CONCEPTUAL/THEORETICAL PAPER

Institutions and axioms: an extension and update of service-dominant logic

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Abstract Service-dominant logic continues its evolution, facilitated by an active community of scholars throughout the world. Along its evolutionary path, there has been increased recognition of the need for a crisper and more precise delineation of the foundational premises and specification of the axioms of S-D logic. It also has become apparent that a limitation of the current foundational premises/axioms is the absence of a clearly articulated specification of the mechanisms of (often massive-scale) coordination and cooperation involved in the cocreation of value through markets and, more broadly, in society. This is especially important because markets are even more about cooperation than about the competition that is more frequently discussed. To alleviate this limitation and facilitate a better understanding of cooperation (and coordination), an eleventh foundational premise (fifth axiom) is introduced, focusing on the role of institutions and institutional arrangements in systems of value cocreation: service ecosystems. Literature on institutions across multiple social disciplines, including marketing, is briefly reviewed and offered as further support for this fifth axiom.

Keywords S-D logic · Theory · Institutions · Service-dominant logic · Ecosystems

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Introduction

It has been a little more than a decade since our initial collaboration offered a perspective on how marketing thought and practice was evolving to a new dominant logic (Vargo and Lusch 2004)-now widely known as "service-dominant (S-D) logic"-and over half that time since we further documented the evolution of the core framework (Vargo and Lusch 2008). During that period, through the participation of countless contributing scholars from around the world and from an ever-growing array of disciplines, S-D logic has been, and continues to be, further consolidated, extended, and elaborated. An example of this consolidation is the reduction of the ten foundational premises (FPs) (Vargo and Lusch 2004, 2008) to four axioms (Lusch and Vargo 2014), from which the remaining six FPs could be derived, providing a more parsimonious framework. Elaborations have been extensive and have ranged from the modification of "value-in-use" to "value-incontext" (Chandler and Vargo 2011) and its amplification, in turn, to include "value-in-social-context" (Edvardsson et al. 2011), to the exploration and further explication of the cocreation of value (e.g., Payne et al.2008), value propositions (Chandler and Lusch 2015), and brands (e.g., Merz et al. 2009; Payne et al. 2009), to exploring the implications of a broader ecosystems perspective (Vargo and Lusch 2011), to the use of S-D logic as a foundation for service science (e.g., Spohrer and Maglio 2008), and its application in logistics (e.g., Randall et al. 2010), information technology (e.g., Yan et al. 2010), and hospitality management (e.g., Shaw et al. 2011), among endless other elaborations, applications, and amplifications.

Most important among the extensions has been a general zooming out to allow a more holistic, dynamic, and realistic perspective of value creation, through exchange, among a wider, more comprehensive (than firm and customer)



configuration of actors. This perspective reveals additional structural details that are not apparent from a more dyadic, micro-level view, but which, at the same time, make the micro-level phenomena more understandable (Chandler and Vargo 2011). Arguably, the most important feature of this structure consists of institutions-rules, norms, meanings, symbols, practices, and similar aides to collaboration-and, more generally, institutional arrangements-interdependent assemblages of institutions. With some exception (e.g., Alderson 1965; 57; Araujo and Spring 2006; Arndt 1981; Carson et al. 1999; Duddy and Revzan 1953; Giesler 2008; Heide and John 1992; Humphreys 2010; Hunt 1983), institutions and institutional arrangements have received relatively little attention in the marketing literature, even though they are prevalent in the related economic, organizational, and sociological literatures. The S-D logic literature (e.g., Akaka et al.2013; Lusch and Vargo 2014; Vargo and Lusch 2011; Vargo et al. 2015; Venkatesh et al. 2006) is increasingly recognizing these institutions and institutional arrangements as the foundational facilitators of value cocreation in markets and elsewhere. In short, they can more fully inform an understanding of networks by conceptualizing them as resource-integrating, service-exchanging actors that constrain and coordinate themselves through institutions and institutional arrangements. That is, economic (and other social) networks tend to be self-governed, self-adjusting service ecosystems engaged in value cocreation at various levels of aggregation. This institutional and dyad-to-network-to-systems turn has additional implications for further development of the foundations of S-D logic, including further refinement in the language used in the existing FPs/axioms of S-D logic and the addition of a fifth axiom (eleventh FP).

The purposes of this article are to (1) further update the existing FPs of S-D logic, highlight their consolidation into a smaller set of axioms, and adjust the language, as needed, for consistency, (2) highlight the concept of service ecosystems to identify the role of institutions, (3) briefly review institutional theory in marketing and other social science literatures, (4) explore the role of institutions (and by implication, service ecosystems) in the S-D logic framework, offering a fifth axiom that recognizes the role of institutions in value cocreation, and (5) point toward future directions for S-D logic theory development and research. The article proceeds in line with these objectives.

The development of service-dominant logic

The 2004 article in the *Journal of Marketing* (Vargo and Lusch 2004) primarily did three related things: (1) identify an apparent trend in mainstream marketing thought, away from a principal focus on outputs (e.g., products) to processes (e.g., service provision, value creation); (2) identify commensurate commonalities in a number of diverse research streams and sub-disciplines

(e.g., relationship marketing, service marketing, business-tobusiness marketing); and (3) identify and advance a convergence of these events on a shift from emphasizing production to emphasizing value (co)creation. Given the article's positioning for the *Journal of Marketing*, and in keeping with mainstream marketing, its focus was relatively micro-level (i.e., firm-customer) and managerial, as evident in the language (e.g., "co-production," "competition," "customer oriented") of several of the original FPs. Considering its original purpose and positioning, this was probably appropriate.

However, the process of zooming out to a broader perspective on value cocreation began almost immediately, as evidenced in the distinction between "co-production" and the "cocreation of value" and the move from a dyadic orientation toward a network orientation (e.g., Lusch and Vargo 2006; Vargo 2008). More generally, the broadening can be seen in our suggestions that S-D logic might serve as a foundation for a "theory of the market" (Vargo 2007), as well as a somewhat more limited, related general theory of marketing (Lusch and Vargo 2006) and a more-encompassing theory of economics and society (Vargo and Lusch 2008). At the same time, often through the initiation of other interested scholars, we were connecting S-D logic to other research streams, such as consumer culture theory (CCT) (Arnould 2006), service science (e.g., Spohrer et al. 2007), and other disciplines (e.g., information technology and hospitality management) and subdisciplines (e.g., international marketing, logistics, service operations), even as the managerial implications were being further explored by us and others (e.g., Benttencourt, Lusch and Vargo 2014; Brodie et al. 2006; Lusch et al. 2007).

Much of this zooming-out movement, as well as the refinement of the lexicon of S-D logic, especially as related to the FPs, was initially more formally captured in an article (Vargo and Lusch 2008) in this journal, "Service-Dominant Logic: Continuing the Evolution," which reiterated previous changes in language, such as those associated with the "cocreation of value" and the distinction between "service" (a process) and "services" (units of output). It specified service as the "basis," rather than the "unit" of exchange. It also formally changed FP9 from its original (Vargo and Lusch 2006) firm-centric wording, dealing with the integration of micro-specializations, to a more generic "all economic and social actors are resource integrators." FP10, "Value is always uniquely and phenomenologically determined by the beneficiary," was also added. The modified FP9 implies a network structure for value creation and the new FP10 implies its contextual nature; both require a move from a single-minded concern with restricted, pre-designated roles of "producers"/ "consumers," "firms"/ "customers," etc. to more generic actors-that is, to an actor-to-actor (A2A) orientation.

While this "actor" language was used in several of the FPs in Vargo and Lusch (2008), and even more broadly in discussing the parties involved in resource integration, service exchange, and value cocreation in conference presentations (see sdlogic.net), it was not until Vargo and Lusch (2011) that we formally completed the turn from parties with pre-designated roles to generic actors. This was a subtle distinction with wideranging implications because it signaled that all actors fundamentally do the same things: integrate resources and engage in service exchange, all in the process of cocreating value. In that publication, we identified the exemplar of the A2A orientation as business-to-business (B2B), rather than the traditional businessto-consumer (B2C) orientation of mainstream marketing. This is because, as in B2B, there are no strictly producers or consumers but, rather, all actors are enterprises (of varying sizes, from individuals to large firms), engaged in the process of benefiting their own existence through benefiting the existence of other enterprises-that is, through service-for-service exchange-either directly or indirectly, through the provision of some output (e.g., a good).

This "generic actor" designation should not be confused with a position that all actors are identical. Indeed, it is intended to do just the opposite: disassociate them from predesignated roles (e.g., "producers" and "consumers") and set the stage for characterizing them in terms of distinctly constituted identities associated with unique intersections of the institutional arrangements, with which they associate themselves.

The A2A orientation also implies several other things. First, it confirms that value creation takes place in networks, since it implies that the resources used in service provision typically, at least in part, come from other actors, as specified in FP9. Second, it implies a dynamic component to these networks, since each integration or application of resources (i.e., service) changes the nature of the network in some way. This in turn suggests that a network understanding alone is inadequate and that a more dynamic systems orientation is necessary. Third, though perhaps less obviously, along with the dynamic systems orientation, it suggests the existence of mechanisms to facilitate all of this resource integration and service exchange through the coordination of actors. Thus, as we indicate in Vargo and Lusch (2011), acknowledgement and understanding of the existence and role of institutions, those routinized, coordinating mechanisms of various types, and institutional arrangements, assemblages of interdependent institutions, become essential to understanding value cocreation.

In line with the above, it has been becoming clearer over the last several years that the narrative of value cocreation is developing into one of resource-integrating, reciprocal-serviceproviding actors cocreating value through holistic, meaningladen experiences in nested and overlapping service ecosystems, governed and evaluated through their institutional arrangements. The major components of this narrative are presented in Fig. 1.

To be consistent with this emerging narrative, it is clear that some of the language of the existing FPs requires modification. It is also apparent that some of the FPs are more foundational than others. These issues are addressed in the following two sections.



Fig. 1 The narrative and process of S-D logic

Modification of foundational premises

As noted, for several reasons, including the positioning of the article for *JM*, the original (Vargo and Lusch 2004) language of S-D logic was, at least in part, expressed in firm, customer, and managerial terms and, in some instances, the language needed more precision. These issues were partially addressed in the modifications and additions of Vargo and Lusch (2008). With the adoption of an A2A perspective, the need to further modify the language of at least four—three of them axioms—of the FPs becomes more glaringly apparent. These modifications are discussed below and summarized in Table 1.

FP4: Operant resources are the fundamental source of competitive advantage

In both Vargo and Lusch (2004) and (2008) we used the term "competitive advantage" to capture the beneficial impact of operant resources (changed from "knowledge," as used in 2004). More recently, we realized that this term not only is myopic but also misdirects attention because it does not point directly toward service provision for some beneficial actor as the primary function. Thus, in Lusch and Vargo (2014) and elsewhere, we have begun using the term "strategic advantage," but even the term "advantage" has competitive overtones and we think "strategic benefit" (for the service-providing actor) more directly conveys the correct strategic intent. Incidentally, "strategic benefit" highlights an important implication of the service-forservice conceptualization of S-D logic, namely, that the service provider also has the role of "beneficiary," given reciprocal service exchange.

This shift is not intended to suggest that competition is irrelevant; we believe that awareness of a beneficiary's alternative sources of service is very important to service

Foundational Premise	2004	2008	Update
FP1	The application of specialized skills and knowledge is the fundamental unit of exchange.	Service is the fundamental basis of exchange	No Change AXIOM STATUS
FP2	Indirect exchange masks the fundamental unit of exchange.	Indirect exchange masks the fundamental basis of exchange.	No Change
FP3	Goods are distribution mechanisms for service provision.	No Change	No Change
FP4	Knowledge is the fundamental source of competitive advantage.	Operant resources are the fundamental source of competitive advantage.	Operant resources are the fundamental source of strategic benefit.
FP5	All economies are service economies.	No Change	No Change
FP6	The customer is always the co-producer.	The customer is always a co-creator of value.	Value is cocreated by multiple actors, always including the beneficiary. AXIOM STATUS
FP7	The enterprise can only make value propositions.	The enterprise cannot deliver value, but only offer value propositions.	Actors cannot deliver value but can participate in the creation and offering of value propositions.
FP8	Service-centered view is customer oriented and relational.	A service-centered view is inherently customer oriented and relational.	A service-centered view is inherently beneficiary oriented and relational.
FP9		All social and economic actors are resource integrators.	No change AXIOM STATUS
FP10		Value is always uniquely and phenomenologically determined by the beneficiary.	No change AXIOM STATUS
FP11			New Value cocreation is coordinated through actor-generated institutions and institutional arrangements. AXIOM STATUS

Table 1 Foundational premise development

provision. However, the realization that there is competition in the process of one actor benefiting itself through service provision to other actors, while critical, is not primary. It also points the service provider in the wrong direction, toward the competitor and thus away from the potential service beneficiary. Competition is (should be) a secondary motivator; value cocreation through service provision is primary. Thus, more appropriate wording for FP4 is: *Operant resources are the fundamental source of strategic benefit.*

FP6: The customer is always a cocreator of value

Perhaps there is no other FP that has created as much misunderstanding and, in a few cases, controversy as FP6. The first misunderstanding is that we are conceptually equating "value cocreation" with active participation in the firm's design, definition, creation, etc. of its offering (e.g., value proposition). As Vargo (2008) acknowledges, we are probably directly responsible for much of this confusion because of our use of the term "co-production" in the original FP6 (Vargo and Lusch 2004). However, we corrected that designation in Lusch and Vargo (2006) and again, more pointedly, in Vargo and Lusch (2008). There, and elsewhere, we distinguished between "co-production," referring to the creation of the value proposition—essentially, design, definition, production, etc.—and "value cocreation"—the actions of multiple actors, often unaware of each other, that contribute to each other's wellbeing. We reemphasize this distinction here because some of the controversy over this FP is based on this continuing misunderstanding, though there are also other issues.

Ironically, these issues come from relatively opposing positions—one normative and the other positive. On the normative side are scholars who understand FP6 as expressing a viewpoint that *firms should always involve customers* (and in some cases other actors) in the design, definition, creation, completion (e.g., self-service), etc. of firm output (i.e., coproduction). However, we have repeatedly emphasized (e.g., Vargo 2008; Vargo and Lusch 2008) that we see *coproduction* as being relatively *optional*, subject to a whole host of factors (e.g., knowledge and desire of the beneficiary and existing knowledge of customer preferences on the part of the provider, among many others), whereas *cocreation of value* is simply a *positive* statement that, at least in human systems, which are characterized by specialization and thus interdependency, *value is always cocreated*. Hence, cocreation of value, unlike co-production, is not optional. The (mis)understanding of either co-production or cocreation of value as a normative concept is exacerbated by their, often explicitly, being treated as such (e.g., Ramaswamy and Oczan 2014), especially in the popular, practitioner literature.

As a positive concept, value cocreation has been criticized by some scholars (e.g., Gronroos and Voima 2013) on the grounds that we misstate its extent-that is, they argue that value is only cocreated in select instances, those in which there is *direct*, *personal interaction* between the provider and the beneficiary and, otherwise, value creation is only "facilitated" by a firm but *created solely* by the customer. We find the conceptual difference between "co" and "facilitate" essentially incomprehensible and are thus unaware of any useful, actionable way that it informs academics or practitioners (or others). However, we must agree that we did indeed misstate the extent of value cocreation in Vargo and Lusch (2006, 2008), just not in the direction indicated by Gronroos and Voima. On the contrary, we drastically understated the extent of value cocreation. Value creation does not just take place through the activities of a single actor (customer or otherwise) or between a firm and its customers but among a whole host of actors. That is, at least in specialized, human systems (and arguably in all species), value is not completely individually, or even dyadically, created but, rather it is created through the integration of resources, provided by many sources, including a full range of market-facing, private and public actors. In short, cocreation of value is the purpose of exchange and, thus, foundational to markets and marketing.

The essential intent of the original FP6 was to recognize that *the beneficiary is always a party to its own value creation* but in doing so, it inadvertently might have conveyed that value cocreation is dyadic. On the contrary, as stated, zooming out reveals that it is neither singular nor dyadic but rather a multi-actor phenomenon, often on a massive scale, albeit with the referent beneficiary at the center, as indicated in FP10, and playing a key, integrative (and evaluative) role in all instances. This is of course what CCT theorists, network and system theorists, sociologists, and others have been saying for some time. For this reason, we believe it is necessary to clarify FP6, partly by strengthening it, as follows: *Value is cocreated by multiple actors, always including the beneficiary.*

Because this point is so central to any meaningful conceptualization of a service-based logic of value creation, we believe it needs additional clarification and elaboration. There actually are two similar, opposing positions to the idea that value is always cocreated. One, which sees the firm as the sole creator of value, is directly linked to G-D logic and, arguably, associated with traditional, mainstream marketing management. As Hakansson et al. (2009, p. 27) note, "In approaches coloured by traditional market assumptions, interaction is treated as a simple *mechanism* that facilitates exchange" (italics in original). Perhaps ironically, this perspective is at least partially acknowledged in many conceptualizations of the "customer orientation." For example, Rindfleisch and Morman (2003, p. 422) define customer orientation as "the set of behavior and beliefs that places a priority on customers' interests and continuously creates superior customer value."

The other shifts the locus of value creation to the customer, though acknowledging that value cocreation is possible in cases of interaction, but argues that this interaction must be direct and relatively face-to-face. For example, as Gronroos and Voima (2013, p. 140) state:

[I]nteractions are situations in which the interacting parties are involved in each other's practices. The core of interaction is a physical, virtual, or mental contact, such that the provider creates opportunities to engage with its customers' experiences and practices and thereby influences their flow and outcomes. Opportunities for interacting are natural in service encounters but may be created in goods marketing contexts too, such as through order taking, logistics, problem diagnosing, and call centers.

Aside from the fact that it is not entirely clear what a faceto-face encounter between a firm and a customer means, particularly in a digital and virtual world, the word *interaction* does not imply face-to-face or repeated encounter at all; it means "mutual or reciprocal action or influence" (Merriam Webster). Gronroos and Voima also specifically cite practice theory in support of their definition. But practice theory is not a theory of involvement in others' practices through direct, face-to-face (or virtual) interpersonal interaction but a theory of dialogical processes between structure and human activity. This structure can be provided through direct interaction, but it can also be provided through institutions (see, e.g., North 1990; Giddens 1984; Simon 1996), including those conveyed physically (e.g., through a good), as Orlikowski (2007) discusses in conjunction with "socio-materiality."

Furthermore, to invoke what appears to be an "inseparability" (i.e., face-to-face) condition or, alternatively, a service-in-conjunction-with-goods condition for interaction seems to be partially reclaiming the "IHIP" characteristic distinctions between goods and services, which thus makes it difficult to see how it constitutes a "service-logic" at all, but rather, something that we would term a "services logic," with a commensurate boundary condition. Gronroos (2008, p. 310) seems to confirm this characterization by noting the existence of separate, alternatively invocable logics:

Adopting a service logic is a strategic decision. If customers are buying goods and services as value-creating processes or can be persuaded to do so, a strategy based on a service logic is supportive - on the other hand, if they only buy them as resources, developing a market offering based on a goods logic makes more sense.

In the "service logic" that we call "service-dominant logic," there is no boundary condition, since S-D logic is transcending; goods logic is integral to and nested in S-D logic, rather than distinct from it.

In either case, as noted, it is difficult to understand just what the distinction between "facilitate" and "co-" offers; in both instances, there are *multiple actors to value creation*, the recognition of which is the essential purpose of FP6. A true, service-based logic implies this multi-actor (often massively so) orientation to value creation; whether that is termed "co-" or "facilitation" is insignificant at best and, arguably, incoherent. If some prefer to argue that "value is always cofacilitated" rather than "co-created" we see it as an inconsequential, semantic exercise and consider there to be many important, scholarly issues more worthy of debate.

One final note on the meaning of "cocreation" is appropriate here. Whereas FP6 is primarily intended to deal with the multi-actor nature of the process of *value creation*, it also characterizes the nature of *value realization* (outcomes), particularly in voluntary exchange. That is, value is typically being created (or anticipated) for multiple actors, including not only those involved in dyadic exchange, but normally many others (Lusch and Webster 2011). The value is different for each referent and must be assessed separately, as implied by FP9.

FP7: The enterprise cannot deliver value, but only offer value propositions

In keeping with the A2A orientation, the essential modification for this FP is to alter the reference to the "enterprise" to generic "actor" in general. That is, consistent with the A2A orientation, FP7 should say: Actors cannot deliver value but can participate in the creation and offering of value propositions. Once again, we emphasize that the purpose of this FP is to establish the non-deliverable nature of value and it does not imply that, once value propositions have been embraced by potentially beneficial actors, nothing else can be done by the service-providing actor to contribute to value creation. To the contrary, the acceptance of value propositions implies a continuing role by the associated actors, whether afforded through resources provided directly (e.g., interpersonally) or impersonally (e.g., through a good). This latter point is of course also captured in FP6. Also consistent with FP6, the creation of value propositions should not be construed to imply they be solely created by service providers. Rather, they are probably more appropriately considered narratives of value potential that are

cocreated among multiple actors, including the provider and beneficiary.

FP8: The service-centered view is inherently customer oriented and relational

As with FP7, the essential modification needed for FP8 is the reflection of the A2A orientation. Thus, FP8 becomes: *A service-centered view is inherently beneficiary oriented and relational*. As discussed in Vargo and Lusch (2008), the purpose of this FP is to indicate that, since benefit for another actor is built into the definition of service, no "consumer orientation" fix is necessary, as it is with G-D logic. However, as we have been arguing, both "consumer" and "customer" imply something of a firm-centered orientation, since "consumer" is defined in terms of the consumption of firm output and the customer is contingent on the identification of a specific firm. On the other hand, "beneficiary" centers the discussion on the recipient of service and the referent of value cocreation.

Similarly, since S-D logic assumes value cocreation, it is inherently relational for this reason alone. Importantly, this is not the "repeat transaction" conceptualization of relationship associated with G-D logic (see Vargo 2009; Vargo and Lusch 2010) but rather a multidimensional one as discussed in Lusch and Vargo (2014). In particular, value cocreation is represented by the reciprocity of exchange, as well as by the existence of the shared institutions that facilitate this exchange, as will be discussed.

The service ecosystem perspective

Alderson (1965) was arguably the first to advocate an ecological framework for the study of marketing systems and specifically put a major focus on cultural ecology, thus creating a broader view of marketing. S-D logic has also been broadening the perspective, even further. Since Vargo and Lusch (2004), we have increasingly encouraged zooming out to wider perspective than "firm"-"customer" exchange. This broadened perspective is implied in FP9 and in the updated wording of FP6 and is dealt with more explicitly in numerous other publications (e.g., Chandler and Vargo 2011; Lusch et al. 2010; Vargo 2008; Vargo and Lusch 2008), especially Vargo and Lusch (2011). This zooming out has resulted in a major turn toward a systems orientation. We use the term "ecosystems" to identify these systems because it denotes actor-environmental interaction and energy flow. More specifically, we use the term "service ecosystem" to identify the particular kind of critical flow-mutual service provision. We (Lusch and Vargo 2014) define a service ecosystem as "a relatively self-contained, self-adjusting system of resourceintegrating actors connected by shared institutional arrangements and mutual value creation through service exchange."¹

This "service ecosystems" concept is similar to the "service systems" concept of service science (e.g., Maglio et al. 2009), defined as "a configuration of people, technologies, and other resources that interact with other service systems to create mutual value," which is also grounded in S-D logic. However, the "service ecosystem" definition in S-D logic emphasizes the more general role of institutions, rather than technology. On the other hand, institutions and technology can be directly linked, as discussed in Vargo et al. (2015). That is, technology, in the general sense of its meaning, is applied, useful knowledge (Moykr 2002) and knowledge is part of the institutional structure we call society. In short, technology is an institutional phenomenon.

Likewise, the service ecosystems conceptualization is somewhat similar to Layton's (e.g., 2011) conceptualization of a "marketing system." However, he sees both knowledge and institutions as "environmental," or exogenous, to marketing systems, though influenced by as well as influencing them. For Layton, service ecosystems represent restricted, more focused examples of marketing systems. By contrast, Alderson (1965) treats institutions as endogenous in his ecological view of marketing systems. For instance, he identified the relation between behavior and structure as determined by "rules which are generated by interaction among the members of a system" (Alderson 1965, p. 301) and "rules of conduct, which grow out of interaction among separate systems" (Alderson 1965, p. 301), thus strongly supporting the rationale for a focus on institutions in the study of service ecosystems.

Institutions

In S-D logic, these *institutions*—humanly devised rules, norms, and beliefs that enable and constrain action and make social life predictable and meaningful (Scott 2001; see also North 1990)—and higher-order, *institutional arrangements*—sets of interrelated institutions (sometimes referred to as "institutional logics")—and the process and role of *institutionalization* are the keys to understanding the structure and functioning of service ecosystems. Indeed, they are, arguably, the keys to understanding human systems and social activity, such as value cocreation, in general.

It is important to note that when we, and most institutional theorists in various disciplines, use the term "institutions," it *does not mean organizations*, as it is sometimes intended in everyday discourse. As North (1990, pp. 4–5) distinguishes

between the two, institutions are the "rules of the game"; organizations are the players (the teams). They are functionally aligned but conceptually distinct (see also Scott 2008; Thornton et al. 2012). Institutions come in many forms; they can be formal codified laws, informal social norms, conventions, such as conceptual and symbolic meanings, or any other routinized rubric that provides a shortcut to cognition, communication, and judgment. In practice, they typically exist as part of more comprehensive, interrelated institutional arrangements.

The development and use of institutions and institutional arrangements are important, at least in part, because humans have, contrary to the assumptions of neoclassical economics, limited cognitive abilities. Simon (1978) comments that the concept of rationality is the main export of "economics" to other social sciences. However, human cognitive ability is a limited resource, and Simon cautions against understanding rationality in the "narrower" maximization-sense of the term and argues for a "broader," institution-assisted conceptualization. That is, the central issue is not so much whether or not actors are rational but rather how they efficiently rationalize, given limited abilities. The answer is through institutions that are diffused and shared. These institutions represent more efficient and arguably more effective ways to reduce thinking. As mathematician and philosopher Alfred North Whitehead (1911, p. 61) commented: "It is a profoundly erroneous truism, repeated by all copy-books and by eminent people when they are making speeches, that we should cultivate the habit of thinking of what we are doing. The precise opposite is the case. Civilization advances by extending the number of important operations which we can perform without thinking about them." Institutions allow this limited-cognition rationality.

Institutions enable actors to accomplish an ever-increasing level of service exchange and value cocreation under time and cognitive constraints. This is in large part because institutions, when shared by actors, result in a network effect with increasing returns. In fact, the more actors share an institution the greater the potential coordination benefit to all actors. Thus, institutions can play a central role in value cocreation and service exchange.

However, while institutional facilitation provides for more parsimonious rationality, it comes at a potential expense. That is, the ability of "performing without thinking" is inherently susceptible to acting without reevaluating the appropriateness of the institutions for the context at hand. Thus, institutions can lead to ineffective dogmas, ideologies, and dominant logics. Perhaps ironically, as will be discussed, even these constraints provide opportunity for innovation. For example, in our initial writing on S-D logic (Vargo and Lusch 2004), we were essentially noting the institutionalized mindset of marketing, what we referred to as goods-dominant logic, as well as suggesting a "potentially" revised dominant logic. For

¹ In Lusch and Vargo (2014), we use the term "logics" rather than "arrangements." Since the former term tends to be specifically associated with the organizational institutionalization literature, we have begun using the latter term.

nearly a century, marketing theory and activity had been guided by a shared, implicit belief in neoclassical economics, goods orientation, or manufacturing logic. Production was understood in terms of being best if removed from the customer and taking place in large, homogeneous units of output to gain efficiency and then sold to the market by setting the four P's to maximize profits. Customers were viewed as exogenous, operand resources to be targeted to increase their rate and level of purchasing of firms' output. As with other institutional arrangements, this logic was relatively unquestioned and infrequently challenged as a foundational framework. However, problems with and disruptions to this framework, along with partial fixes, had been surfacing for decades, if not centuries (Vargo and Morgan 2005). S-D logic was an attempt to distill an evolving, revised institutional arrangement from these disruptions.

Although he did not regularly use the term, institutions are what Nobel laureate Herbert Simon (1996) was referring as the "artificial," which he defined as "man-made" (p. 4) in *The Sciences of the Artificial*. Perhaps it is testimony to the importance of institutions that, in the last quarter century, five other Nobel laureates in economic sciences (Coase, North, Ostrom, Sen, and Williamson) have been directly associated with institutional theory and, although perhaps not directly in terms of theory development but certainly in terms of methodology, a sixth Nobel laureate, Vernon Smith, in his work in experimental economics, typically manipulated economic institutions.

Institutions also form the structure, which represents both the outcome and context of human action in Gidden's (1984) recursive structuration theory. They also form the structure, in relation to which Ostrom (2005, pp. 3–4) asks:

Can we dig below the immense diversity of regularized social interactions in markets, hierarchies, families, sports, legislatures, elections, and other situations to identify universal building blocks used in crafting all such structured situations...to build useful theories of human behavior in the diverse range of situations in which humans interact? Can we use the same components to build an explanation for behavior in a commodity market as we would use to explain behavior in a university, a religious order, a transportation system, or an urban economy?

Her answer to these questions was "yes." Similarly, though not specifically referring to institutions, von Mises, (1949, p. 2) argued, "One must study the laws of human action and social cooperation as the physicist studies the laws of nature" and pointed to the "inescapable interdependence of social phenomena" as foundational to his view.

Foundational overview of institutional thought

Institutional theory has found a strong foothold in economics, sociology, organizational science, and political science. These disciplines share something of a common, core understanding of institutions—not surprising given the often common historical perspectives and high degrees of cross fertilization—but each of which has a somewhat nuanced approach and often use a combination of somewhat different and shared lexicons. Though not intended to provide a comprehensive review and recognizing that differences within-discipline orientations are almost as prevalent as those between disciplines, the following sections briefly review these disciplinary literatures, especially as they relate to developing an S-D logic, service ecosystems perspective.

Institutional perspectives in the sociology literature

The study of institutions has a long tradition in sociology, dating back to its inception. Exploring the genealogy of this tradition, Scott (2001) highlights such influential scholars as Spencer, Durkheim, Marx, and Weber as the forerunners of institutional theory. Foundational to their early work was the tension that lies between materialist, agency-driven views and those focused on "ideational, normative forces that serve as constraints on individuals' behavior (Hinings et al. 2008, p. 476)"-in short, the role of agency versus structure. Spencer (e.g., 1910), for example, described social systems as a series of institutional subsystems and highlighted their centrality in society, but saw them as evolving naturally from the selfinterest of actors-e.g., conscious choice. Durkheim (1912/ 2008) was also interested in the forces that held society together but, at least in his later work, in contrast to Spencer, focused less on conscious choice and put more emphasis on the normative structures that characterize social life.

Whereas both Spencer and Durkheim, despite some differences, focused their work on the persistence of social order, Marx was mainly concerned with the forces that enabled major transformations in social structures (Hinings et al. 2008), especially those relating to the struggles between classes (i.e., ownership/capitalist and productive/labor), driven by their differing orientations. More specifically, he viewed class conflict as inevitable and primarily driven by related rational efforts, while acknowledging the more normative roles of cultural forces and ideologies. Finally, Weber, by highlighting the interplay of material and ideational forces, argued for a more balanced approach that describe these forces as "independent though intertwined phenomena" (Hinings et al. 2008, p. 476). Of particular importance was his theorizing about *legitimacy*, the subjective belief in the authority of a rule or normative structure, and its macro-social consequences.

Fast forwarding, of particular importance to institutional theory in sociology, at least as it relates to marketing and S-

D logic, is the work grouped under the broad rubric of *practice* theory. While more of a generalized approach than an integrated body of work, it has been particularly instrumental in linking agency with structure. For example, Bourdieu (1977) developed the concept of *habitus* to capture the internalized, mental schemata that represents external social structures and guide practices and appropriated the concept of *fields* from Lewin (e.g., 1939) to capture particular nested and overlapping domains (e.g., marketing, scholarly activity) of social structure. Actors' practices then are produced from the habitus developed through the negotiation of the reconciliation of multiple fields. Giddens (1984) has arguably been the most influential of the practice theorists in bridging agency and structure through what he calls structuration, a transcending conceptualization that asserts that structure is both the outcome of and context for human action. That is, the connection between agency and structure is a relational duality, rather than a dichotomous dualism. Institutions in this duality are the "practices which have the greatest timespace extension." Of equal influence has been Granovetter (e.g., 1985) who, based in part on Karl Polanyi (e.g., 1968), advanced the concept of embeddedness-the idea that actors' relationships take place in social networks and associated institutions.

Institutional theory with an organizational focus

Closely aligned with the sociological literature, though somewhat more hybrid and transdisciplinary, is the study of institutions with an organizational focus, often conducted under the rubric of *institutional logics*. Regardless of the label, the central concern continues to be the interplay and reconciliation of the more "taken-for-grantedness" of normative structures (i.e., organizations) and the more rational, individualistic practices of actors, usually characterized as agency. Meyer and Rowan (1977), for example, based on the Weberian use of legitimacy, shaped work on organizational institutionalism by focusing on three concepts: *institutional rules, legitimacy,* and *isomorphism*—the constraining impact of institutional environments that causes homogeneity in the activities of actors—thus downplaying the importance of agency and emphasizing the role of organizational structure.

DiMaggio and Powell (1983) extended Meyer and Rowan's work on isomorphism by highlighting the importance of the structural dynamics in organizational fields—sets of organizations that constitute a recognizable whole (e.g., automobile industry). Isomorphism, in this context, is specifically conceptualized as "a constraining process that forces one unit in a population to resemble other units" (Hawley 1968) that could not be explained by competitive pressures or other environmental conditions or efficiency motives (see also Thornton et al. 2012). However, missing in this work was an explanation of institutional change and disruption. In an effort to overcome this weakness, DiMaggio (1988) introduced the notion of *institutional entrepreneurs*, which he defined as actors who initiate changes that contribute to creating new or transforming existing institutions. Thus, institutional entrepreneurship aimed not only to explain "how institutions influence actors' behavior but also how these actors might, in turn, influence, and possibly change institutions" (Battilana and D'Aunno 2009, p. 66). In line with this extension, DiMaggio and Powell (1991) point to the importance of practice theoretical approaches, such as Gidden's (1984) structuration theory or Bourdieu's (1977) habitus, to develop a more balanced view of the relationships between actors and institutions.

More recently, researchers have introduced more systemic explanations for institutional change. For example, Scott (2008, p. 50) suggests that "institutions provide [both] guidelines and resources for taking action as well as prohibitions and constraints on actions" and identifies three institutional pillars: rule setting and sanctioning activities (i.e., the regulative pillar), values and norms (i.e., the normative pillar), and the constitution and interpretation of frames through which meanings are interpreted (i.e., the cognitive pillar).

However, Thornton et al. (2012, pp. 38–39) argue that the three pillars lack parallelism, and that, in line with Friedland and Alford (1991), they actually represent institutional influence observed from different "levels of analysis"-individual, organization, and society. Building further on Friedland and Alford, they outline a model of an multidimensional, interinstitutional system of society consisting of "nearly decomposable" (p. 123) ideal-type, institutional ordersi.e., family, community, religion, state, market, profession, corporation-of institutional logics. They define these as "the socially constructed, historical patterns of cultural symbols and material practices including assumptions, values, and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences" (p. 2). For Thornton et al., field/ organizational-level logics are both embedded in and contribute to societal-level (i.e., institutional orders) logics, which provide the building blocks, but they are also influenced by micro-level processes. This suggests both an alignment with the structuralism of Giddens (1984) and the "combinatorial evolution" precept-the idea that new structures always evolve from parts of existing ones-of Arthur (2009), both of which Thornton et al. acknowledge.

Consistent with this more systemic approach, Lawrence and Suddaby (2006), extend DiMaggio's (1988) work on institutional entrepreneurship by pointing out that actors not only engage in institution building, but also in *translations*, *interpretations, modifications, and accommodations* of institutional arrangements. In particular, their concept of *institutional work* "is concerned with the practical actions through which institutions are created, maintained, and disrupted" (Lawrence et al. 2009, p. 1). They offer a more encompassing, practice-theoretical, relational perspective to address institutional change and the "paradox of embedded agency, or the contradiction between actors' agency and institutional determinism" (Battilana and D'Aunno 2009, p. 32) that is, as described, deeply embedded in the sociology and organizational literature on institutions.

Institutional theory in economics

There are two institutional traditions associated with economics. One, ("old") institutional economics, shares some of the same philosophical underpinnings as institutional theory in sociology and is usually associated with Veblen (1899/ 1934), Commons (1934), and Mitchell (1937) in the early to mid twentieth century.

The "old" institutional economists, while differing somewhat in their specific approaches, shared a common conviction about the shortcomings of neoclassical economics and embraced models of dynamic, changing, and in some cases, evolutionary rules of conduct, habit, and convention (Scott 2008). Notable scholars such as Schumpter and Galbraith followed in this tradition but, overall, its influence was blunted, according to Scott (2008; see also Swendberg 1991). He also notes, somewhat ironically, that it has more in common with institutional thought in contemporary sociology than does more contemporary institutional thought in economics.

The other institutional tradition in economics is usually discussed under the rubric of "new institutional economics" (NIE). Somewhat contrary to Scott, Arrow (1987, p. 734) argues that "the older institutionalism school failed so miserably [because] the New Institutional Economics movement consisted of answering new questions, why economic institutions emerged the way they did and not otherwise," rather than answering old questions of resource allocation and utilization. But NIE is also characterized by its reclaiming of some of the *perfect competition* and *marginal utility* assumptions and the methodological rigor associated with neoclassical economics.

Much of the work on NIE can be traced to Coase and his work on transaction costs and property rights. Scott (2008, p. 28), for example, calls Coase (1937) the "Godfather" of new institutional economics and points to the importance of his seminal article ("The Nature of the Firm"), which addressed the question why some economic exchanges are carried out within firms rather than through markets and pricing mechanisms.

However, as Coase (1972, p. 69) noted himself, his early work was "much cited and little used," until it was brought back to life by work on the new institutional economics of North (1990) and Williamson (1981, 1988). Williamson (1975, 1985, 1991), for example, in line with Coase's (1937) earlier work, aimed to explain how organizational forms are shaped. More specifically, in what has become known as *transaction cost analysis* (TCA), he argues for a framework that explains how varying types of organizational forms, such as markets, firms, and hybrid organizations, are grounded in the actions of economic agents' efforts to minimize transaction costs (e.g., search, bargaining, enforcement) in managing their exchange activities. According to Williamson, these costs are incurred because these activities are embedded in an institutional environment or a "set of fundamental political, social, and legal ground rules that establishes the basis for production, exchange and distribution" (Davis and North 1971, p. 6).

Similarly, North (1990) argues for an institutional matrix that provides both "rules of the game" and the goals of the players (i.e., organizations). In this context, North highlights the importance of customs, traditions, norms, and religion and also works to overcome the dismissive views of institutions that were prevalent in neoclassical economic thought, noting that they are essential to cooperation. It is important to note, however, that, generally, much of the early work on institutions in the economic literature was, corresponding to early work in sociology, mainly focused on the constraining properties of institutions. North (1990, p. 97), for example, describes institutions as "humanly devised constraints that structure political, economic and social interactions." He distinguishes between informal constraints, such as sanctions, taboos, customs, and traditions, and formal rules such as constitutions, laws, and property rights.

More recently, Williamson (2000, p. 595), citing Matthews, argued that "the economics of institutions had "become one of the liveliest areas" of his field. While confessing that his discipline was "still very ignorant about institutions," in an important transition from earlier work, Williamson explicitly highlighted the significance of studying human actors' capabilities of conscious foresight, cognition. and self-interestedness in an institutional context. In other words, the economic literature is, in line with sociological thought, beginning to broaden its conceptualizations of institutions by not only recognizing their constraining but also their enabling properties. Likewise, North (1990) notes that when transactions are costly, institutions matter (i.e., are enabling). TCA has of course found a particular acceptance by marketing scholars, especially in relationship marketing and inter-firm governance.

More generally, the shift away from the idealized conceptions of individual rationality of classical economic thought has been influenced by the work of Simon. Simon (1957), in discussing what he called *bounded rationality*, argues that individual actors lack the cognitive ability to achieve a high degree of rationality given the complexity of the environment in which they find themselves. More specifically, Simon (1945/1997, p. 111) claims that human actors are guided by value assumptions, cognitive frames, rules, and routines and that "the rational individual is, and must be, an organized and *institutionalized* individual (emphasis added). Similarly, as pointed out by Williamson (2000), Simon's work, along with Granovetter's (1985) concept of "embeddedness," both in the context of society and social network relationships, has also helped to anchor deeply the study of institutions in economic thought.

As we conclude this brief discussion of institutional theory in economics, it is interesting to note that Adam Smith, although not in his writings on economics per se, recognized the role of institutions in enabling humans to understand the world around them, a world that they could not understand based on their limited individual cognitive abilities and computational skills. Smith (1980) elaborated on the role of scientific theories, as illustrated in his "History of Astronomy," where he argued that scientific theories serve the purpose of achieving mental tranquility by allowing humans to see the world as conforming to patterns that become familiar.² Essentially Smith was arguing that scientific theories are the "product of the human need for institutions that would make comforting knowledge possible" (Loasby 2001, p. 9).

Institutions in political science

Like economics, institutional theory in political science has an "old" and a "new" version. Old institutionalism in political science is generally structuralist—focused at macro-level, formal structures, with an underlying assumption that structure drives individual behavior. Additionally, it is normatively concerned with the identification of good, if not best, political structures (Peters 2012). As Bill and Hargrave (1981; see also Scott 2008) point out, it also is historical, though not necessarily dynamic, at least in the sense of being concerned with future changes. It has also been described as atheoretical, though Peters (2012, p. 6), argues that there was "prototheory" lurking in the background. Political science, as a discipline, emerged from this old institutionalism, as did the new institutional movement.

New intuitionalism represents the joint influence of two movements, which, while different, share some commonalities moving toward more theoretical and methodological rigor, non-normative approaches, a focus on micro-level utility maximization, and concern with societal input into the political structure (Peters 2012). One of those movements is characterized as *behavioralist* and transfers attention from political structure to political behavior. The other is characterized as *rational choice*, which applies assumptions of economic science to political behavior (Scott 2008).

Of potential particular interest to understanding value and market cocreation is the work by Ostrom (e.g., 1990, 2005) on the governance of the commons. She studied the role of diverse institutions, other than property rights, in the collaborative management of (natural) ecosystems. At the heart of her analyses is the Institutional Analysis and Development (IAD) framework, which she saw as applicable to levels of analysis ranging from fine-grained (e.g., individual) to coarse-grained (e.g., nation), in which the whole system at one level is part of a system of another level. Following Koestler (1973), she called these systems holons. While the levels might have different concepts associated with them, she cautions that levels cannot be treated independent of the whole, but rather both local and global perspectives are needed for analysis (c.f., Chandler and Vargo 2011; Latour 2005). To deal with the various levels of complexity implied by her framework, Ostrom used both game-theoretic and qualitative (case study) methods.

Institutional thought in marketing³

Generally, at least thus far, with a few notable exceptions, institutional theory has not been as prominent in academic marketing as it has in the disciplines discussed above, al-though interest has been increasing in recent years (e.g., Giesler 2008; Humphreys 2010; Hunt 2012; Vargo and Lusch 2011; MacAlexander et al. 2014). Perhaps this lack of prominence is ironic, given that the market is often referred to in institutional terms (e.g., Loasby 2000; Menard 1996), at least in other disciplines. Perhaps it is also ironic, since one of its early schools of thought was called the "institutional school" (Shaw et al. 2010), which described the roles and dynamics of the various marketing specializations, though it morphed into a term more synonymous with channels of distribution.

This is not to say that a concern for institutions and institutional theory in marketing is totally absent; it is not. It is just that much of the focus has tended to be conceptually restricted and disguised in more specific concerns (e.g., relational norms, attitudes, transaction cost analysis), with the few calls for a more general understanding of the role of institutions, while present (e.g., Alderson 1957; Arndt 1981; Duddy and Revzan 1953; Hunt 1983), generally unheeded.

On the other hand, there has been a long history of what might be called brief flirtations with institutional thought in academic marketing, though with varying meanings of the term. As noted, the "institutional school" is generally considered one of the first schools of thought. Although it became

² It is interesting that this manuscript predates Smith's work on the wealth of nations and his ideas on economics. Also of the many unpublished manuscripts in his files upon his death all were to be destroyed except the "History of Astronomy," subsequently published in 1980 by Oxford University Press in a collection of articles.

³ Although laws and public policy are institutions, we do not review the literature in this area since what is written is not about institutional thought per se but more about the evaluation of the functioning of laws and public policy.

identified with the organizations involved in distributions and the channel of distribution itself, the early roots (e.g., Weld 1916, p. 17) were more concerned with the specialized functions and the structure of marketing, somewhat more in line with the connotations of the term institution, as we use it here. However, this soon changed to a focus on the organizations that were formed around these functions. Later, Alderson and Cox (1948, p. 143) more directly emphasized the importance of institutions, defined in terms of "patterns or arrangements of group behavior," to the development of a "theory of marketing." As they noted:

It should be remembered that marketing men call one of their traditional approaches to the study of marketing the institutional approach. [With some exception] the term has been restricted to apply to classifying, describing, and analyzing the operations of the two million or so individual establishments that participate in marketing. This approach is not institutional in the sociological sense. It is nevertheless adaptable to a more fundamental and far-reaching approach that would treat retailers, wholesalers, and other entities active in marketing as true institutions in the sociological usage of the term. In this view, agencies of marketing would become patterns of human behaviors and communication...

Arguably, no marketing scholars have been more direct and outspoken about the need for studying institutions than Duddy and Revzan (1953). For example, Revzan (1968, pp. 99, 101), drawing on Commons, saw institutions representing "collective human action in control of individual action," though with varying degrees of exactness or leniency and completeness and incompleteness. For Revzan (p. 105), the institutional approach was an evolutionary, holistic approach to the study of marketing, which "views the marketing system within the entire economic order as an organic whole functioning through a great variety of interrelated marketing structures to achieve the purposes attributed to marketing," and he argued that it requires comprehension of the "functional activity," the "structural organization," the process of "structural change," and economic and cultural "coordination and control" (p. 106). In contrast to the "mechanistic" concept of theoretical economics, Duddy and Revzan (1953, p. 621) saw the institutional approach to marketing as more analogous to a biological system, albeit imperfectly, since "social structures, while in large part inherited and subject to environmental influence, may be modified or invented at the will of those who constitute their membership."

Subsequently, Arndt (1981, p. 37), drawing on Duddy and Revzan (1953) and partially echoing Alderson and Cox (1948), noted that "institution' in marketing has referred mainly to market actors such as manufacturers, wholesalers,

and retailers" and suggested that the lack of a true institutional approach in the marketing literature was caused by the fact that marketing thought was still being profoundly dominated by the neoclassical economic paradigm, which in turn, was dominated by "Newtonian thinking" (cf. Vargo and Morgan 2005)-emphasizing celestial forces and equilibrium mechanisms-rather than "Darwinian thinking"-emphasizing how organisms "change the environment to which they initially adapt" (Arndt 1981, p. 37). Thus, he argued that marketing scholars need to cut their "umbilical cord" to neoclassical economics, shifting the focus from final states to processes of change and a broader definition of institutions "as sets of conditions and rules for transaction and other interactions" (Arndt 1981, p. 37). For Arndt, that meant a "political economic" approach, settling on a meaning borrowed in part from Stern and Reve (1980, p. 53) that views social systems as "comprising interacting sets of major economic and sociopolitical forces which affect collective behavior and performance" (p. 30).

Hunt (1983), while acknowledging that the concept of "institutions" has dual meanings—(1) the organizations that take title and facilitate marketing and, (2) in accordance with Arndt (1981), "norms, conditions, and rules for transactions and other interactions"—identified institutions as one of the "three fundamental explanada of marketing." He similarly commented, consistent with Layton (2011), on the study of marketing systems as "the study of collections of interacting, marketing institutional entities, and the norms that guide them."

One significant research stream dealing with institutions has been concerned with the idea that inter-firm exchanges cannot be adequately described solely by legal contracts and other formal mechanisms for governing exchanges (e.g., Cannon et al. 2000; Gundlach and Achrol 1993). Often based on Macneil's (1980) thoughts on social contracts, this stream highlights the importance of relational norms. Of particular note is the work of Heide and John (1992), who argue that norms, defined as shared expectations about behavior, play a significant role in structuring economically efficient relationships between independent firms. More specifically, they point to the importance of *relational norms*, those based on the expectation of mutuality of interest, in governing exchange relationships. Similarly, Lusch and Brown (1996) provide empirical support for the use of normative versus explicit, hard contracts and show that these normative contracts influence relational behavior such as flexibility, information exchange and solidarity. Likewise, Canon et al. (2000) describe five cooperative norms-flexibility, solidarity, mutuality, harmonizing of conflict, and restrain in the use of power-as important in adaptations to dynamic market conditions and safeguarding the continuity of exchanges.

Much of the additional work in marketing has studied institutions as contextual variables. Some of this was concerned with supply- or value-chain processes (e.g., Carson et al. 1999; Grewal and Dharwadkar 2002), sometimes combined with an international or global focus (e.g., Bello et al. 2004; Yang et al. 2012). Typically this research has somewhat ignored the broader systemic and dynamic issues. Similarly, many marketing scholars have highlighted the impact that regulatory policies, rules, and technical standards have on exchange in diverse contexts (e.g., Sheth and Parvatiyar 1995).

More recently, marketing scholars have begun to recognize the importance of institutions in the formation of markets and brands. For example, Humphreys' (2010) work on the casino gaming industry established the importance of *legitimization* in institutional change and market creation, and Kates (2004) investigated the systemic nature of institutionalization and legitimatization processes in branding. Similarly, Giesler (2008) examined how the tension between countervailing institutional ideals impacts market evolution. Research has also appeared that begins to address how sacred institutions are becoming more market facing. For instance, McAlexander et al. (2014) study the "marketization" of religion and its impact on individuals and their consumption practices as they identify less with the traditional religious institution.

All of the above supports the notion that markets, viewed through an institutional lens, are not seen as static or preexisting, but as being "performed" through the actions and interactions of market actors (Harrison and Kjellberg 2010; Kjellberg and Helgesson 2007), mediated by institutions. More directly, Kjellberg and Helgesson (2006, 2007) describe markets as being continually formed and re-formed through the activities of economic actors performing sets of interlinked practices. This is consistent with viewing the market as "a set of culturally constituted institutional arrangements" and "a sociohistorically situated institution" (Vankatesh et al. 2006), as well as our (e.g., Lusch and Vargo 2014) description of markets as "institutionalized solutions."

As this brief review revels, while institutional research has not been as prevalent in marketing as it has in several other disciplines, it nonetheless has been present, sometimes quite pointedly and at others more incidental. However, a deeper look at the marketing literature reveals it is even more populated with institutional concepts than might be readily apparent. Relevant research streams include semiotics, attitude research and decision heuristics, brand valuation, and, as mentioned briefly, research associated, with TCA. All of these either deal directly with institutional phenomena or have significant institutional components. There are many others. What is missing is a conceptual framework for organizing, integrating, and advancing these streams.

Institutions in service-dominant logic

In spite of the traditional assumption of neoclassical economics that economic participants are highly calculative, rational actors, evidence points toward very restricted cognitive abilities and "bounded rationality" (Simon 1996). This implies the need for cognitive shortcuts (i.e., heuristics); institutions of course provide these. From the perspective of G-D logic and the limited resource-allocation concerns of neoclassical economics, the story of institutions is pretty simple: they allow conservation of cognitive resources for optimum utilization for the purpose of utility maximization.

However, from the perspective of S-D logic, institutions take on an expanded role. As discussed, the emerging narrative of S-D logic is a dynamic one, concerned with value cocreation (FP6) and determination (FP10), through resource integration (FP9) and service-for-service exchange (FP1). Thus, it is a narrative of cooperation and coordination in ecosystems, as well as the reconciliation of conflict between them. Institutions are instrumental in these cooperation and coordination activities by providing the building blocks (Ostrom 2005) for increasingly complex and interrelated resource-integration and service-exchange activities in nested and overlapping ecosystems organized around shared purposes. In short, institutions represent the humanly devised (Simon 1996), integrable resources that are continually assembled and reassembled to provide the structural properties we understand as social context (Chandler and Vargo 2011; Edvardsson et al. 2011) and thus are fundamental to our understanding of value cocreation processes. Some of the resulting ecosystems represent markets, what we (Lusch and Vargo 2014) have called "institutionalized solutions," which, especially in today's specialized world, are often made up of diverse subsystems, including submarkets, coming together in ways never imagined by most of the participating actors and which, as a whole, make up the economy. More generally, service ecosystems represent the assemblages and subassemblages of society (cf. Latour 2005)

For analytical purposes, these structural assemblages can be viewed at various levels of aggregation, which we (e.g., Lusch and Vargo 2014) and others have labeled "micro," "meso," and "macro" levels. Very loosely, we tend to place individual and dyadic structures and activities (e.g., what sometimes is considered B2B or B2C) at the micro level, midrange structures and activities (e.g., "industry," brand community) at the meso level, and broader societal structures and activities at the macro level, though we see all levels as social and also as relative, rather than absolute, and thus these assignments are somewhat arbitrary. We additionlly caution that activity at one level can only be adequately understood by also viewing it from other levels or, as Chandler and Vargo (2011) suggest, using "oscillating foci." For example, individual buyer behavior does not make sense independent of meso-level structural influences such as institutionalized brand meanings and industry standards. In short, understanding context is essential for understanding the perception and determination of value, since value is a contextually contingent concept (Vargo et al. 2008).

More precisely, however, it is important to reiterate that these are analytical levels only and do not exist independently of each other. Rather, they represent perspectives related to levels of aggregation. We have tended to deal with this issue by invoking structuration theory (Giddens 1984), which says that structural properties are both the outcome and context of actions-that is, structure and agency represent a *duality*, an interdependency, rather than a *dualism*, a separation. Structuration theory does not, by itself, address all of the issues of the nature of this duality, but its establishment of relational and recursive nature of structures is both seminal and essential to a robust conception of levels of analysis, as used in S-D logic. It also links the process orientation of S-D logic with practice theory, with which we will argue it has a natural epistemological fit. More generally and even more precisely, we acknowledge that the position of actor-network theorists (e.g., Latour 2005) that actor networks (close to what we call service-ecosystems) are flat-that is, there are no separate individual actors, interactions, and contexts-is consistent with the S-D logic framework. However, while this flat, one-level (macro) view might be theoretically consistent and robust, it does not provide the analytical power that a more restricted and possibly less robust levels-of-analysis model, augmented by structuration theory, can provide, at least for addressing some kinds of issues. Thus, we cautiously invoke the latter even as we acknowledge the former.

Just as actors don't exist independently of (social) contexts, institutions don't exist independently of other institutions. However, here too, a conceptual distinction is useful because, as noted, institutions work as building blocks for the ongoing formation and reformation of increasingly complex assemblages. Thus, also as noted, we use "institution" to refer to a relatively isolatable, individual "rule" (e.g., norm, meaning, symbol, law, practice) and "institutions that together constitute a relatively coherent assemblage that facilitates coordination of activity in value-cocreating service ecosystems.

This consideration of the essential role of institutions in value creation from a S-D logic, ecosystems perspective suggests an additional foundational premise and axiom: FP11/A5: Value cocreation is coordinated through actor-generated institutions and institutional arrangements. The five axioms of S-D logic are summarized in Table 2.

Table 2 The axioms of S-D logic		
Axiom	Desription	
Axiom 1/FP1	Service is the fundamental basis of exchange.	
Axiom 2/FP6	Value is cocreated by multiple actors, always including the beneficiary.	
Axiom 3/FP9	All social and economic actors are resource integrators.	
Axiom4/FP10	Value is always uniquely and phenomenologically determined by the beneficiary.	
Axiom 5/FP11	Value cocreation is coordinated through actor-generated institutions and institutional arrangements.	

Advancing S-D logic and the institutional perspective

From our initial reviews (Vargo and Lusch 2004), to occasional remarks during conference presentations and dialogue with the S-D logic community, the question of whether or not S-D logic has limits or boundary conditions has arisen. We have always been resolute in our belief that it does not. That is, it is not just applicable to some class of value propositions (e.g., "services" vs. goods) or type of exchange (e.g., market vs. social). With the addition of the fifth axiom and its focus on institutions and institutional arrangements, we are even more convinced that the S-D logic framework is applicable to all exchange. Stated slightly differently, as we and others have emphasized, value creation can only be fully understood in terms of integrated resources applied for another actor's benefit (service) within a context (e.g., Akaka et al. 2013, Chandler and Vargo 2011; Edvardsson, et al. 2011), including the institutions and institutional arrangements that enable and constrain value creation. Thus, with this increased understanding brought about through the fifth axiom, S-D logic becomes an even more general and transcending theoretical framework.

As noted, there have been a number of attempts to recognize the role of institutions in marketing in the past (e.g., Alderson 1957; Arndt 1981; Duddy and Revzan 1953; Hunt 1983). Arguably, these attempts have been less successful than their advocates might have envisioned for several reasons, including the lack of a theoretical framework consistent with the idea of institutional endogeneity and conducive to full institutional inclusion, the lack of an epistemological and methodological framework in marketing for advancing understanding of the institutional role, and the fragmented and limited nature of the study of institutions, both inside and outside of marketing. We believe S-D logic provides a necessary, compatible, and inclusive theoretical framework for marketing to benefit from and contribute to institutional thought.

At the heart of this compatibility and inclusion is the concept of "value cocreation," not in the normative sense of suggesting a service beneficiary *should* be included in production processes (e.g., Moeller 2008)—what we call "coproduction" (Vargo 2008)—or in the restricted meaning of direct, dyadic, one-on-one (i.e., business–customer) interaction (e.g., Gronroos and Voima 2013), but in the sense that it accommodates, if not necessitates, recognition of the full range of the cumulatively coordinated resource-integrating and service-for-service exchange activities of the multiple actors always involved in every instance of value creation. In short, S-D logic not only accommodates institutions; the coordinating role of institutions and institutional arrangements is essential for a deeper understanding of the value cocreating processes with which it is concerned.

This is perhaps especially timely because the topic of value cocreation is of growing interest to practitioners (Ramaswamy and Ozcan 2014), but expositions on cocreation are theoretically fragile. In that regard, the expanded S-D logic framework allows cocreation to be viewed and understood in a more complete, realistic, and robust manner. Arguably, this is a precursor to making better strategic decisions.

Another factor that favors the advancement of a full institutional perspective in marketing more likely at this time relates to the development of practice theory in sociology (e.g., Bourdieu 1977; Giddens 1984; Reckwitz 2002) and its subsequent importation into (e.g., Araujo and Spring 2006; Kjellberg and Helgesson 2006) and application to (e.g., Edvardsson et al. 2011; Korkman et al. 2010; Vargo and Lusch 2011) marketing thought. Practice theory is important to this advancement because, like S-D logic, it shifts the focus from production output to activities and processes-for our purposes, of resource integration, service exchange, and value creation and determination-and thus reinforces S-D logic's shift in the primacy of resources from operand to operant. It also makes institutions and institutionalization processes integral. This should be no surprise, given that practices-routinized activities-are institutions. Furthermore, as Nicolini (2009, p. 1405) notes, practices "are by definition social, because it is only at this level that morality, meaning and normativity can be sustained." Thus, a practice view of markets highlights how economic and social exchange become reconciled and stabilized. These activities can then be conceptualized as relatively durable and repetitive resource integration and value cocreation practices, or, as we have called them, "institutionalized solutions" (Lusch and Vargo 2014). Consistent with practice-theoretic approaches, this conceptualization implies that, rather than being existing structures that are entered and characterized by competition, markets are envisioned and created through institutionalization.

This institutional orientation of practice theory, combined with the resource-generating and value cocreating framework of S-D logic, has the potential to move S-D logic from the status of a theoretical framework toward a true *theory of the market* (cf. Vargo 2007), and thus arguably closer to strategic and tactical application. Given its "grand theory" orientation, the primary implications of S-D logic are strategic, especially through innovative insight. That is, it reframes the purposes and processes of economic exchange and provides a zoomedout perspective that makes it possible to envision new ways to integrate and beneficially apply (potential) resources.

For example, an S-D logic framework informed by practice theory and institutional theory has implications for understanding the market-formation component of innovation (e.g., Abernathy and Clark 1985; Schumpeter 1934) in terms of the creation and recreation of "integrative practices" (see Vargo et al. 2015). This understanding reconciles quite easily with the related understandings of the technological component of innovation, such as Orlikowski's (2007), represented by concepts of sociomateriality and "duality of technology," which are also based on practice theory, as well as Arthur's (2009) idea of technological advancement through the (re)combination (i.e., integration) of useful knowledge (Mokyr 2002) that he calls *combinatorial evolution*. Thus, it provides a transcending common narrative for the market and technological components of innovation (see Vargo et al. 2015).

Traditionally, the role of technology in economic growth has been primarily informed by economic growth theory. Service-dominant logic addresses technology through the role of operant resources (primarily knowledge and skills) enhancing human viability, especially through the creation of new resources. This occurs through the integration of resources from a host of actors. Institutions enable the coordination, collaboration, and cooperation of these actors in the value creation process and thus are critical to understanding economic growth. Some of these institutions may include such things as property rights, a relatively stable economic currency, and contracting norms. Thus institutions and operant resources can help to actualize the potentiality of technology, as well as hinder it. Consequently, "institutional work" (Lawrence, Suddaby, and Leca 2009) becomes a vital part of innovation. Furthermore, technology, once it is diffused and accepted (i.e., becomes an institutional solution), becomes integral to the market component of innovation. As noted, this suggests that economic growth, technology, and innovation represent a common institutional narrative.

Zooming out even further, this framework might shed light on the principles of macroeconomic growth, including the tendency toward the acceleration of global wellbeing with increased specialization and exchange, even in situations of increasing population growth accompanied by decreases in at least some types of operand resources (e.g., Beinhocker 2006; Bernstein 2004). Only an institutionally coordinated, ecosystemic framework seems adequate to the task of explaining this phenomenon. Fully understanding and explicating this explanatory framework is desirable because, arguably, it can guide policy makers toward facilitation of the institutional structures conducive to its advancement.

Economic growth is contingent on innovation. The enhanced S-D logic orientation achieved through the inclusion of institutions and institutional arrangements provides managers and policy makers a practical perspective for viewing and understanding continuous and discontinuous innovation. It sheds light on how discontinuous innovation, almost always leading to creative destruction, is heavily intertwined with deinstitutionalization and reinstitutionalization. It also shows that all types of actors are a part of the innovation process but that different types of actors are often faced with at least somewhat different institutions and institutional arrangements. Innovation is not only the result of "producers" and "inventors." Economic growth is more broadly a cocreation process. This suggests that an institutionally informed S-D logic perspective on economic growth theory and other forms of the growth of human wellbeing needs more exploration and attention.

More generally, several years ago we began to bridge S-D logic to managerial practice (Lusch et al. 2007, 2010); we continue on this journey (Bettencourt et al. 2014; Lusch and Nambisan 2015; McColl-Kennedy et al. 2012) and others are doing so as well. Importantly the institutional perspective also brings S-D logic closer to fulfilling the need for mid-range theory, as has been urged (Brodie et al. 2011), and managerial and policy directions. All managerial and policy decisions are decisions that involve resources, their creation, choice, and integration. When managers and policy makers develop an understanding of the shared values, beliefs, and norms (i.e., institutions) of the constellation of resource-integrating actors, it allows decisions and policies to be better informed. Rather than focusing only on dyadic exchange and a narrow view of resources, the larger system of actors and resources (including institutional arrangements) is considered and understood. We use this perspective (Akaka et al. 2013) to point out to managers and others that an understanding of the complexity of context, which is heavily informed by institutions and institutional arrangements, is a practical way for all markets and service ecosystems to be viewed. This enables us to inform managers of international markets that all marketing is reducible to differences in context. With this increased understanding managerial decisions and policy making is improved.

Moving forward

An additional condition that might assist in the development of an institutionally oriented understanding of markets and marketing relates to the ongoing development of complexity theory (e.g., Holland 2014; Mitchell 2009) and its application to the understanding of the economy (e.g., Arthur 2014). Like S-D logic, especially as informed by an emerging understanding of ecosystems, institutions, and practice, complexity economics is the study of the formation and reformation of structure in the economy as the result of "recursive loops" in which "aggregate patterns form from individual behavior and individual behavior in turn responds to these aggregate patterns" (Arthur 2013, p. 2; cf. Giddens 1984). Thus, unlike traditional, equilibrium approaches, it is a model of "endogenously generated nonequilibrium" in which technology is seen in its role of a primary disrupter of equilibrium.

Consistent with the service ecosystems orientation of S-D logic, complexity theory, especially as it relates to the economy (Arthur 2013, p. 14)— "the set of arrangements and activities by which a society fulfills its needs"-emphasizes self-generation and self-adjustment. Thus, it is well suited to deal with market and economic formation and emergence. It also potentially brings new methods to the table, from agent-based modeling to evolutionary computation (Beinhocker 2010; Lusch and Tay 2004). There has been some encouragement in economics and marketing to use complexity theory and computational science (Tesfatsion 2002; Rand and Rust 2011; Tay and Lusch 2005). These computational tools, when coupled with an S-D logic inspired model, can provide a new method for understanding and informing decisions and policies. This approach could allow firms and policy makers to grow a service ecosystem in a "cultural petri dish" to allow them to see how markets emerge and proliferate and sometimes collapse. In this petri dish, one could also alter institutions and institutional arrangements to study their local and systemic effects.

There is still a lot of work to do in reconciling S-D logic, institutional theory, practice theory, and complexity economics, but at their core they all deal with the evolutionary process through which actors form, reform, and are influenced by the endogenously generated structures that support their joint survival—value cocreation in S-D logic parlance. Through this reconciliation, we see S-D logic further advancing our understanding of markets and marketing.

Conclusion

From our initial effort more than decade ago we have striven to provide a simplifying, realistic, and transcending view of markets and marketing and more broadly human exchange systems. Our current effort continues in that direction, but it is also the result of listening to multiple and often opposing views from passionate scholars throughout the world whom have sensitized us to the power of language and the need for more clarity and, in many cases, the need for an even more robust portraval of markets. As a result we have found it necessary and timely to offer an updated statement and rationale of the S-D logic foundational premises. At the same time it has become evident that the recognition of the central role of institutions and institutional arrangements and the resultant heuristics that emerge that foster cooperative and coordinated behavior among actors in an evolving service ecosystem is central to a more complete and realistic portrayal of markets

and marketing. It is one that might provide the foundation for a theory of the market, from which normative theories of marketing can emerge.

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