries or translates these practices to the market context; market devices can also drive market practices or make actors drive them (Callon & Muniesa, 2005).

## 2.4 Market arrangements

If market practices, structuring practices and market devices are the modifications placed on the market and translations chains and inscriptions are the means by which these modifications are conveyed and transported along the market, it is necessary to understand what the market is.

According to Araújo (2007), a market is an arrangement with three main characteristics: (i) it organizes the production and circulation of goods; (ii) has a heterogeneous composition, i.e., is composed of devices, actors and technologies; and (iii) builds a space for confrontation where power is competed for.

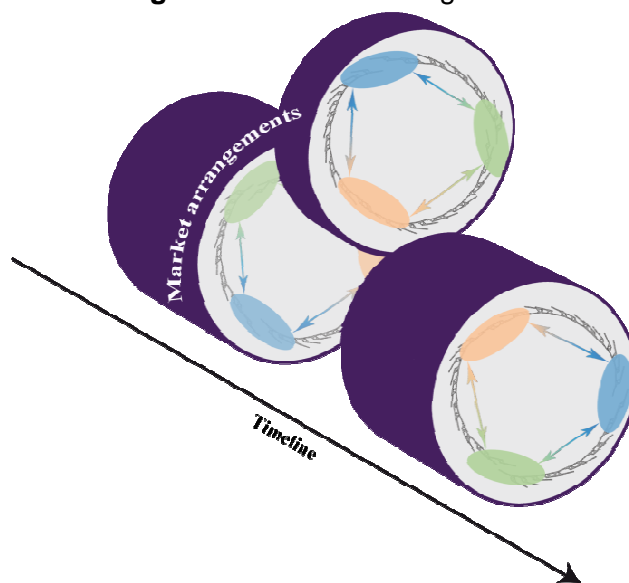
Based on this principle, for this space for power and interaction to exist, actors must be arranged in this market. Çaliskan and Callon (2010) define market arrangement with the term 'arrangement' –the notion of fit, configuration, or organization – derived from the French term *agencement*.

*Market arrangements* are the configurations that a given market can assume given the actors and devices that comprise it, the functions they perform and the market practices they conduct. For Çaliskan and Callon(2010),market arrangements also have agency because they can also perform actions, which may sound controversial, but not if considering that certain actors can perform certain actions in a given market arrangement context, as if it were a device allowing this action in a coordinated way.

According to Çaliskan and Callon (2010), there are five types of market arrangements: 1) Pacifying goods, which corresponds to the process of predictable product quality evolution so that this stability facilitates organized actions to build transactional relationships; 2) Marketizing agencies, which refers to the ability of actors to compete for the right to define goods and value; 3) Market encounters, which refers to the encounter between goods to be valued and the actors who value these goods; 4) Price-setting, which refers to the application of valuation methods to estimate monetary value for goods; and 5) Market design and maintenance, which concerns the definition, consolidation and improvement of these arrangements based on market practices performed in the market context.

Market arrangements can also be understood as a point of reference if one imagines the market to be something that progresses over time, as shown in Figure 2.

**Figure 2 – Market Arrangements**



Source: The authors, based on Leme (2015).



## 2.5 Overflows and framings

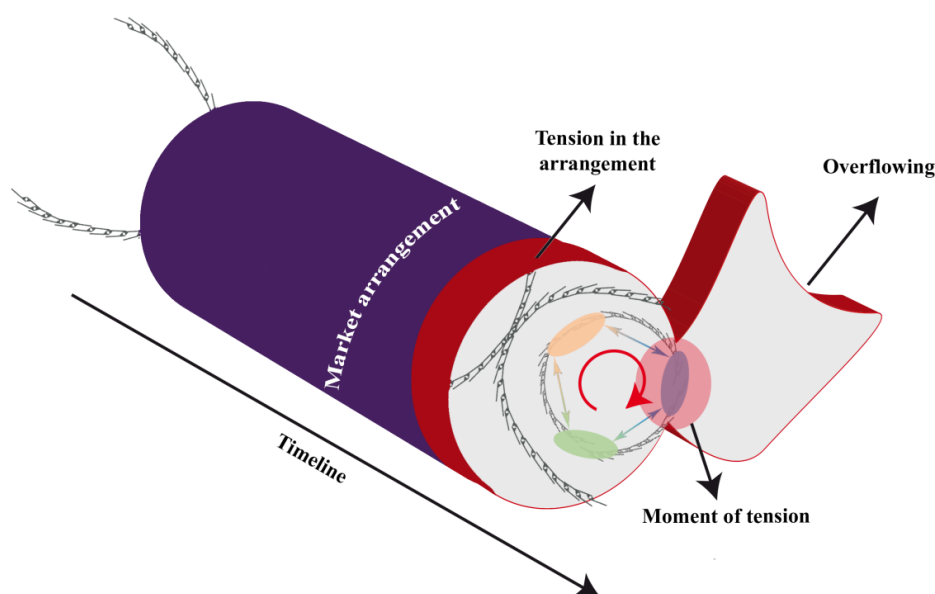
Actors conduct market practices and structuring practices and construct market devices to modify or maintain the market structure; these modifications are conveyed by translation chains and inscriptions, resulting in combinations of actors, actions and practices called market arrangements. These arrangements are dynamic and undergo constant transformation and improvement.

The transformations proposed by actors that are transmitted by translation chains or inscriptions can maintain the market arrangement as it stands but can also cause tension in these arrangements. This tension can cause imperfections in the market arrangement, revealing what Çaliskan and Callon (2010) referred to as *overflows*, as shown in Figure 3.

These overflows need to be corrected so that the market can operate in full functioning again. Through market devices, market arrangement actors can evaluate improvement strategies to bring the arrangement back to stability through new market practices and new market devices or even through the entry of new actors in the market arrangement.

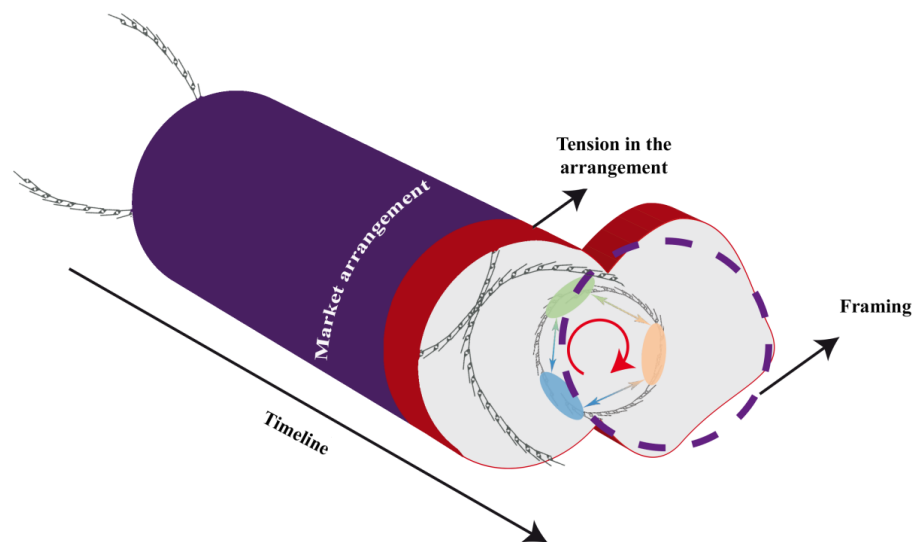
The function of *framing* is to propose ways for the market arrangement to be stabilized and for its processes to be improved, including price calculation mechanisms, textual communication devices, evaluation methodologies, market practices and the strategy of actors for that context. Every action to stabilize the arrangement is understood as framing, including structural practices, as shown in Figures 3a and 3b. Figure 4 shows that framings can also generate market arrangements.

**Figure 3a – Overflows in Market Arrangements**



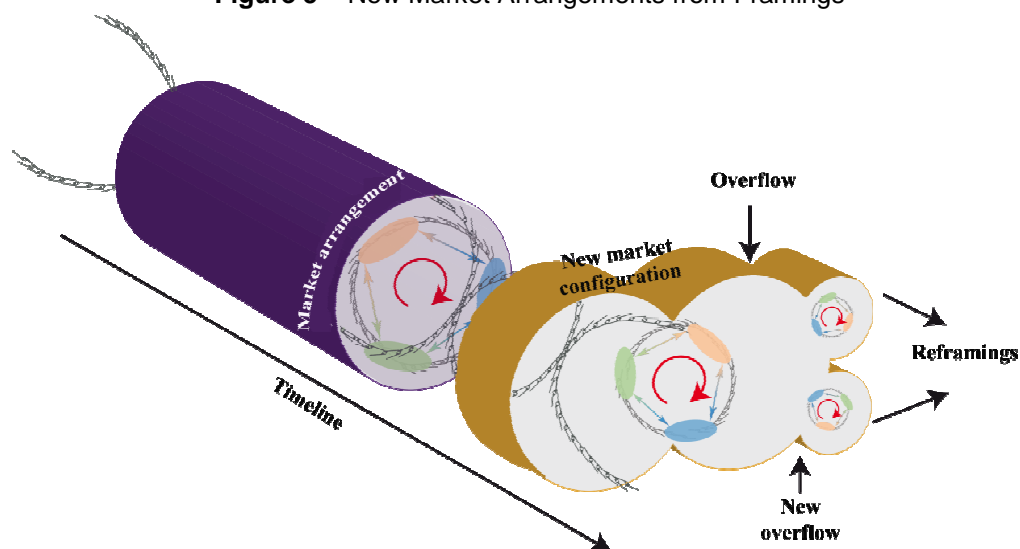
Source: The authors, based on Leme (2015).

**Figure 4b – Framings in Market Arrangements**



Source: The authors, based on Leme (2015).

**Figure 5 – New Market Arrangements from Framings**



Source: The authors, based on Leme (2015).

The stabilization of the market arrangement, i.e., the framing process, refers to the capture and dissociation of social relations within the market network, breaking with the previous network and configuring into a new network. The overflow and framing process refers only to the stabilization of the market arrangement, not necessarily leading to the creation of a new market arrangement, but this is an option (Çalışkan & Callon, 2010).

Thus, by overflowing and framing, markets take shape and improve over time, allowing the entry of actors or new practices or even new market devices. An important aspect to be emphasized is that this theoretical model is not about hierarchies but rather about rankings that correspond to the order of activity processes and practices that occur within the market context.



### 3 Market-making Research Terminology

Several studies from various authors compose market-making research, and understanding them can be a challenge. To build a glossary of the terms used in this theory, Leme and Rezende (2018) began this systematization, complemented by Souza (2019), by adding concepts explored in their work, as shown in Table 1.

**Table 1** – Central concepts of market-making research

CONCEPT	DEFINITION	REFERENCES
Abstraction	Transportation of an economic good to a formal price calculation space. <i>Example:</i> Inclusion of the good in a value attribution space.	Çaliskan and Callon (2010).
Asymmetry	Imbalances in power relations and resources that cause changes in the behavior of other actors within a given market arrangement. <i>Example:</i> Tension caused by power relations involving one party excelling the other.	Callon (2015).
Actor	Any element that intervenes in the network, creating dependency relations with other elements and translating their desires into its own language. An actor can be human or not human, such as technological artifacts. <i>Example:</i> Human and nonhuman actors driving market practices.	Callon (1986); Latour (1994); Miranda (2009).
Sociotechnical agencements	Agencements are arrangements that have the ability to act in different ways, depending on their configuration. Agencements are operators of translations, and translation is the basic module where agencements are constructed. The act of heterogeneous elements in the network fitting together. Sociotechnical agencements (STAs) are composed of human beings (bodies) as well as material, technical and textual devices. <i>Example:</i> The arrangement/configuration of actors and devices in a given market context, effected and produced from the transactions performed in the STA.	Callon (2009); Çaliskan and Callon (2010).
Market arrangements	A type of economic arrangement. In market arrangements, the emphasis is on the conception, production and circulation of goods, their valuation, and the construction and subsequent transfer of property rights through monetary mediations, transaction mechanisms and pricing systems. <i>Example:</i> The product resulting from the fit of the parts involved in a market, creating a configuration with a defined purpose.	Çaliskan and Callon (2010).
Calculation, Calculation, Qualculation	Objectify and singularize a good, that is, define its properties objectively so that it can become part of the consumer world. This adjustment work is the substance of any market transaction. Thus, the properties of products are co-formulated by various market professionals. <i>Example:</i> Definition of minimum conditions to make an object available to an acquirer.	Callon and Muniesa (2005) Cochoy (2008); Çaliskan and Callon (2010); Cochoy et al. (2016)
Market device	Devices are objects with agency that articulate actions: they act or make others act. They can also be considered material and discursive arrangements that intervene in market making. They are components of market arrangements. <i>Example:</i> Objects, endowed with agency, elaborated by actors that affect market making, catalyzing or aiding the action taken by market actors.	Muniesa et al. (2007); Çaliskan (2007); Cochoy (2008); Çaliskan and Callon (2010).

Economization	<p>Act of making an economic good, that is, endowing the good with minimal elements to transact it in a value exchange space. Economic goods have predictability attributes, pricing mechanisms and defined value propositions.</p> <p><i>Example:</i> Recognition of the good by its value.</p>	<p>Callon and Muniesa (2005)                      Çaliskan and Callon (2010).</p>
Framing	<p>A disarticulation operation that allows a myriad of associations among actors to be ordered and classified. It is a stabilization process of market arrangements, i.e., framing allows relationships in a network to be captured and decoupled from one another. The framing establishes a limit around which interactions occur, regardless of context.</p> <p><i>Example:</i> Means by which the market configuration assimilates and stabilizes the overflow, modifying the market configuration or improving the market arrangement.</p>	<p>Callon (1997, 1998);                      Araújo (2007);                      Cochoy (2008);                      Çaliskan and Callon (2010);                      Oliveira (2013).</p>
Inscription	<p>Means by which translated market practices are conveyed along the market by the components of the STA.</p> <p><i>Example:</i> Means of conveying translations between analytical perspectives; can be discursive, textual and practical. They are traces left by translations of market practices of the same nature.</p>	<p>Latour (1986, 1994, 1996).</p>
Market	<p>STAs with three characteristics: (i) organize the conception, production and circulation of goods and property; (ii) possess heterogeneous constituents; and (iii) delimit and construct spaces for power disputes. Continuous translation process linking transactions, representations and norms in hemicycle and reversing self-interfering chains.</p> <p><i>Example:</i> An environment where economic exchanges are carried out and where actors conduct market and structuring practices.</p>	<p>Araújo (2007),                      Kjellberg and Helgesson (2007),                      Araújo et al. (2010),                      Çaliskan and Callon (2010),                      Leme (2015).</p>
Multiplicity	<p>Possibility of any market existing, as long as the necessary translations occur for its existence.</p> <p><i>Example:</i> Assumption that all markets can occur.</p>	<p>Kjellberg and Helgesson (2006, 2007).</p>
Order	<p>Procedural order in which technological processes occur within a social network context.</p> <p><i>Example:</i> Sequence of events in a market context.</p>	<p>Law (1992).</p>
Performativity	<p>Process of understanding the translations and movements that occurred for a market configuration to materialize.</p> <p><i>Example:</i> Practical understanding of the conversion of hypothetical markets into practical markets.</p>	<p>Kjellberg and Helgesson (2006, 2007), Mason et al. (2015)</p>
Structuring practice	<p>Practices that structure the operation of a market. They do not constitute market practices but are relevant for assisting in the stabilization of a given market arrangement and its operational models.</p> <p><i>Example:</i> Practices that are not normalizing or representational or exchange practices that assist in maintaining a given market arrangement or in structuring other practices.</p>	<p>Leme (2015);                      Leme and Rezende (2016)</p>
Market practice	<p>Set of practices, including material arrangements, that contributes to making markets. All activities that contribute to the formation of markets.</p> <p><i>Example:</i> Practices conducted that shape certain market configurations.</p>	<p>Callon (1998);                      Araújo et al. (2008);                      Callon and Muniesa (2005);                      Kjellberg and Helgesson (2006, 2007).</p>
Rhizome	<p>It divides the hierarchical structure, as in a tree of knowledge organization system, into taxonomies and classifications (hierarchies). In the rhizome model, any element can influence and modify elements.</p> <p><i>Example:</i> In market-making research, rhizomes indicate the disruption of order.</p>	<p>Deleuze and Guattari (1987).</p>

Overflow	Overflows are the results of imperfections or the failure of framing attempts and the processes that involve them. Times of overflow mark the emergence of imperfections in framings, and in doing so, they make visible material, legal or other framing devices that inspire debates about how these can be improved. <i>Example:</i> Imperfections caused in market arrangements, triggered by tension.	Callon (1997, 1998); Araújo (2007); Cochoy (2008); Çaliskan and Callon (2010); Oliveira (2013).
Translation	The transportation of transformations; it is not an actor among others nor a force behind the actors carried by some of them. It refers to all the displacements among other actors whose mediation is indispensable to the occurrence of any action. Instead of rigid opposition between context and content, translation chains refer to the work thanks to which actors modify, displace and translate their various and contradictory interests. May involve acts of displacement or replacement of the actors in the network, whenever involving a transformation. <i>Example:</i> Movements of modification (translation) and resignification (transcription) of the configuration of market practices and market making.	Latour (1986, 1994, 1996), Tureta et al. (2006), Tonelli (2016).

Source: Souza (2019), based on Leme and Rezende (2018)

#### 4 Analytical Perspectives of Market-Making Research

The application of market-making research comprises two analytical perspectives: translational and inscriptional. Both consider the same theoretical elements and definitions of the model but have distinct targets and focuses in their application, particularly regarding the nature of market practices, i.e., the type of market practice (exchange, representational and normalizing).

The translational perspective is related to the application of market-making research to understand market arrangements in a temporal manner, i.e., observing how different market arrangements occur over time from the translation chains observed in these specific transitional periods between market arrangements in a given context.

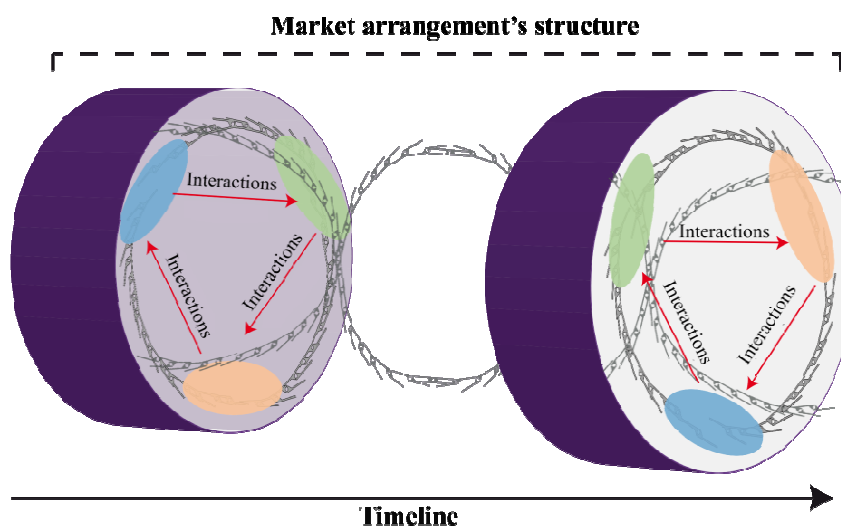
This perspective seeks to understand the processes of translation between market practices of a distinct nature, that is, how representational practices alter normalization nor exchange practices in a given observation context. Based on this analysis, translation chains are observable, and by assigning meanings to these translations, it is possible to trace or reconstruct how these market arrangements are formed, under what circumstances and in what times of tension the overflows generated framings or new market arrangements.

The application of the translational perspective allows us to travel across time for a given market through historical-practical-functional mapping of market arrangements, understanding them as reference points. The application of this perspective reveals how market practices of a distinct nature cause translation chains and how these translation chains create, modify or eliminate certain market arrangements.

This perspective helps us to understand why the arrangement is how it is at a given moment of time by tracing its structures and translation patterns. Considering that the market arrangement is a configuration, an arrangement of actors, the translational perspective helps us identify which translation chains aid the entry of new actors, market devices and other factors that are decisive for the creation of tension in market arrangements so that they are subsequently able to be framed.

In summary, the translational perspective directs its understanding efforts toward the structural formation and composition of the market arrangement, considering its components and its overflow and framing mechanisms based on translation chains of market practices of a distinct nature, as shown in Figure 5.

**Figure 6 – Translational Analytical Perspective**



Source: The authors.

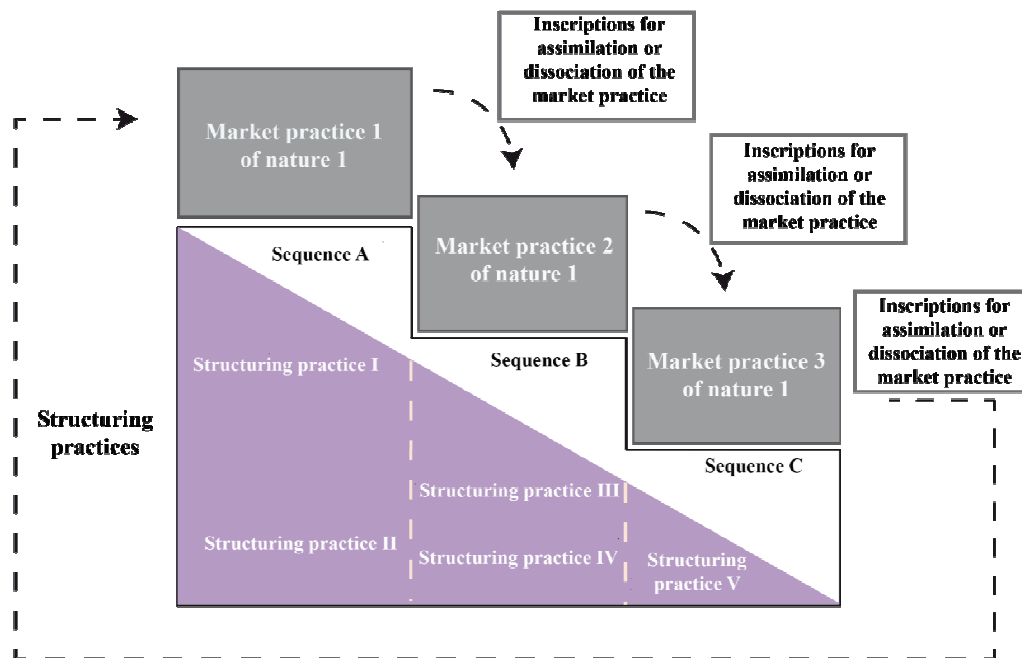
However, there is a level of interaction that the translational perspective and the original conceptualization of market-making research *does not* address. Considering that several actors are included in the market, there is a level of interaction among these actors when implementing market practices of the same type. The means through which an actor prices a good can be influenced by how another actor positions a sales strategy, for example; that is, both actors conduct exchange practices, but they are different – this distinction is explainable through inscriptions, as premises to ground the actions of actors in a specific market practice context.

The inscriptionary perspective focuses on the interactions that occur within the context of a given market practice category, i.e., observing how market practices of the same nature are transported between the different orders contained within a market context as a process. From this perspective, inscriptions play a key role because they allow observing how a given market practice is assimilated or dissociated by another actor, indicating whether this other actor conducted a similar or distinct market practice and why this change was addressed in this particular way.

Order is relevant to this perspective because, by understanding the market as a process, translation chains cannot answer all questions that emerge for market functioning because the translation chains would all be the same when observing market practices of the same nature, as they only differ when considering different market practices. In this sense, order provides the sequential notion of value exchange within the market and allows us to see the traces of this value exchange, which we can also understand as inscriptions.

Application of this perspective reveals how market practices are assimilated through order, helping to build an understanding of how a given market works from the perspective of one or more actors, revealing the motivations for certain market practices to be performed in a given way, as shown in Figure 6.

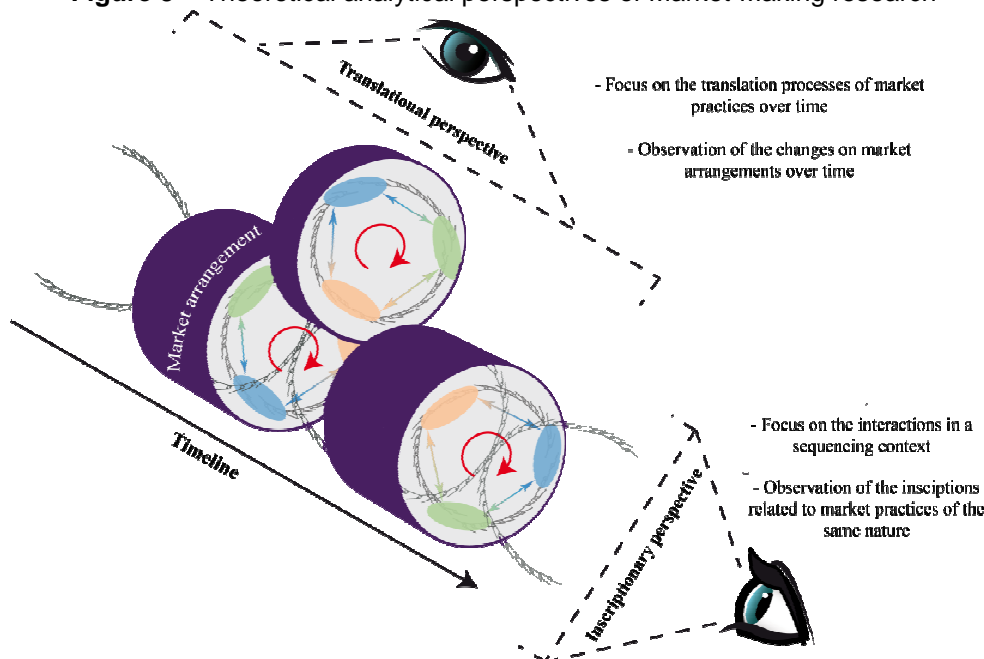
**Figure 7 – Inscriptional analytical perspective**



Source: The authors.

Both analytical perspectives consider the premises of dynamism and fluidity of market-making research, offering targeted ways to apply this analytical point of view to observe the composition of markets. Figure 7 summarizes this systematization of perspectives.

**Figure 8 – Theoretical analytical perspectives of Market-Making research**



Source: The authors, based on Leme and Rezende (2018).

Thus, it is understood that the translational perspective views the market from a longitudinal time line seeking to understand the changes in market arrangements that occur in it. The inscriptionary perspective, in turn, views the market in a 'frontal' way, analyzing how market practices are transported from point A to B between the orders contained in the market.

## 5 Final Considerations

The aim of this paper was to systematize the concepts of market-making research through an integrative review to facilitate understanding the dense, complex literature and the concepts that often confound readers. This complexity occurs mainly because, in the author's opinion, market making is a theory in which all aspects are very fluid and dynamic, where everything can be anything.

Market-making research, in this sense, is proposed as a useful theoretical model to explain markets from the point of view of their constitution and functioning, knowing that their structure is temporal and changeable based on the action of actors. It is an appropriate and promising model to explain the various construction and deconstruction processes that permeate the history of a given market with respect to its actors, market devices, tension, framings and market arrangements.

As a theoretical analytical model, it is important to organize the central concepts and assumptions of market-making research in order to assign the correct nomenclature to the factors identified in the market so that these traces and reconstructions of market situations and the understanding of their functioning are systematized in an effective manner. The translational and inscriptionary analytical perspectives are interesting points of view for looking at the constitution of markets to observe their functioning and operation and help in systematizing these market factors, attributing to them their proper function.

The inscriptionary perspective in particular fills a gap in market-making research when considering the order and the transportation/assimilation of market practices among different market actors. This is an important part of such research for observing market dynamics because the issue of transportation among market practices of the same nature or classification has a direct relationship with how actors define strategies of action based on these transformations proposed for the market.

Notably, all the original elements of market-making research are present in both the translational and inscriptionary perspectives: dynamism, fluidity, translation, inscription, practices and their drivers. What distinguishes them is a simple matter of perspective and direction taken to understand efforts –there is no restriction to the application of one or the other or both; rather, they should be applied to facilitate the conceptual understanding of market-making research.

## References

- Andrade, J. A. (2004). Actor-network theory (ANT): uma tradução para compreendero relacional e o estrutural nas redes interorganizacionais? *Cadernos EBAPE*, 2(2), 1-14.
- Araújo, L. (2007). Markets, market-making and marketing. *Marketing Theory*, 7(3)3, 211-226.
- Araújo, L., Finch, J., & Kjellberg, H. (2010). *Reconnecting Marketing to Markets*. Oxford: Oxford University Press.
- Araújo, L., Kjellberg, H., & Spencer, R. (2008). Market practices and forms: introduction to the special issue. *Marketing Theory*, 8(1), 5-14.



- Çaliskan, K. (2007). Price as a market device: cotton trading in Izmir Mercantile Exchange. *The Sociological Review*, 55(2), 241-261.
- Çaliskan, K., & Callon, M. (2009). Economization, part 1: shifting attention from the economy towards processes of economization. *Economy and Society*, 38(3), 369-398.
- Çaliskan, K., & Callon, M. (2010). Economization, part 2: a research programme for the study of markets. *Economy and Society*, 39(1), 1-32.
- Callon, M. (1998). An Essay on Framing and Overflowing: Economic Externalities Revisited by Sociology. *The Sociological Review*, 46(S1), 244-269.
- Callon, M. (2009). Elaborating the notion of performativity. *Le Libellio d'AEGIS*, 5(1), 18-29.
- Callon, M. (2015). Revisiting marketization: from interface-markets to market-agencements. *Consumption Markets & Culture*, 19(1), 17-37.
- Callon, M. (1986). The Sociology of an Actor-Network: The Case of the Electric Vehicle. In: M. Callon, J. Law, & A. Rip, *Mapping the dynamics of science and technology*. (1<sup>st</sup> ed., pp. 19-34). London: Palgrave Macmillan.
- Callon, M., & Law, J. (1997). After the Individual in Society: Lessons on Collectivity from Science, Technology and Society. *Canadian Journal of Sociology*, 22(2), 165-182.
- Callon, M., & Muniesa, F. (2005). Economic Markets as Calculative Collective Devices. *Organization Studies*, 26(8), 1229-1250.
- Cochoy, F. (2008). Calculation, qualculation, calquulation: shopping cart arithmetic, equipped cognition and the clustered consumer. *Marketing Theory*, 8(1), 14-44.
- Cochoy, F., Trompette, P., & Araújo, L. (2016). From market agencements to market agencing: an introduction. *Consumption Markets & Culture*, 19(1), 1-16.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia* (2<sup>a</sup> ed.). (B. Massumi, Trad.) University of Minnesota Press.
- Kjellberg, H., & Helgesson, C.-F. (2006). Multiple versions of markets: Multiplicity and performativity in market practice. *Industrial Marketing Management*, 35(7), 839-855.
- Kjellberg, H., & Helgesson, C.-F. (2007). On the nature of the markets and their practices. *Marketing Theory*, 7(2), 137-162.
- Latour, B. (1994). *Jamais fomos modernos: ensaios de antropologia simétrica* (1<sup>a</sup> ed.). São Paulo: Editora 34.
- Latour, B. (1996). On actor-network theory: A few clarifications. *Soziale Welt*, 47(4), 369-381.
- Law, J. (1992). Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity. *Centre for Science Studies Lancaster University*, pp. 1-11.
- Leme, P. H. (2015). *A construção do mercado de cafés certificados e sustentáveis da UTZ Certified no Brasil: As práticas e os arranjos de mercado* (Tese de Doutorado). Lavras, MG, Brasil: UFLA.
- Leme, P. H., & Rezende, D. C. (2018). A construção de mercados sob a perspectiva da Teoria Ator-Rede e dos Estudos de Mercado Construtivistas (EMC). *RIMAR - Revista Interdisciplinar de Marketing*, 8(2), 133-151.
- Leme, P. H., & Rezende, D. C. (2016). Práticas de Mercado e a Construção de Mercados: Análise dos Cafés Certificados e Sustentáveis da Utz Certified no Brasil. *Encontro Nacional da Associação de Pesquisa e Pós Graduação em Administração*, pp. 1-16.
- Mason, K., Kjellberg, H., & Hagberg, J. (2015). Exploring the performativity of marketing: theories, practices and devices. *Journal of Marketing Management*, 31(1-2), 1-15.
- Miranda, P. d. (2009). A Teoria Ator-Rede como Framework Teórico para o Estudo dos Processos de Participação Democrática Apoiados por Tecnologia da Informação no Brasil. *II Encontro de Administração da Informação*, pp. 1-15.
- Muniesa, F., Millo, Y., & Callon, M. (2007). An introduction to market devices. *The Sociological Review*, 55(2), 1-12.

- Oliveira, S. R. (2013). *Construção o mercado de alimentação local: Um estudo com base na teoria ator-rede (Dissertação de Mestrado)*. Lavras: UFLA.
- Souza, C. E. (2019). *Práticas Estruturantes e de Mercado na Construção do Impacto em Sustentabilidade: Os Processos de Translação e Inscrição na Produção de Café Certificado no Contexto Sul-Mineiro (Dissertação de Mestrado)*. Lavras: UFLA.
- Tonelli, D. F. (2016). Origens e afiliações epistemológicas da Teoria Ator-Rede: implicações para a análise organizacional. *Cadernos EBAPE*, 14(2), 377-390.
- Tureta, C., Rosa, A. R., & Santos, L. L. (2006). Estratégia como Prática Social e Actor-Network Theory: uma Possível Conversação para o Estudo da Estratégia. *Anais do 30º Encontro da ANPAD*. , pp. 1-16.

## Authors

- 1. Cassio Souza**, Master in Managerial Sciences, Federal University of Lavras - UFLA.
- 2. Paulo Leme**, Ph.D. in Managerial Sciences, Federal University of Lavras - UFLA. Professor at Departament of Management and Economics, UFLA.
- 3. Elisa Guimarães**, Ph.D. in Managerial Sciences, Federal University of Lavras - UFLA. Professor at Departament of Management and Economics, UFLA.
- 4. Gustavo Maciel**, Master in Managerial Sciences, and Ph.D. student in Managerial Sciences, Federal University of Lavras - UFLA.

## Contribution of each author

Contribution	Cassio Souza	Paulo Leme	Elisa Guimarães	Gustavo Maciel
1. Definition of research problem	✓	✓		
2. Development of hypotheses or research question (in case of empirical studies)				
3. Development of theretical propositions (in case of theoretical work)	✓	✓		
4. Theoretical foundation / literature review	✓	✓		
5. Definition of methodological procedures	✓	✓		
6. Data collection	✓			
7. Analysis and interpretation of data (when applied)	✓	✓	✓	
8. Revision of the manuscript	✓	✓	✓	✓
9. Manuscript writing	✓	✓	✓	✓