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Special Issue Introduction

Shaping Markets Through Temporal, Constructive, and Interactive Agency

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Abstract. In this introductory essay, we develop a theoretical framework of agency as a basis for strategic shaping and market transformation. We conceive of agency as both constrained and enabled by structure, and we build on sociological views that treat market structures as pairings of cultural schemas and material resources that are mutually sustaining. Structures contain the seeds for change because contradictions and conflicts that are inherent to structure inspire agents to imagine a new order and provide pathways to enact them. We theorize three connected forms of agency. *Constructive agency* captures agents' ability to differently apply schemas to mobilize resources and improve their strategic positions. *Temporal agency* underlies agents' autonomy and individuation, and enables agents to envision new possibilities. *Interactive agency* captures the collective nature of agency, where interactions among heterogeneous actors provide opportunities for agents to persuade others of their changing conceptions and learn new schemas, expanding agents' repertoires for shaping opportunities.

Keywords: [shaping](#) • [agency](#) • [imagination](#) • [structure](#) • [structuration](#) • [market creation](#) • [market](#)

The focus of this special issue is firm strategies that fundamentally change markets. Markets are largely understood as “structured and patterned exchanges that exhibit a high degree of regularity in product/service offering, the roles that actors play in the exchange, and the infrastructure that enables and governs the exchange” (Lee et al. 2018, p. 245). The study of market structures is a mainstay in understanding sources of competitive advantage, including industry and mobility barriers, strategic groups, product market categories, ecosystems, industry and organizational architectures, value-added networks, alliance portfolios, and business models.

Much of this research has taken market structures as given and examined strategic behavior within them. However, as Cattani et al. (2018, p. 632) recently observed, this conceptualization of markets and competition is evolving, and “the field has moved from viewing competitive forces as uniform and exogenous constraints that are imposed on a firm’s strategic choices ... toward ... agentic notions of the strategic ‘playing field.’” Strategy scholars are increasingly recognizing that shaping the environment is a source of strategic opportunities (Rindova and Fombrun 1999, Teece 2007, Gavetti and Menon 2016, Gavetti et al. 2017, Pontikes 2018, Rindova and Courtney 2020). The papers in this special issue respond closely to

our call for “studying how firms reshape market structures and chart new trajectories” (Pontikes and Rindova 2019, p. 60). Collectively, they span firm, market, and stakeholder levels of analysis and offer novel understandings about the dynamics of market creation and transformation.

The goal of our paper is to provide a theoretical framework for agency as the basis of strategic shaping, building on the idea that agency and structure are intertwined. Our theoretical point of departure is Giddens’ (1984) structuration theory, which has been of long-standing interest to sociologists and institutional theorists in organizational research. Structuration theory portrays agency and structure as mutually constitutive. Agency is both constrained and enabled by structure, which provides the rules and resources that make actions possible and comprehensible.

We develop a framework that focuses on *agents* and *different forms of agency*.¹ We theorize three connected forms of agency—constructive, temporal, and interactive—that underlie multiple shaping processes related to structure, agents, and interaction contexts. These three forms of agency capture how actors exercise agency using the structures they are embedded in, how they gain autonomy relative to these structures, and how they influence others in market interactions. Collectively, the three forms of agency provide a theoretical

foundation for understanding how agents develop, acquire, and exercise agentic capacities.²

First, we theorize *constructive agency* by building on Sewell's (1992) definition of structure as a combination of schemas and resources and definition of agency as the ability of actors to apply new schemas to existing resource arrays. Agents exercise constructive agency when they "transpose and extend schemas to new contexts" (Sewell 1992, p. 18). We propose that, with constructive agency, actors generate and select varying and novel schema-resource combinations to improve their strategic positions and often transform the structures within which they are embedded. Thus, constructive agency enables actors to change their access to and control of resources, including changing the patterns of resource availability for others.

Second, we introduce the notion of *temporal agency* to explain how actors gain autonomy and develop distinctive perspectives relative to structurally reinforced action patterns. Temporal agency captures the conscious self-reflection through which agents become autonomous and individuated. The temporal embeddedness of individuated agents distinguishes them from the individualistic agents of economic models. Temporal agency connects an agent's unique experiences over the temporal horizons of the past, present, and future. It individuates agents' perspectives and endows them with uniquely crafted identities and action repertoires, as well as dreams and visions for the future. Temporal agency provides the perspectives from which agents seek to change their positions and transform the structure—changes that are enacted through constructive agency.

Third, we account for collective aspects of agency by theorizing *interactive agency* as the processes through

which agents shape and are themselves shaped in interactions with heterogeneous market actors. Interactive agency, in our view, involves both shaping the perspectives of others and learning from them. It spurs agents to reflect and reimagine possibilities, energizing their temporal agency. Interactive agency amplifies, or contracts, agents' visions and actions through synchronization, or discord, with others.

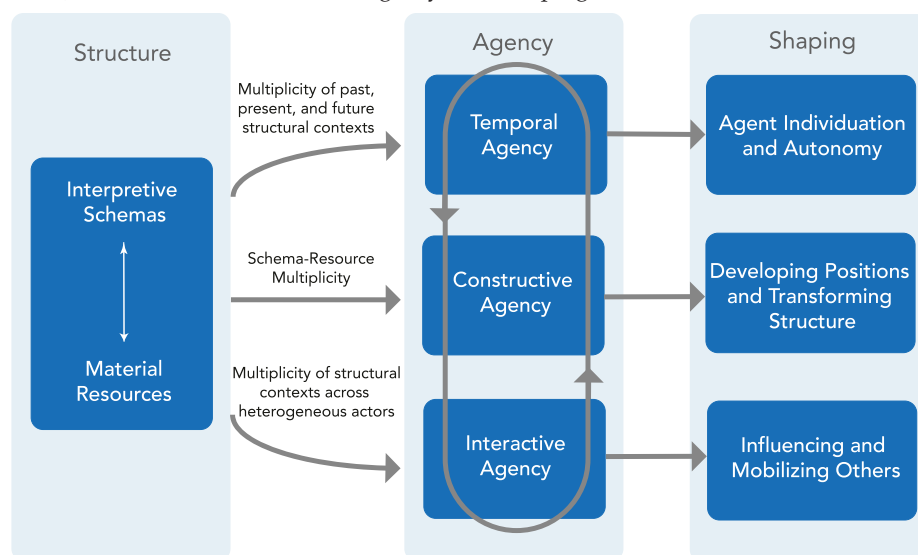
These ideas form the core building blocks of our framework, represented in Figure 1. The central line in Figure 1 represents how structure—as articulated in sociological treatments by Giddens (1976, 1984), Sewell (1992), and others—enables agents to exercise *constructive agency* and develop strategic positions, which are based on the schemas they adopt and the resources they mobilize. These positions are the foundation from which agents engage and influence others—and, to the degree possible, exert market power. Agents influence other market actors through *interactive agency*, which involves a variety of persuasive activities, represented in the bottom line of Figure 1. The top line in Figure 1 describes *temporal agency*, through which agents gain autonomy and individuation. Figure 1 reflects our arguments that agentic behavior is shaping behavior. This is in departure from prior views defining shaping strategies in terms of outcomes (e.g., changing industry payoffs for all actors; Gavetti et al. 2017), specific symbolic choices (e.g., Suarez et al. 2015), or resource commitments (e.g., Rindova and Courtney 2020).

Interpretative-Material Structure and Constructive Agency

Structure as Schema-Resource Combinations

Understanding market creation and transformation requires an integrative conception of structure and agency.

Figure 1. (Color online) Structure, Three Forms of Agency, and Shaping



Sociological theories that describe structures and agency as mutually constitutive (Giddens 1984, Sewell 1992, Emirbayer and Mische 1998) provide the theoretical foundation for such integration. These ideas have been central to conceptualizing how institutions are created, altered, and reproduced (for a discussion, see Barley and Tolbert 1997, Seo and Creed 2002, Garud et al. 2007, Micelotta et al. 2017, and Cardinale 2018). Giddens (1976, p. 161) introduced the core idea that “structures must not be conceptualized as simply placing constraints on human agency, but as enabling.” Sewell (1992, p. 19) further theorized structures as “sets of mutually sustaining schemas and resources.” Schemas, he argued, are “virtual,” resources “actual,” and the relationship between them mutually constituted, so that “schemas are the effects of resources, just as resources are the effects of schemas” (Sewell 1992, p. 13).

This distinction differentiates *resources* as material, tangible, and observable (wood, bricks, people, and technology) from *schemas* as the knowledge—largely cultural and institutional—that enables actors to combine and use material resources. Sewell (1992) does not define schemas, but within the social sciences, a schema is well understood as a structured representation of an object, idea, or other stimuli (Hannan et al. 2019). Schemas refer to “people’s *theories* and *concepts* about the world” (Fiske and Taylor 1991, p. 98), and they organize both individual knowledge and collective cultural knowledge. Sewell (1992) refers to the latter, and DiMaggio (1997, p. 269) defines cultural schemas as “knowledge structures that represent objects or events and provide default assumptions about their characteristics, relationships and entailments.” Thus, structure comprises collective knowledge represented in cultural schemas that mobilize and remobilize resources in a mutually sustaining process (Rosa et al. 1999, Weber et al. 2008, Anthony et al. 2016). Conversely, the absence of collective schemas impedes resource allocations. For example, Zuzul (2019) shows how the ambiguity of “smart cities” schemas prevented actors from making concrete resource allocations toward their implementation.

Structure, therefore, is defined by the ongoing association between schemas and resources, or schema-resource pairings. This maps onto Rindova and Fombrun’s (1999) conception of strategic positions and market boundaries as based on two dimensions: one interpretational (schema) and the other material (resources). The relationship between these dimensions is dynamic but is stabilized by a reinforcing feedback loop, whereby schemas define consistent patterns of resource use, and resource allocations validate schemas. Routines, technologies, and settled business models fit this pattern (Gavetti and Porac 2018). As Sewell (1992, p. 13) notes, “Sets of schemas and resources may

properly be said to constitute *structures* only when they mutually imply and sustain each other over time.” Structure is the “sustaining relationship” between resources and schema: every structure is composed of schema-resource pairings, but not every schema-resource pairing is structure. This view of structure comports with the view of a market order as “a relatively sticky, well patterned, and evolving set of ‘givens’ that affect firms’ competitive options and behavior at any given time” (Gavetti and Porac 2018, p. 354).

A particular schema-resource combination is neither objectively determined (i.e., there is no one correct schema that matches to a particular resource array) nor singular (i.e., a schema-resource pairing is not exclusive). There are multiple structures at different social levels, schemas are transposable, structures intersect, and resources can take on different meanings. Agents can access multiple schemas and apply them in different contexts.

Adopting the notion of market structure as a schema-resource pairing provides a platform that accommodates market stability and agentic transformation. This framework allows for agents to adopt different schema-resource combinations while maintaining that market structures rest on collective knowledge and cultural schemas. Thus, this approach reconciles the individualistic view of markets as aggregations of individual actors, with the traditional conception of structure as common to all industry players. In addition, conflicts inherent in structure are opportunities for constructive agency, spurring creative and transformative processes that motivate actors to identify and construct new value-creating schema-resource pairings.

Constructive Agency

Structure constrains and enables agency by providing the rules and resources for competent and comprehensible action. Much prior research argues that market structures, and agents’ positions within them, are sources of constraint. But a central insight from the sociological work on the duality of agency and structure is that agents are not “embedded” in structures in a deterministic way. According to Sewell (1992, p. 19), agency is defined by “the actor’s capacity to reinterpret and mobilize an array of resources in terms of cultural schemas other than those that initially constituted the array.” Agents have access to multiple schemas and heterogeneous arrays of resources to which they “are capable of applying a wide range of different and even incompatible schemas” (Sewell 1992, p. 17). In other words, the constraining effects of structure are limited by the multiple schemas actors can access and apply.

Inherent in this conception of structure are multiple transposable schema-resource pairings. Furthermore,

conflicts across multiple schemas bring forth interpretive challenges for agents and become the basis for generating alternative possibilities (Emirbayer and Mische 1998). We build on this idea and propose that the conflicts arising from imperfect fits between schema and resources motivate agents' varied and changing conceptions of the market order. Structure not only enables actors to act competently and effectively—thereby reproducing it—but also presents agents with contradictions that lead them to take actions to modify schema-resource pairings. In doing so, agents shape the structure. As a result, competent agents not only navigate and leverage existing structures to their advantage in a given market order; they also have the capacity to transform the market order, provided they imagine compelling new alternatives. (We return to this point in our discussion of temporal agency.) The duality of agency and structures implies *agency is constructive*, not simply embedded.

Constructive agency rests in agents' ability to apply new schemas—by replacing or extending current ones—to mobilize resources and improve their strategic position. This may proceed as a Mendelian search process (Levinthal 2017), where actors, starting in their position in market space, intentionally select promising schemas to project onto the resources they can mobilize, observe whether outcomes are improved, and iterate. Alternatively, agents may recombine existing schemas to derive new guiding principles for action and value creation. For example, Dalpiaz et al. (2016) show how Alessi, an Italian manufacturer of steel products for the kitchen, purposefully employed the logic of art to recast its products into objects of high design, thereby creating fundamentally new markets for designer kitchenware and introducing aesthetic design as a new dimension of competition in its industry. Bingham and Kahl (2013) show that when the computer first emerged, groups developed a collective schema for the new object through schema assimilation, deconstruction, and unitization. Jacobides et al. (2016) describe how auto manufacturers contested and negotiated alternative industry-architecture schemas at the collective level and used those schemas to implement new, asset-reducing, consumer-facing strategies at the firm level. Similarly, Barnett's (2008, 2017) concept of metacompetition—competition to define the logics of competition within a market—can be understood as firms engaging in conceptual conflicts to assert preferred cultural schemas and reinterpret resources in their terms. More generally, strategic cognition research emphasizes how managers' schemas affect how resources are understood and valued, influencing the capabilities firms develop (Tripsas and Gavetti 2000, Kor et al. 2007). Recent work also shows how strategists regenerate their schemas to develop novel

conceptions of products, strategies, business models, and opportunities (Benner and Tripsas 2012, Martins et al. 2015, Gavetti and Menon 2016).

Individuated Agents and Temporal Agency Temporal Agency

Within the duality of agency and structure, agency rests on the ability to decouple current schemas-in-use and the resources available. Agents accomplish such decoupling by selecting among multiple cultural schemas available to them and by transposing schemas across contexts.³ Strategy research on analogical reasoning has shown how transposing schemas is used to create new business models (Martins et al. 2015) and transform industries (Gavetti and Menon 2016, Jacobides et al. 2016). The ability to strategically draw on different cultural schemas is a fundamental agentic competence (Sewell 1992) that enables constructive agency. However, it is important to emphasize that such decoupling is not without risks. Novel schemas, especially those derived from analogies (Gavetti and Rivkin 2005), may not generate the expected and desired resource flows and recombinations. (See Jacobides et al. (2016) for an example of a failed attempt at schema repairing in the auto industry.)

Beyond the uncertain effects of transformative efforts, constructive agency alone leaves open the following question: "How are social actors ... capable (at least in principle) of critically evaluating and reconstructing the conditions of their own lives?" (Emirbayer and Mische 1998, p. 963). To answer that question, Emirbayer and Mische (1998, p. 964) proposed a view of agency "as composed of variable and changing orientations within the flow of time." They reconceptualized agency as a temporally embedded process, "informed by the past (in its habitual aspect), but also oriented toward the future (as a capacity to imagine alternative possibilities) and toward the present (as a capacity to contextualize past habits and future projects within the contingencies of the moment)" (Emirbayer and Mische 1998, p. 963). Subsequent work on the temporality of agency has argued that these different temporal horizons not only present agents with different views of structure but also involve different cognitive processes through which past experience, present-day concerns, and future visions and imagining are integrated (Rindova and Martins 2018b).

Our conceptualization of temporal agency draws on different treatments of the temporal aspects of cognition and behavior.⁴ Specifically, the concept of temporal focus (Nadkarni and Chen 2014) considers "the extent to which people characteristically devote their attention to perceptions of the past, present, and future" (Shipp et al. 2009, p. 1); temporal cognition describes the distinct cognitive processes associated with

each temporal horizon—for example, schematic information processing, judgement, and imagination (Rindova and Martins 2018b); and cross-temporal sensemaking addresses the different ways in which actors give meaning to the past and derive its implications for the future (Ravasi et al. 2019). At the collective level, temporal work describes how actors resolve differences and connect their interpretations of the past, present, and future in strategic accounts that guide action (Kaplan and Orlikowski 2013), and temporal bricolage addresses how actors negotiate different conceptions of time (Reinecke and Ansari 2015). Organizational research on temporal agency is in its infancy, but the emerging literature shows that the various processes of temporal work, temporal focus, cross-temporal sensemaking, and mental time travel enable agents to reevaluate and reconsider their current structural contexts.

We build on these ideas to theorize (a) how the different temporal orientations suggested by Emirbayer and Mische (1998) affect how agents realign schemas and resources and (b) how agents connect their unique experiences across temporal horizons to “craft the self” and become individuated—that is, how they develop autonomous perspectives, as well as distinctive identities and action repertoires. These agentic processes are depicted in the top row of Figure 1.

Thus, we view temporal agency as encompassing two related but distinct processes. The first is consistent with Emirbayer and Mische’s (1998, p. 1003) ideas that agency involves three temporally directed agentic orientations and that, “as actors alter or shift between their agentic orientations, ... they may increase or decrease their capacity for invention, choice, and transformative impact in relation to the situational contexts within which they act.” The second process builds on neuroscience and psychological research on “mental time travel” (Suddendorf and Corballis 2007), and it describes how individuals connect their unique experiences across past, present, and future to craft an individuated selves. We discuss each in turn.

Temporal Orientation

Emirbayer and Mische (1998) put forth three temporally directed agentic elements. First is an iterative element, past oriented and habitual, where agents reactivate “past patterns of thought or action,” thus “giving stability and order to social universes and helping to sustain identities, interactions, and institutions over time.” Second is a perceptive, evaluative element, present oriented, which enables actors to respond to demands and ambiguities of present situations. Third is a projective element, future oriented and encompassing “the imaginative generation by actors of possible future trajectories of action, in

which received structures of thought and action may be creatively reconfigured” (Emirbayer and Mische 1998, p. 971).

The above-mentioned organizational and psychological research on temporality offers some refinements to these core ideas. First, past orientations not only are habitual but can also be reflective, involving reassessment of the effectiveness and value of schema-resource combinations over time (Dalpiaz et al. 2016). Furthermore, individual and organizational histories represent unique stocks of knowledge and cherished historical identities that serve as resources for agency (Ravasi et al. 2019). Second, present-oriented processes involve attending to unfolding situations that present opportunities for interventions to either protect the status quo or support emerging change (Reinecke and Ansari 2015). Third, in contrast to the adaptive processes that react and respond to present situations, future-oriented “prospective cognition focuses on the generative cognitive mechanisms that enable radical cognitive shifts and leaps of imagination” (Rindova and Martins 2018b, p. 174). Future orientations differ significantly in the futures they project. Near futures tend to be represented in practical terms, as contexts of risk or uncertainty (Rindova and Courtney 2020, Zuzul and Tripsas 2020), whereas distant futures are often represented as imagined possibilities fraught with ambiguity (Augustine et al. 2019, Zuzul 2019).

Individuated Agents

Temporal agency not only involves different ways of relating to the present context from the perspective of the past, present, or future but also inner-directed cognitive processes involved in crafting a strategically individuated self. Through a process termed “mental time travel,” the past provides the scripts and schema that enable mental simulation of future scenarios, ranging from mundane next steps on a to-do list, to imagining future worlds (Suddendorf and Corballis 2007, Szpunar et al. 2014). This self-reflexive process rests on inner-directed cognitive processes that orient cognition away from representing and acting upon the external environment (Gavetti and Levinthal 2000) and toward the self. Neuroscience and psychology research present evidence that when people’s minds are not working on a specific task, they engage in spontaneous inner-oriented cognition, such as recollecting the past, planning for the future, and reflecting on oneself (Buckner and Carroll 2007). By shifting cognitive processing away from environmental stimuli and task demands, these processes support the development of autonomous (by which we mean based on inner-directed, self-referential processes) perspectives, value orientations, and action repertoires. These processes individuate the self by connecting

our past and future selves, reflecting on past accomplishments and challenges across time and space, and formulating personally meaningful versions of the future.

These individuated lenses inform how agents relate to existing schema-resource pairings and how they draw on them to shape future possibilities. Agentic choice, in our view, is also a choice about what aspects of the environment to take as “givens” and what aspects to reconstruct imaginatively through envisioning new possibilities. These individuated identities and action repertoires give rise to different approaches and, ultimately, different ways actors shape the environment—whether they take actions to stabilize, modify, or transform a given market order (Gavetti and Porac 2018). Temporal agency therefore can influence the transformative capacities of agents as well as the content of their transformative agendas.

Market Spaces and Interactive Agency

Although agency is exercised by individuals—and the organizations they represent and lead—it is also collective because reworking schemas and remobilizing resources are “always acts of communication with others” (Sewell 1992, p. 21). Agency requires the ability “to coordinate one’s actions with others and against others, to form collective projects, to persuade, to coerce, and to monitor the simultaneous effects of one’s own and others’ activities” (Sewell 1992, p. 21). Multiple intersecting structures provide different pathways through which agents can mobilize and persuade others of their changing conceptions (Dalpiaz et al. 2016). The collective nature of agency implies both opportunities to influence others—and amplify the agent’s agendas through collective action—and demands to navigate conflict and contestation (Jacobides et al. 2016, Lee et al. 2018). These ideas suggest the importance of our third agentic process, interactive agency, which addresses how agents shape and are shaped in interactions with heterogeneous market actors.

Market Spaces

To build a theory of interactive agency, related to structure, we first position agents with respect to structures in a space in which they interact. We bring agents and structure together in a market space, which consists of actors, their positions, and relations between them (Abbott 2005). Market space accommodates both structure and agency: structure based on actors’ strategic positions defined by the schema-resource combinations they adopt (or acknowledge) and agency in that actors can move within the space (Liu and Emirbayer 2016). In our view, a market space

comprises heterogeneous actors; it includes various stakeholders and intermediaries, consistent with the perspective of markets as embedded in organizational fields (DiMaggio and Powell 1983, Rindova and Fombrun 1999, Pontikes 2018). The structure of a market space is defined by actor positions: individually, as competing firms with specific strategic positions (e.g., encompassing market shares, resource profiles, and business models), and in aggregate, as a field including different types of organizations, connected by different interdependencies (e.g., supplier and buyer relationships). The space is further ordered by market and competitive categorization schemes.

As noted at the outset, market spaces are typically defined as relatively fixed structures that stabilize interactions (e.g., Liu and Emirbayer 2016, Lee et al. 2018, and Hannan et al. 2019). Even when structural change is acknowledged, scholars implicitly or explicitly assume structures are sticky enough to assume as relatively fixed (e.g., Gavetti and Porac 2018). A fixed structure allows researchers to measure similarity between positions in the space and thus between agents in positions, which is especially important for empirical measurement and formal models (Hannan et al. 2019).

We conceive of market space as linked to our conception of structure, a schema-resource pairing. This does not comport with a fixed, universal market space. In the view of structure we emphasize, the coupling of resources (actual) and schemas (virtual) determines similarities between positions in the space and dimensions of evaluation (what is valued, as well as relative values along a dimension). Agents can have positions in multiple market spaces, but the relations among actors, as well as the comparisons among their positions, are defined within the focal space.⁵ Market spaces are based on collective, cultural schemas, not individual agent schemas, but agents can generate new and unique schemas and apply and promote those to the collectively defined market space. For example, Pontikes (2012) shows that “market maker” actors, with the goal of shaping markets, project different value dimensions onto ambiguous categorical definitions, compared with “market taker” actors. The shaping processes we associate with interactive agency, discussed next, address how actors seek to influence others to adopt new schema-resource pairings. Shaping provides agents with another way to “move” to an improved position: by reconfiguring the market space and altering collective interpretations of value and resources—and thus the dimensions of evaluation (also see Gavetti et al. (2017) and Rindova and Martins (2018a)).

Interactive Agency

As the foregoing discussion highlights, interactional and relational spaces are often understood in structural terms, where structure is typically defined by relevant resources. Such a structural analysis has received considerable attention in research on social and strategic networks, ecosystems, and market categories (Pontikes and Hannan 2014, Kovács and Hannan 2015, Adner 2017, Jacobides et al. 2018, Hannan et al. 2019).

Our focus, by contrast, is on markets as interaction contexts. Understanding markets as organizational fields comprising heterogeneous agents requires attention to understanding interactions, which are the dynamic processes through which actors relate. Greater actor heterogeneity is associated with greater heterogeneity of relations (Liu and Emirbayer 2016) and with greater dynamism in these relations (Hannah and Eisenhardt 2018, Jacobides et al. 2018). In our view, interactions with actors in heterogeneous positions and roles bring forth mismatches, frictions, and alternative visions of schema-resource pairings that are the basis for transformative intention and shaping actions among actors. Heterogeneity in positions and roles increases the propensity of such agentic moves.

Interactive agency describes the processes through which agents shape the resource allocation processes of others, aimed at increasing support for an agent's preferred schemas. Interactive agency is thus the expression of agents' transformative intentions that temporal agency generates. This can include introducing new technologies or business models that change actor interdependencies or changing the schemas through which relationships and resources are interpreted. Rosa et al. (1999) show the emergence of a collective market schema for the minivan through interactions among consumers and producers, mediated by the media. Ecosystems research provides ample evidence of changing schemas to change ecosystem structures (Hannah and Eisenhardt 2018) and of concerted strategies to bring alignment among varied and valuable—but not necessarily structured—complementarities (Gawer 2014, Adner 2017). More generally, Liu and Emirbayer (2016, p. 74) argue, "As the scope and intensity of social processes such as boundary work, exchange, and power struggle vary from one social space to another, some spaces might appear more competitive, others more cooperative, yet others more conflictual."

These dynamics highlight an important tension in the exercise of interactive agency. On the one hand, actors' positions in market spaces provide the foundation of their shaping intentions and capacities, including their market power and influence. On the other hand, outcomes—and in our view, even actions and intentions—are also influenced by the shaping efforts of heterogeneous others. As Emirbayer (1997, p. 294)

has argued, "Viewed internally, agency involves different ways of experiencing the world. . . . Viewed externally, it entails concrete transactions within relational contexts. . . . Agency is always a dialogic process . . . with others in collectively organized action contexts, temporal as well as spatial." Agency therefore gives market spaces their fundamentally dynamic character as settings for shaping processes of persuasion.

Persuasion is a broad term that refers to influence directed toward others' beliefs, attitudes, intentions, motivations, and behavior. With strategy scholars' growing interest in endogenous environments, persuasive strategies are receiving more attention. Shaping through persuasion has been related to changing the expected payoffs of the strategy a firm has chosen to pursue (Gavetti et al. 2017), as well as increases in the value a focal firm can claim and capture (Cattani et al. 2018). For example, Grodal et al. (2015) and Suarez et al. (2015) analyze the coevolution of technologies and categories in the automotive sector and show that some firms "engage in active, symbolic management in order to shape stakeholders' perceptions" (Suarez et al. 2015, p. 445). Such firms, they argued, "may emerge as the industry's categorical referents but may also run the risk of being locked into a specific categorical position that fails to gain traction" (Suarez et al. 2015, p. 445). Persuasive techniques may affect a firm's categorical position as well as the content of the category itself (Rindova et al. 2007, Pontikes 2018).

The effects of persuasion extend beyond the firm's position to affect market-level outcomes. Carroll and Swaminathan (2000) show that advocacy among craft beer activists, producers, and consumers led to a novel cultural schema of artisanal authentic production that advantaged microbrewers. Rindova and Fombrun (2001) show how specialty coffee entrepreneurs combined resource and identity claims to attract new stakeholders to the specialty coffee niche. Weber et al. (2008) show how actors in the emerging grass-fed beef niche employed oppositional cultural codes to devalue the incumbent schema-resource pairings and increase the value of the alternative schema-resource pairings they sought to promote. These examples suggest that the persuasive processes of interactive agency may be understood through the lens of social movement mobilization. In fact, Rao and Dutta (2018) argue that great strategies arise from firms becoming relationally embedded in identity movements.

Shaping interactions are bidirectional. Agents learn from those with whom they interact, both about new schema-resource pairings and their resource relocation effects (see Alvarez and Barney 2007). Engagement with a variety of cultural schema applications builds the agent's repertoire, or toolkit, and thus expands the actor's options and capacities to envision

and enact possible trajectories of action (Rindova et al. 2011). Interactions also present opportunities for actors to adopt schema-resource pairings that are less than suitable in their context. Such mismatches create and expose new contradictions and oppositions, reinvigorating efforts to transform. More than specific outcomes, interactive agency contributes to social reconstitution of agents. In Abbott's (1995, p. 863) evocative terms, "Previously-constituted actors enter [transactions] but have no ability to traverse [them] inviolable. . . . What comes out are new actors, new entities, new relations among old parts."

New Insights: The Special Issue

The articles in this special issue bring new insights to how firms create and transform markets, from different theoretical perspectives and at different levels of analysis. Our introductory essay provides a broad theoretical foundation for firms' shaping strategies, based on how structure enables agency. We theorize three agentic processes: constructive agency, where actors leverage multiplicity of schemas and structural contexts to advance novel schema-resource combinations; temporal agency, which underlies agent individuation and autonomy, providing them with distinctive perspectives and action repertoires; and interactive agency, where actors influence and mobilize heterogeneous others with divergent, and often conflicting, perspectives.

The special issue papers deepen and broaden these ideas, forming a rich tapestry of how firms shape and transform markets. The first two papers, by Engler et al. (2020) and Ozcan and Hannah (2020), bring into focus a core tension in industry disruption and creation—the frictions and conflicts between innovating actors and key decision makers entrenched in the status quo. Although the constraints facing visionaries are familiar, the papers shed new light on the dynamics of change and transformation, including the value of divergent managerial beliefs and the consequences of their fit and misfit with existing organizational structures and decision premises. The next two papers, by Moeen et al. (2020) and Struben et al. (2020), offer in-depth analyses of the dynamics of knowledge generation and aggregation and of resource allocation, respectively, during industry emergence and market creation. These analyses offer comprehensive and dynamic views of schema emergence and the resource allocation processes that underlie the intertwining of agency and structure in market creation and transformation. The final paper by Ricart et al. (2020) brings a broader lens to these ideas by attending to stakeholder mobilization and contestation, and firm strategies for managing them.

Engler et al. (2020) develop a history-friendly simulation of the emergence of the minivan product

market niche to examine the complex interdependencies between agency and structure in the context of new market creation. They deepen theories of agency, directly engaging with how distinctive managerial beliefs as individual-level schemas combine with firm-level structures, including incentives and capabilities, to effect market transformation. They join simulation and historical case analysis methods to provide unique insight into how these factors could have led to "alternative histories" for market emergence. Their use of a fractal landscape model enables them to compare the alternative histories of whether the minivan innovation champions Harold Sperlich and Lee Iacocca remained at Ford, moved to Chrysler, or left the industry altogether. Results show that different agent-structure combinations of innovating leaders and firm environments lead to market-changing minivan rollouts. Methodologically, the paper showcases the role of counterfactual thinking as a means to re-imagine the past—a core cognitive process in temporal agency. Analytically, the paper holds important insights for research on agency and structure at individual versus organizational levels of analysis. Imagination and risk seeking, the paper suggests, may lead firms on pathways that differ from the ones that follow systematic resource allocation processes that often impede incumbents' ability to shape and transform.

The question of how incumbents navigate an industry in the process of being transformed is the subject of the Ozcan and Hannah's (2020) study of how five global consumer goods manufacturers respond to the emergence of social media advertising. The paper presents an in-depth qualitative study of these firms' attempts to integrate social media into their advertising activities, documenting their repeated efforts to understand and act on the implications of the new technology by simultaneously preserving and changing existing supply structures. Conflicting interpretations, market power, and resource allocation trade-offs all contribute to what the authors aptly call "a catch-22 situation" defined by being "unable to replace existing suppliers to 'make room' for the new technology but unable to realize its value unless they do" (p. 194). The study powerfully shows the intertwining of constructive agency oriented to updating schema-resource combinations in the face of market disruption, and the interactive agency required to shape the beliefs and integrate behaviors of heterogeneous actors—in this case, old and new suppliers, with competing interests and incompatible schema-resource positions.

Moving the analysis from the agents—individuals and firms—to interacting collectives, Moeen et al. (2020) open up an expansive vista into the complex processes of industry emergence over multiple milestones. Drawing

on a rich base of empirical studies, the authors take the reader on an expansive journey into the context of market creation and industry emergence associated with major technological breakthroughs. In doing so, the authors offer three novel sets of foundational understandings about the multiple complexities of industry emergence. First, they recognize how multiple uncertainties—technological, market, ecosystem, and institutional—interact and shift over time. Second, they theorize the distinct processes of knowledge generation and aggregation, at both actor and collective levels of analysis, that are required for each milestone to occur. Third, they identify the changing cast of actors and mechanisms of interconnectivity at each emergence stage. Combined with the incorporation of findings across a large number of empirical studies, the paper offers a comprehensive articulation of the dynamics of knowledge generation through which new markets and industries emerge.

The fourth paper in the special issue by Struben et al. (2020) deepens our understanding of the resource side of market creation and structuration, highlighting the multiplicity of resource allocation dynamics. The authors posit a core resource-allocation dilemma that agents involved in market creation face: to allocate their limited resources to building firm capabilities or to developing market infrastructure. They then consider how individual allocation decisions aggregate to determine the difference between virtuous and vicious cycles of collective action. Using system dynamics simulations, well suited for exploring conditions that lead to tipping points, the paper examines market- and actor-related characteristics that lead to higher or lower collective action thresholds. Positing the substitutability and heterogeneity of initial resources as key variables, the authors contrast the baseline preference for privately oriented resource allocation with various scenarios of collective action and market creation. When resources are highly substitutable, their simulation uncovers the expected relationship, where increases in heterogeneity reduce collective action problems. However, when resources are not substitutable, heterogeneity in initial resources can exacerbate collective action problems, as a result of resource misalignment. They further show that interactive agency alters these dynamics, as it affects actors' ability to anticipate others' contributions. In this way, this paper brings into focus how interactive agency shapes collective outcomes.

In the final paper in the special issue, Ricart et al. (2020) broaden the lens and explore dynamics of market transformation by considering unintended consequences of platform business models. Platforms are a novel form for organizing market interactions and thus pose new questions and challenges to understanding—and managing—firm interactions with stakeholders and

the public at large. The paper suggests a new type of boundary between firms and stakeholders, viewed as local insiders and local outsiders, and identifies a set of strategies for navigating this boundary. Core to this study are the conflicts and contradictions generated by novel schemas for value creation and capture by platforms. This paper incorporates a social movement perspective on stakeholder mobilization, and it offers a novel and expansive understanding of interactive agency. The authors propose a relational business model design as a solution, which includes a multisided structure, an inclusive stakeholder value proposition, and ecosystem-centered governance as mechanisms.

Conclusion

We set out a framework in which structure does not equate with stability; rather, structure and agency are jointly responsible for both stability and change. Structure holds the seeds of change because, as schema-resource pairings lose alignment and create frictions, the constraints and conflicts from within a structure motivate agents to imagine and enact new orders. Structure enables change because agents' future projections reinterpret, rewrite, and rework the schemas that support extant structures. Agency inhibits change when agents choose habitual actions and thus support the sustaining relationships between schemas and resources; it fosters change when agents imagine new schema-resource pairings. Market transformation arises from the interplay of structure and agency: constraints in structure motivate future-oriented projections of desirable alternatives, and agency is the choice to engage with these conflicts; imagine, envision, and recombine new actionable schemas; and mobilize resources to enact them.

Collectively, the contributions to this special issue shed new light on core issues in market creation and transformation. They identify and theorize a diverse set of processes that enrich our current understandings while opening avenues for further investigation. In doing so, they provide a robust theoretical platform for studying making creation and transformation (a) through a cognitive interpretative *and* material resource lens; (b) as dynamic, temporally, *and* contextually embedded processes; and (c) as sites of heterogeneity, multiplicity, and agentic shaping behaviors. The view that emerges from the special issue papers resonates with Shackle's (2009, p. 428) notion of "kaleidic economics," emphasizing that in markets interpretations define facts and possibilities, and that dynamism and multiplicity continuously reveal new possibilities.

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Endnotes

¹ Our ideas extend prior work on agency as multifaceted (Garud et al. 2014) by developing an integrative model that specifies mechanisms across multiple agentic processes.

² Understanding agentic capacities as distinct from empirical action is central to understanding the notion of agency (Emirbayer and Goodwin 1994).

³ These ideas are similar to Swidler's (1986) view of culture as a toolkit and the related work on use of cultural resources for defining new strategies of action (Weber et al. 2008, Rindova et al. 2011).

⁴ Temporality has been discussed more generally in studies of market creation, including the rate of change in different market elements, windows of opportunity, timing of actions, and unfolding journeys (Garud et al. 2014, Nadkarni and Chen 2014, Zuzul and Tripsas 2020).

⁵ This means the same agents can be more similar in one space than another. Comparing the similarities or distance between positions across spaces is not well defined, though in some situations it may be possible to project between spaces. Positions in multiple market spaces may reveal new and different schema-resource combinations, thereby strengthening an agent's constructive agency in a focal market space.

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