Article

Triads: A review and analytical framework

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Abstract

Triads examine the associations among three actors, involving, at a minimum, the analysis of two dyadic ties among three interrelated actors. By making apparent the indirect ties bearing on actors, the triad is the smallest unit of analysis for a network. Despite extensive conceptual and empirical work, little systematic attention is given to the triad in the marketing literature. This article reviews literature spanning multiple academic disciplines and makes three contributions. First, it provides an overview of the triad concept combining sociological insights with more recent work emerging in operations management and marketing. Second, the article identifies three distinct forms of triadic relationships in existing literature: (1) brokerage, focused on the action of the third between two others; (2) mediation, describing different mechanisms by which a dyadic relationship affects and is affected by a relationship with a third party; and (3) coalition, capturing the configuration and evolution of ties in the three-actor system as a whole. Finally, this article develops an initial research agenda for triadic marketing research.

Keywords

Brokerage, exchange, mediation, network, system, third party, triad

Introduction

Literature characterizes triads as systems of three actors in which each actor interacts directly and reciprocally with another actor and also operates as an intermediary between the other two (Simmel, 1950). Hence, triads do not merely concern the examination of systems with three actors but involve, at minimum, an analysis of the simultaneity of two dyadic ties among three interrelated actors (Chandler and Vargo, 2011; Choi and Wu, 2009a; Vedel et al., 2016). This opens

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new avenues for understanding more deeply the formation, structure, and dynamics of relationships among both individuals and organizations. For example, triads have been used in the study of opportunity and competitive advantage (Burt, 1992), innovation (Obstfeld, 2005), and strategic alliances (Madhavan et al., 2004) as well as the complexity of relationship management in marketing channels (Antia and Frazier, 2001; McFarland et al., 2008; Narayandas et al., 2002) and different supply chain settings (Choi and Wu, 2009b; Mena et al., 2013; Wynstra et al., 2015).

Attention to triads is linked to the broader shift in perspective from dyadic interactions to networks and a networked understanding of relationships, business, and value creation (e.g., Achrol and Kotler, 1999; Drucker, 1993; Håkansson and Snehota, 1995; Powell, 1990; Prahalad and Ramaswamy, 2004). An essential insight of the network perspective is that actors do not create value alone or in dyadic relationships but in and through the multiple relationships through which they access resources and opportunities for fulfilling their needs and the needs of others (e.g., Håkanson and Snehota, 1989; Vargo and Lusch, 2004, 2011). This systemic nature of exchange emerges and is analyzable only in triads because the addition of a third fundamentally changes the immediate reciprocity of the dyad and makes visible the indirect ties bearing on actors (Callon, 1998; Cook and Emerson, 1984; Provan et al., 2007; Simmel, 1950; Wasserman and Faust, 1994).

However, much of the empirical research has maintained its basic orientation toward dyadic relationships, with inadequate understanding of the triadic dynamics that underlie it (e.g., Baker and Faulkner, 2002). This is problematic because dyads cannot capture the multidirectional and complex relationships that constitute contexts for collaboration, competition, and value creation in human systems (Callon, 1998; Vargo and Lusch, 2011; Wasserman and Faust, 1994). Hence, the first purpose of this article is to *provide an overview of the triad concept* in order to facilitate a shift from dyadic to triadic thinking of marketing phenomena. The second purpose of this article is to *advance analytical understanding of triads as the smallest unit of analysis for a network*. While existing literature has focused on specific empirical settings and their special features (Choi and Wu, 2009b; Wynstra et al., 2015), the orientations of individual actors in triads (Obstfeld et al., 2014), as well as particular triad structures and the characteristics of relationships among three specific actors (Vedel et al., 2016), we provide an overarching examination of the forms of triadic relationships that characterize complex systems and become visible only with the addition of the third actor.

To this end, we reviewed the triad literature across multiple disciplines, including sociology, organization and management research, innovation, operations management, and marketing. We make two contributions: First, we expand the understanding of triads and integrate multiple loosely coupled research streams around triads into a single analytical framework. Second, we develop a research agenda for marketing research, which has thus far made relatively little use of the theoretical underpinnings of triads. We develop these contributions in three main parts. First, we provide an overview into the concept of triads. Second, we present the findings of our literature review by organizing the literature in three main categories—brokerage, mediation, and coalition—which describe different social dynamics encapsulated in the analysis of triads. Finally, we conclude the article by outlining a research agenda for future research in the marketing context.

What is a triad?

The term *triad* first emerges in the work of Georg Simmel (1950) who was interested in the "associations of threes"¹ as a foundationally important unit of sociological analysis. In his work, a dyad was distinguished from larger groups by the fact that it does not attain a sense of collectivity

or "super-personal life" outside the two members constituting it. The introduction of a third party changes the social dynamic, as each actor not only interacts directly and reciprocally with another actor but also operates as an intermediary between the other two. Thus, not only can the third intensify a relationship between two actors, it can also interfere with the immediate reciprocity of a dyadic relationship. While the presence of a third "indicates a transition, conciliation, and abandonment of absolute contrast" (Simmel, 1950: 145), as the third simultaneously interacts directly with the two and indirectly between them, the third can also seek to divide the two and use their conflicts for one's own benefit (Burt, 1992; Simmel, 1950). This indicates that triads provide means for understanding both the integrative and the divisive social processes that are invisible to the analysis of a dyad (Krackhardt, 1999).

Because triads make salient the indirect ties bearing on actors, research considers *triads as the smallest unit of a network in sociological analysis* (e.g., Callon, 1998; Cook and Emerson, 1984; Simmel, 1950; Wasserman and Faust, 1994). The triad enables a consideration of actors as both *shaping and being constantly shaped by* the network of ties bearing upon them (e.g., Granovetter, 1985)—something that a dyad by definition cannot do. In marketing, Bagozzi (1975) makes a similar observation regarding the fundamental nature of market exchange, as he conceptualizes the restricted form of exchange between two actors as a special case of the more general forms of exchange—generalized and complex—which must be conceptualized in triadic terms (see also Sheth and Uslay, 2007).

These observations highlight that triads are not defined simply as systems of three actors. Instead, existing research converges on a view that triads are defined, at minimum, by *the coexistence of two ties between three associated actors* (Vedel et al., 2016). Here, the two ties can be seen as the "direct" exchange between two parties and the "indirect" exchange between two others, both influencing the dynamic of the three-actor system as a whole (Chandler and Vargo, 2011). As Choi and Wu (2009a: 263) state: "In order to capture the essence of a network, two things must be examined at minimum: how a node affects another node, and how a link affects another link."

However, as we will elaborate in the remainder of this article, existing triadic research may provide only partial understanding of triads. Specifically, we find that in emphasizing the role of the third as an intermediary between the other two, these definitions overlook some crucial aspects of social dynamics that characterize human systems and become visible in the triad. This motivates our review of existing literature on triads, elaborated in the next section.

Three forms of triadic relationships

To advance understanding of triads as an analytical tool, we reviewed literature on triads spanning multiple academic disciplines from sociology and organization research to operations management, innovation research, and marketing. We explored multiple literatures to identify commonalities and distinctive viewpoints to provide a wide-ranging overview of triads across academic disciplines. Given our specific interest in marketing research, we divided this review into two overlapping and nested parts.

In the first part, we explored literature in the aforementioned areas with the purpose of identifying as many distinct perspectives to triads as possible. We searched relevant literature by conducting searches in the Scopus database using key words such as triad, brokerage, and third party; scanning key journals in the aforementioned research areas; and searching the references of already identified source materials to identify additional works relevant to our goals. This process resulted in a database of altogether 181 articles, books, and book chapters addressing triads from various perspectives, providing insights into the analytical diversity that exists in the research on triads.

In the second part of the research process, nested within the first we focused specifically on triad research in the marketing context with the purpose of gaining an overall understanding of the use and conceptual development of triads in different streams of marketing research. To this end, we focused specifically on seven journals, including the *Journal of the Academy of Marketing Sciences, Journal of Consumer Research, Journal of Marketing, Journal of Marketing Research, Marketing Science, Marketing Theory*, and *Industrial Marketing Management*. These journals were selected to provide insights into different streams of research with both conceptual and empirical emphasis. In addition to the five "top-tier" journals, we included *Marketing Theory* for its emphasis on conceptual theory building and *Industrial Marketing Management* for its interest in relationships and network-related phenomena likely to foster research on triads. We searched these journals on the basis of common concepts referring to triads in the literature—*triad, third party, brokerage and intermediary*—which resulted in altogether 57 references (included in the total sample of 181).

During the iterations between reading the literature and categorizing the emerging findings, we identified three analytically distinct perspectives to research on triads: brokerage, mediation, and coalition (see Table 1). First, *brokerage* focuses on the "behavior by which an actor influences, manages, or facilitates interactions between other actors" (Obstfeld et al., 2014: 141), drawing attention to the orientations of the third between two other actors. Second, *mediation* examines the embeddedness of dyads within triads (Krackhardt, 1998, 1999), illuminating the different mechanisms by which a dyadic relationship affects and/or is affected by a relationship with a third

Triadic relationship	Focus of analysis (bolded)	Examines	Illustration
Brokerage	How one actor (B) brokers between two others (A)	The behavior by which an actor influences, manages, or facilitates interactions between other actors	
Mediation	The embeddedness of dyads (A–A) within triads	The mechanisms by which relationships (dashed line) with third parties (T) affect, and are affected by, focal dyadic relationships (between As)	$(A_1) \longrightarrow (A_2), (A_1) \longrightarrow (A_2), (A_2) \longrightarrow (A_2), (A_2$
Coalition	The configuration and evolution of ties in the three- actor system as a whole	The logic and process by which actors (As) form and balance relationships in a triad, including the characteristics of relationships among them $(+/-)$	A_1 $+/-$ $A_3 \longleftrightarrow A_2$

Table I. Three forms of triadic relationships.

party (Anderson et al., 1994; Choi and Wu, 2009a). Third, *coalition* focuses on the configuration and evolution of ties in the three-actor system as a whole, illuminating the logic and process by which actors form and balance relationships in a triad (e.g., Caplow, 1956, 1959; Granovetter, 1973; Heider, 1958; Madhavan et al., 2004).

Brokerage, mediation, and coalition describe fundamentally different forms of *triadic relationships*. By triadic relationships, we refer broadly to the constitutive forms of social interaction that become apparent in the analysis of triads. In relation to systems theory, the notion of triadic relationship highlights that the properties of a system cannot be reduced to its parts (e.g., individuals) but arise from the interactions and relationships between them (e.g., Capra and Luisi, 2014). Our focus on the triadic relationships thus differs from existing research which has focused predominantly on the structural, contextual, and relational characteristics of triads, such as their open versus closed structure (Burt, 1992; Madhavan et al., 2004); the empirical identification of different "types" including two-tier, three-tier, and service triads (Choi and Wu, 2009b; Mena et al., 2013; Wynstra et al., 2015); or the characteristics of relationships in the triad including mutual goals and the degree of internal cohesiveness (Vedel et al., 2016). Our review elaborates different forms of triadic relationships that allow us to understand at the microlevel the emergent properties of human interaction, the social dynamics, that characterize larger systems.

Brokerage

The first form of triadic relationship—brokerage—is concerned with the "behavior by which an actor influences, manages, or facilitates interactions between other actors" (Obstfeld et al., 2014: 141). The literature distinguishes between three orientations to brokerage depending on how the third interferes with the relationship between the other two: in *tertius gaudens*, the third keeps the two others apart; in *tertius iungens*, the third forms a new connection between the two; and, the noninterfering conduit facilitates between two others without interfering with the relationship (Obstfeld et al., 2014).

Research on tertius gaudens, or "the third who enjoys," has roots in Simmel's (1950) seminal work which first coined the term to highlight the ability of the broker to use her position for selfish interests. This occurs because the broker is able to leverage a potential conflict between the two others by deciding for or against one of them. Furthermore, the broker may intentionally create a conflict between two others to gain a dominant position. This work on tertius gaudens constituted the basis for Burt's (1992) influential research, which theorized how the broker benefits from her position between two otherwise disconnected actors. Building also on the notion of weak ties (Granovetter, 1973), Burt (1992) suggested that a broker who connects two otherwise disconnected actors is able to access information from one side before the actors on the other side and use this information asymmetry for her benefits. The broker's position referred to as the *structural hole*, thus affords the broker information benefits by giving her knowledge of opportunities on both sides and the ability to seize them before the others. This, in turn, gives the broker control over the two, as she can use the information asymmetry to negotiate relationships by playing the actors against one another.

Contextually, the potential benefit of the tertius gaudens broker depends on the substitutability of the two actors on either side of the structural hole, because this allows the broker to bid them against one another; the more similar the actors are and the more similar their relationship with the broker, the better (Simmel, 1950). The effect of diverse factors on broker's benefit have been studied, including shared social practices and the degree of shared tacit knowledge that is difficult

to transfer from actor to actor (e.g., Burt, 2007; Hallen, 2008; Ryall and Sorenson, 2007; Zhixing and Tsui, 2007). In the marketing literature, tertius gaudens emerges primarily with interest in how intermediaries in distribution channels may sustain and leverage their brokerage position to benefit over other channel members (Kwon and Easton, 2010; Pardo and Salle, 1994).

Although tertius gaudens has become nearly synonymous with the concept of brokerage in the social network literature, brokerage entails more than just the third keeping two others apart. Obstfeld (2005) describes *tertius iungens*, our second orientation to brokerage, as a form in which the broker creates new relationships between previously disconnected actors to facilitate knowl-edge creation and innovation. While the tertius gaudens describes how the broker enjoys opportunities from accessing and leveraging information between substitutable and disconnected actors, tertius iungens describes the creation of new ties in which knowledge creation depends on the nonsubstitutability (i.e., actors with complementary knowledge and skills) of the actors connected (Obstfeld et al., 2014). This perspective is important for research on innovation. For example, it helps understand the important roles intermediaries play in the innovation system by connecting and facilitating among other actors (Cabanelas et al., 2013; Crespin-Mazet et al., 2013; Howells, 2006; Stewart and Hyysalo, 2010). It also shows how the position of the intermediary across multiple networks and industries allows it to integrate knowledge and solutions from different contexts for new purposes (Hargadon and Sutton, 1997).

The third orientation to brokerage—*the non-interfering conduit*—describes situations in which the third facilitates the relationship between two others without manipulating the relationships (Obstfeld et al., 2014; Simmel, 1950). Hence, emphasis is on passing of information between parties by the third, not whether or not the two are connected directly (Obstfeld et al., 2014). In Simmel's (1950) work, the role of the conduit was central in balancing the triad, for example, by negotiating conflicts and producing agreement between the two others. Castaldo et al. (2009) illustrate how the conduit can pass on information between disconnected actors, or otherwise enable collaboration among them without benefitting herself or altering the structure of relationships. Furthermore, a conduit is important for the persistence and functioning of the triad over time, as it elucidates relationships, speeds up collaborative processes, builds ties to other third parties, plays a role in issue reconciliation (Nätti et al., 2014), and hence shapes the network horizon of the firm (Holmen and Pedersen, 2003). Conduit also emerges in the literature on cultural intermediaries who operate between, or parallel to, market actors (e.g., "providers" and "customers") by influencing, for example, the formation of affective opportunities and paths for customers within the cultural sphere of a market (Smith Maguire, 2010).

As a variant of tertius gaudens and conduit orientations to brokerage, the literature also considers *second-hand brokerage*, in which the question is whether or not an actor may access disconnected networks effectively through their direct (and strong) relationships with brokers acting as conduits. Burt (2007) argues that because knowledge is always localized and its transmission dependent upon sharing tacit knowledge, actors do not benefit from their direct ties to brokers who span otherwise disconnected networks. Hence, the extent to which knowledge can be shared between loosely coupled networks influences the relative advantage of direct brokerage over second-hand brokerage: The lower the boundaries of knowledge (i.e., the higher the shared tacit knowledge in a "global" system), the more benefits for second-hand brokers. In this sense, both geographic proximity and the relational orientation to collaboration promoted by the key members of a network influence different forms of brokerage (Owen-Smith and Powell, 2004).

While the distinctions between different forms of brokerage are analytically useful, most social situations are likely to involve more than one form of brokerage. This can be illustrated with the

idea of tie *multiplexity*, according to which a group of actors, which may in one context constitute a tightly connected triad or network with no brokerage opportunities (e.g., family), may in other contexts (e.g., specific task or profession) be brokered by one over the others (Obstfeld et al., 2014; Shipilov and Li, 2014). One result of this view is that complex tasks and achievements comprise a combination of brokerage orientations applied by multiple actors to achieve desired outcomes. For example, Long Lingo and O'Mahony (2010) show how music producers combine multiple brokerage orientations to initiate and facilitate collaboration among studio musicians to achieve fine recordings. In the marketing context, Narayandas et al. (2002) imply that the multiple brokerage orientations played by component distributors, traditionally thought of as simple sellers, enabled them to survive the Internet revolution. Despite radically lowered transaction costs, the distributors were able to support customers to integrate components into their value creation and thus prevail against online stores.

Mediation

Mediation constitutes the second form of triadic relationship we identified in our review. While brokerage focuses on the different roles of the broker between two others, mediation examines the *embeddedness of dyads within triads* (Krackhardt, 1998, 1999) and seeks to understand the mechanisms by which a dyadic relationship affects and/or is affected by a relationship with a third party (Anderson et al., 1994). We took particular interest in the different mechanisms of mediation, seeking to understand *how* indirect relationships with third parties influence focal dyads (and vice versa). We found examples of mediation at both individual and organizational levels and identified three distinct mechanisms of mediation: (i) dyadic influence, (ii) normative commitment, and (iii) cognitive disposition.

First, *dyadic influence* demonstrates how a third party can influence behavior in a focal dyad by *providing information* to one of the two focal actors. For example, studies in the large scale establish that critics' reviews influence box office revenue (Basuroy et al., 2006; Chen et al., 2012), which can be understood as the critic (the third) influencing customers' behavior with respect to consuming movies or stage productions. Similarly, the influence of infomediaries that offer consumer information about product quality and prices has been identified as factor shaping consumer decisions, competition among sellers, trust, and the retention of customer relationships (e.g., Aiken and Boush, 2006; Chen et al., 2002; Rese, 2003; Shaffer and Zettelmeyer, 2002).

Second, *normative commitments* refer to a mechanism of mediation in which existing commitments to a third party (or to multiple third parties), whether based on explicit agreements or more implicit social norms, constitute *constraints on activity* in a focal relationship. This is well explained by Krackhardt (1999), who builds on Simmel, as well as empirical work in showing that the embeddedness of dyadic relationships in a triadic clique limits actors' freedom to advance their interests in two ways. First, this embeddedness imposes and enforces the values and norms of the clique on its members and, second, limits the ability of brokers positioned in multiple nonlinked cliques to play the different sides to one's benefit.

The marketing literature provides a number of illustrations of the influence of normative commitments on firms in different channel settings, showing how they apply to both individuals and organizations. For example, Wathne and Heide (2004) found that manufacturers' supplier qualification and incentive design in an upstream relationship influenced the ability of the manufacturer to react to uncertainties (i.e., changes in demand) in its downstream relationships with retailers. Existing work also shows that buyers' decision in choosing partners depends on the

characteristics of relationships these actors, such as IT system providers, have with their suppliers (Wuyts et al., 2004). Furthermore, the relationships among competing suppliers complicate the way in which a buyer can develop relationships with the suppliers (Choi and Wu, 2009b; Dubois and Fredriksson, 2008; Lazzarini et al., 2008).

In addition to formal contracts, normative commitments also include the influence of more implicit social norms, which constitute a central mechanism of mediation that is acknowledged as an important constituent of supply chain and channels relations (Heide and John, 1992). In the triadic setting, norms can influence behavior, for example, by restricting the channel principal's use of contract-endorsed rights to sanction violations because it would harm the principal's reputation and thus undermine collaboration in the future (Antia and Frazier, 2001). In a service triad consisting of a service buyer, customer, and a third-party service provider, Hartmann and Herb (2015) show how factors related to the quality of social relationships, such as trust, mutual appreciation, and the presence of shared norms, constitute important coordination mechanisms that allow the triad to function toward common goals (see also van der Valk and van Iwaarden, 2011).

Normative commitments are also identified in the context of consumer research, which brings the analysis from the organizational to individual level. Schmitt et al. (2011), for example, show how customer referrals increase customer loyalty via the mechanism of social enrichment (see also Castilla, 2005). Peer influence is also evident in the more informal domain of consumer behavior, such as gift giving. Lowrey et al. (2004) identify multiple mechanisms by which friends and family members influence gift giving, including maintaining equipollence, reenacting third-party traditions, or adhering to group norms. Additionally, cultural socialization and family-specific upbringing (i.e., the creation of social norms) influence how individuals act as consumers more generally (Cotte and Wood, 2004; Laroche et al., 2007).

Third, we identified *cognitive dispositions* as a mechanism of mediation characterized by the human tendency to *adopt certain forms of activity unconsciously* as a result of interactions in a particular context. In good illustration of this mechanism, McFarland et al. (2008) discover the contagion of sales practices as dealers, operating between manufacturers and customers, mimicked the sales practices used by manufacturers toward them in their interactions with "downstream" customers. Similarly, Hughes and Ahearne (2010) found that manufacturers are able to indirectly motivate the employees of their resellers to promote their products by reinforcing brand identification among sellers' employees. In service triads, shared assumptions and basic understanding of common goals as well as the expectations and requirements of other actors provide an important coordination mechanism in addition to normative commitments (Hartmann and Herb, 2015). Actors' cognitive dispositions also influence service recovery, in which downward social comparison to a real or imagined third party who is worse off than the focal actor alleviates dissatisfaction (Bonifield and Cole, 2008).

Coalition

The third type of triadic relationship—coalition—is defined by its emphasis on the dynamics of the three-actor system as a whole, drawing into focus the formation and reformation of ties among three actors over time. A central concept in understanding the formation and stability of coalitions in the literature is *transitivity*, which emerges in social network analysis to describe the higher probability of actors to form a relationship if they have a relationship with a common third party (Granovetter, 1973). When this relationship is formed, the third party also acts as a conciliator stabilizing and sustaining the relationship over time (Krackhardt, 1998; Simmel, 1950). This

means that in both interpersonal and interorganizational triads, intransitive or open triad structures have the tendency of moving toward transitive or closed structures over time.

The literature describes a number of factors that over time the formation of coalitions. In his seminal sociological work, Caplow (1956) described six distinct forms of coalition in triads and explained the reasons for their emergence based on the initial distribution of power among the three actors (see also Vinacke and Arkoff, 1957). For example, Caplow theorized that in the case of one dominant actor, the two others are likely to form a coalition that undermines this dominance. Similarly, in the case of a weak actor, both powerful actors are likely to seek collaboration with the weakest who can benefit particularly from partnering with the most powerful one. Extending this work, Caplow (1959) added a consideration of three situations in which coalitions may be formed. In *continuous situations*, the coalition is established to control joint activity within the triad (e.g., ongoing work) and constantly (re-) negotiated; in *episodic situations*, the triad is mostly stable but punctuated by contests for power (e.g., election) and hence subject to periodic change; in *terminal situations*, coalition formation is directed toward a single redistribution of power (e.g., war) in which the need for a coalition is most pressing but unlikely to form.

While Caplow was primarily interested in power as the driving force of coalitions, balance theory in psychology proposes that the formation of human relationships in triads is driven by the search of cognitive consistency with others (e.g., Alessio, 1990; Heider, 1958; Kilduff and Tsai, 2003). This theory posits that a triad is balanced only when all relationships among three actors are positive or when one positive and two adversarial relationships exist (Heider, 1958). While central to understanding the behavior of individuals, it has also seeded work in the supply chain context to understand the (re-) formation of relationships among organizations. Choi and Wu (2009b) build on balance theory in their examination of the different alternatives of relationship configurations among a buyer and two suppliers. They also propose a number of ways in which the unbalanced states among these three actors may transform into balanced states conducive to collaboration.

Summarizing the power and psychological perspectives, Freilich (1964) suggested that triads tend to develop toward a common structure—the *natural triad*—in which actors take the roles of high-status authority, high-status friend, and low-status subordinate. His argument stems from Weber's (1947) view that action toward common goals requires high-status authority to direct and coordinate collective efforts. The role of high-status friend appears particularly central as a check on the power of the high-status authority, because the potential alliance between high-status friend and low-status subordinate can counter the power of the authority (as proposed by Caplow, 1956). From a psychological perspective, the high-status friend also reduces the tension created by the imbalance between the authority and subordinate(s) by providing positive affectivity.

Analyses based on power and psychological balance help elaborate the dynamics of coalition formation and thus add depth to the transitivity principle. In particular, these mechanisms are evident at the individual level (Krackhardt and Kilduff, 1999) although also applied in analyses at the organizational level (Choi and Wu, 2009b). More commonly, however, the organizationallevel analysis of coalitions has focused on the theme of strategic benefit, which draws attention to firms' pursuit of business performance through new collaborations and concurring attempts to limit the threat of opportunistic behavior of others. In the context of an alliance among competing organizations, Madhavan et al. (2004) illustrate two phases in the formation of closed or transitive coalitions. First, competing actors form dyadic relationships and begin to exchange information in order to makeup for their individual shortcomings, thus acquiring necessary resources for achieving new or complex ends. As these relationships form, intransitive triads emerge in which some actors, either by accident or due to their resources or field position, come to occupy a structural hole between others. In the second phase, the growing threat of opportunism associated with structural holes induces others to form relationships that counter the power of the broker, resulting in the closing of the structural hole. In the broader network, this leads to the expansion of the alliance and growing density of ties (i.e., similarity and trust) among actors, which constitutes the basis for collaboration.

This logic of analysis is particularly common in the context of different types of supply chain triads, in which the coalitions among actors influence both the collective output and the benefit for individual firms. As an example of the collective output, Mena et al. (2013) show how a buyer's need to improve key product characteristics drives the closing of the triad involving a buyer, supplier, and supplier's supplier, simultaneously increasing mutual trust and the stability of relationships among the actors. As an example of the egocentric benefit, research on service triads illustrates how the threat of opportunism affects the triad in which a service provider commissioned by the buyer provides service directly for the customer. Because this situation breaks the immediate reciprocity between a buyer and a customer, it allows the service provider to leverage this position to its own benefit (Li and Choi, 2009; Wynstra et al., 2015). As a result, the buyer must rely on "social" governance mechanisms (e.g., informal interactions and building mutual trust) which counter the threat of service provider opportunism by reinforcing the relationship with the customer (Hartmann and Herb, 2015; van der Valk and van Iwaarden, 2011).

Summary and implications for future research

As summarized in Table 2, the three forms of triadic relationships—brokerage, mediation, and coalition—describe the constitutive and emergent properties of interaction among individuals and organizations that become visible as we move from dyads to triads as the smallest unit of analysis for a network. Despite being analytically distinct, the three forms of triadic relationships are tightly interrelated and often inseparable in real-life contexts. For example, actors' orientations to brokerage and the mechanisms of mediation both affect and are affected by the (re-) formation of ties among actors in a triad. This means that the three triadic relationships do not categorize or guide empirical studies based on the types of triad structures (e.g., open or closed) but based on the social dynamics that are relevant to the analysis. This underscores the analytical interest of the article toward the social dynamics constitutive of complex human systems, which transcend specific empirical settings and structural configurations among three actors.

Table 2 shows that marketing research has taken a number of different perspectives to triads. However, we find that this research has paid only limited attention to the theoretical basis and development of triads, focusing instead on triadic analyses of specific marketing settings and their context-specific outcomes. Hence, the findings of this article provide fruitful grounds for directing future research toward more theoretically informed and motivated research agenda.

Beginning with the three forms of triadic relationships, *brokerage* analyzes the actions of the third—broker—between the two others. Existing research provides a detailed understanding of the different behavioral orientations of brokerage (Obstfeld et al., 2014), which can open new avenues for marketing research. While many channel studies are implicitly framed as the manufacturer or distributor brokering between "upstream suppliers" and "downstream customers," few studies seem to extend beyond the broker's strategies or the governance mechanisms aimed against opportunistic behavior. Hence, future research may find interesting avenues by examining the network structure around key channel members and its influence on their strategic advantage (Burt,

Triadic relationship	Main variants	Research in the marketing context
Brokerage	<i>Tertius Gaudens:</i> Leveraging the disconnect between two others for broker's benefit (Burt, 1992)	 How a channel intermediary becomes a broker and sustains a tertius gaudens orientation with respect to other actors (Kwon and Easton, 2010; Pardo and Salle, 1994) The importance of firm's positioning in
	 Tertius iungens: Facilitating the formation of new connection between previously disconnected actors (Obstfeld, 2005) Conduit: Facilitating between others without altering, or benefitting from, the triad structure (Simmel, 1950) 	 informal networks as broker (Pitt et al., 2006) Role of border agents in facilitating innovation processes by linking channel actors (Cabanelas et al., 2013) Examination of the multiple roles of "the third" in mediating and facilitating value cocreation in a service triad (Nätti et al., 2014; Olsson et al., 2013)
	Second-hand brokerage: Accessing the benefits of brokerage through close ties with the broker (Burt, 2007)	 Buyers' preference to build strong ties with vendors that have strong ties to their suppliers (Wuyts et al., 2004) Identification of three mediating functions by which partners link a focal firm to new actors, and how the focal firm can strategically affect these mediating functions (Holmen and Pedersen, 2003)
Mediation	<i>Dyadic influence</i> : Based on the availability and use of information from a third party in a focal relationship	 Independent certificates and product reviews affect consumers' trust toward firms (Aiken and Boush, 2006) Critics' reviews influence box office revenue (Basuroy et al., 2006; Chen et al., 2012) The influence of infomediaries on consumer decisions, competition among sellers, and customer retention (Chen et al., 2002; Rese, 2003; Shaffer and Zettelmeyer, 2002)
	Normative commitment: Based on either the formal commitments or informal social norms and values implicated in relationships with one or more third party, which constrain action with another actor (Eisenhardt, 1989; Heide and John, 1992)	 The organization of an upstream relationship influences ability to adjust to uncertainties in a downstream relationship (Wathne and Heide, 2004) How norms coordinate channel relations (Heide and John, 1992) Norms restrict the channel principal's use of contract-endorsed rights to sanction violations in order to avoid retaliation and protect important relationships (Antia and Frazier, 2001) The quality of social relationships, including trust, mutual appreciation and presence of shared norms, provide coordination mechanisms in service triads (Hartmann and Herb, 2015)

 Table 2. Summary of triadic relationships and associated marketing literature.

Triadic relationship	Main variants	Research in the marketing context	
	<i>Cognitive disposition:</i> Based on cognitive processes that lead actors to adopt schemas and behaviors from third parties (DiMaggio and Powell, 1983)	 Customer referrals increase customer loyalty by the mechanism of social enrichment (Schmitt et al., 2011) How friends' and family members' expectations influence gift-giving (Lowrey et al., 2004) The multiple and changing roles of third parties in relationship recovery (Salo et al., 2009) Unconscious imitation of sales practices from upstream relationship in downstream relationships (McFarland et al., 2008) Manufacturers are able to motivate the employees of their resellers to promote their products by reinforcing brand identification (Hughes and Ahearne, 2010) A downward social comparison to a real or imagined third party alleviates customers' dissatisfaction (Bonifield and Cole, 2008) 	
Coalition	The configuration and evolution of ties in a triad (Caplow, 1956; Heider, 1958; Madhavan et al., 2004)	 Systemic explanation for the persistence of a channel system configuration during internet revolution (Narayandas et al., 2002) The influence of outside partners on the evolution of a strategic alliance (Gebrekidan and Awuah, 2002) An agency-theoretical examination of relationships and their evolution in a system of two principals and a marketing services provider (Tate et al., 2010) 	

Table 2. (continued)

1992). Understanding better the dynamics of tertius iungens brokerage is also important, as it is central to innovation in channel systems.

Furthermore, recent work in organization studies draws attention to the co-existence of multiple forms of brokerage in the achievement of collaborative outcomes (e.g., Long Lingo and O'Mahony, 2010). This may be a particularly interesting starting point for the more practically oriented marketing research, as it encourages research on how multiple forms of brokerage contribute to collaborative value creation in different marketing contexts, such as channel systems or consumer communities. As a concrete example, new online service platforms constitutive of the emergence of "the sharing economy," such as Uber or AirBnB, have created new markets by brokering between previously disconnected actors (i.e., apartment and car owners with those in need of accommodation or transportation). Analyzing their role and orientations as brokers can enhance understanding of the functioning of online platforms (e.g., Chakravarty et al., 2014; Muzellec et al., 2015) and also aid in understanding the role of brokerage in the micro-processes of new market creation.

Second, *mediation* examines the embeddedness of dyads within triads (Krackhardt, 1998, 1999) and identifies the mechanisms by which a dyadic relationship affects and/or is affected by a relationship with a third party (Anderson et al., 1994). Essential to this perspective is the realization that social interaction is shaped by different mechanisms that do not necessarily involve fully rational and calculative decision-making based on the utility of choices by actors. Although this realization is by no means new (e.g., Heide and John, 1992), we believe that the analysis of the "nonrational" or informal mechanisms of coordination and governance, such as normative commitments and cognitive dispositions, can enrich current literature because these are fundamentally triadic in nature. A social norm, for example, only emerges and makes sense in a system of (at least) three actors, because it is the common third party who sanctions or endorses the behavior of others and hence reinforces or undermines the emergence of shared understandings and behavioral norms.

This points in the direction of institutional theory in sociology and organizational theory. Similar to the mechanisms of mediation, institutional theory argues that the forms of human action are shaped, by social processes in which formal rules, informal social norms, and taken-for-granted cultural meanings affect how actors proceed in collaborative value creation (Berger and Luckman, 1967; DiMaggio and Powell, 1983; Scott, 2014). As recent research shows growing interest toward integrating the institutional insights with marketing topics (e.g., Dolbec and Fisher, 2015; Humphreys, 2010; McFarland et al., 2008; Scaraboto and Fischer, 2013; Vargo and Lusch, 2016), we find the linkage between institutions and triadic relationships a particularly promising area of future inquiry. This is particularly the case because the microfoundations of institutions remain undertheorized in general (Powell and Colyvas, 2008) and because—if we are correct above—one needs to move from dyads to triads in order to understand institutions (i.e., the rules, norms, and meanings that constrain, enable, and coordinate human action) at the microlevel.

Third, *coalition* focuses on the dynamics of three-actor systems as a whole highlighting the formation and change in relationships among three actors. Illustrating aspects such as power, psychological balance, and the pursuit of strategic benefit, coalition draws attention to the dynamic evolution of triads in which egocentric motives are balanced out by the growing collaboration, mutual coordination, and similarity among actors (Granovetter, 1973; Krackhardt, 1999). Our review indicates that, while existing work in marketing has holistically analyzed the evolution and stability of certain triadic settings, for example, B2B distribution channels (Narayandas et al., 2002) and strategic alliances (Gebrekidan and Awuah, 2002), most research does not explicitly theorize the formation of coalitions but focuses on the effects of one or more actors on a focal dyadic relationship (e.g., Nätti et al., 2014; Salo et al., 2009).

As a result, we see potential in the analysis of transitivity (or the dissolution of closed triads) both in interorganizational and in interpersonal triads. For example, future work could follow the lead of operations management scholars (e.g., Choi and Wu, 2009b; Li and Choi, 2009) in utilizing psychological balance theory as the basis to study the (re-) formation of channel relationships. The growing interest toward service triads in operations management can also provide new insights into the triadic constellation involving a third-party service provider "between" the buyer and the customer (Wynstra et al., 2015). Additionally, coalition provides a basis for studying the motives as well as the process of emergence and stabilization of new supplier system configurations, for example, those built around large distributor platforms such as Amazon (cf. Jiang et al., 2011) or those involving the use of concurrent channel strategies (Sa Vinhas and Anderson, 2005).

Beyond the three forms of triadic relationships, this article directs future research by advocating a view of triads not as a specific unit of analysis between dyads and networks but as *the smallest unit of analysis for a network or system* (e.g., Callon, 1998; Cook and Emerson, 1984; Simmel, 1950; Wasserman and Faust, 1994). This is important because, as the literature is moving toward a systemic perspective (e.g., Anderson et al., 1994; Håkansson and Snehota, 1989; Vargo and Lusch, 2011), we need to shift from the dyad to triad accordingly in the microlevel analysis of human systems. In this analysis, the three triadic relationships offer unique insights into marketing phenomena. Moreover, we suggest that triadic analysis is not limited to specific systems of exactly three actors but applicable to any system of *at least three actors*. We agree with Simmel (1950: 141) that "the triad is a structure completely different from the dyad but not, on the other hand, specifically distinguished from groups of four or more members." For future research, this means that triads can be utilized for analyzing multiple forms of triadic relationships in systems of more than three actors. As an example, Salo et al. (2009) achieve this by examining the influence of multiple third parties on relationship recovery over time.

We also call for future research to explore more systematically the intersection between triads and (complex) human systems in order to advance systemic theorizing on marketing phenomena. In this task, related research streams such as institutional theory (as mentioned earlier), systems theory, or complexity theory may be useful. In marketing, service-dominant (S-D) logic brings these streams together by developing a systemic conceptualization of value cocreation between resource integrating and service exchanging actors joined by shared institutions and institutional arrangements (Vargo and Lusch, 2004, 2011, 2016). Hence, future work at the intersection of triads and S-D logic is encouraged to develop the systemic perspective of triads as well as advance the conceptualization of value cocreation within S-D logic. In relation to the latter, S-D logic can benefit from a triadic conceptualization of its central processes, such as resource integration or coordination of value cocreation, which have remained dyadic despite its explicitly systemic perspective. As an example toward this direction, Kowalkowski et al. (2016) advance a triadic conceptualization of the value proposition concept, focusing specifically on how a new service initiative affects the relationship and value proposition in a triad consisting of a manufacturer, dealer, and user.

Beyond the marketing discipline, this article also contributes to research on triads by organizing different streams of literature, and perspectives of analysis, under a single analytical framework. Although we have taken care in distilling the three forms of triadic relationships, we expect that future research can uncover additional forms of triadic relationships and continue to refine understanding of the subprocesses that are constitutive of human interaction. Moreover, an important yet thus far underdeveloped area of research concerns the emergence of coordination and cooperation among actors in a manner which extends beyond the common explanations focused on opportunistic actors seeking benefit over, and countering the power of, others. In this task, the human need for psychological stability in social relationships (Heider, 1958), the integrative orientation of tertius iungens brokerage (Obstfeld, 2005), and the "social control" of triadic ties (Krackhardt, 1999), that is, the emergence of social norms and shared assumptions that contribute to the group's survival, provide good if so far isolated grounds for future work. We find this task particularly worthwhile in the light of the view—still to some extent dominant in the marketing community—of human actors as rational, calculative, and self-interested agents. The triad, we believe, can make salient the multiple and complex facets and "functions" of human action, which can enrich research in marketing and elsewhere by providing new directions for theory building.

Conclusion

Although Bagozzi (1975) long ago formulated the archetypical forms of exchange as triadic rather than dyadic triads have mostly remained under the radar of systematic research attention in the marketing literature. In this article, we address the lack of conceptual development concerning triads in the marketing context, developing an analytical framework that integrates the growing number of triadic research stemming from a broader shift in marketing—and elsewhere—from dyadic relationships toward a systemic view of exchange and value creation.

Our contributions are threefold: First, we provide an overview of the triad concept, illustrating its origins in the seminal work of Simmel (1950) as well as elaborating the more recent insights emerging, among others, in the operations management (Choi and Wu, 2009a) and marketing contexts (Vedel et al., 2016). Second, we develop an analytical framework that identifies three constitutive forms of triadic relationships in the existing literature: brokerage, mediation, and coalition. These illustrate the constitutive forms of social dynamics that characterize networked human systems and emerge only in triads. This work integrates multiple streams of research on triads into a single framework, which enables our third contribution, namely, the outlining of an initial research agenda for triadic marketing research. This article shows that much work, both conceptual and empirical, is needed in order to advance theorizing on marketing phenomena as well as to further develop the conceptualization of triads.

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Note

1. The association of threes was the direct translation from the term "Verbindung zu dreien" used by Simmel in his original work; the term triad was coined by his translator, Kurt H. Wulff (Simmel, 1950: 135).

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