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**Shifting Arrays of a Kaleidoscope: The Orchestration of Relational Value Cocreation in Service Systems**

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Abstract

The predominant value discourse among scholars characterizes value cocreation as involving multiple actors at the micro-, meso-, and macrolevels in service systems. This research contributes to the knowledge of the interdependencies among multiple resource-integrating actors and value outcomes by employing a relational perspective on value cocreation within the empirical context of family caregiving. The findings reveal how interdependent actors orchestrate value cocreation in service systems, how this impacts value, and how orchestration precipitates system adjustments, which form the recursive context of value cocreation over time. We differentiate and delineate three multi-actor orchestration mechanisms—assembling, performing, and brokering—through which nonreferent beneficiaries coordinate value cocreation on behalf of dependent referent beneficiaries. We term the mutually generalized oscillating multiform negative and positive well-being outcomes that emerge from orchestration among interdependent actors as relational value. In employing the metaphor of the kaleidoscope to emphasize system dynamism, our discussion of relational value cocreation deepens our understanding of how nonreferent beneficiary-led orchestration, founded on generalized mutuality and on behalf of referent beneficiaries with reduced agency, enhances and balances multiform, oscillating and positive and negative well-being outcomes in service systems. This will help service practitioners facilitate orchestration and optimize value for all.

Keywords

value cocreation, orchestration, relational value, well-being, transformative service research
No man is an island,
Entire of itself,
Every man is a piece of the continent,
A part of the main.
—John Donne

At the grand theory level, there is emerging consensus among service researchers and practitioners that value cocreation occurs among multiple resource-integrating actors in “relatively self-contained, self-adjusting” systems based on “mutual value cocreation through service exchange” (Lusch and Vargo 2014, p. 24). For scholars adopting this position, the points of departure are the various axioms and foundational premises (FPs) of service-dominant (SD) logic, including that “value is cocreated by multiple actors, always including the beneficiary” (Axiom 2/FP6) and that “a service-centred view is inherently beneficiary related and relational” (FP8; Vargo and Lusch 2016, p. 8). Regarding the impact of value cocreation on value, Axiom 4/FP10 posits that value is “always uniquely and phenomenologically determined by the beneficiary” (Vargo and Lusch 2016, p. 10). The beneficiary is defined as the (direct or primary) “recipient of service and reference of value cocreation” (Vargo and Lusch 2016, p. 10) or the “referent beneficiary” (Vargo and Lusch 2016, p. 9).

Despite the ongoing interest and advancements in value cocreation (e.g., McColl-Kennedy et al. 2012; Sweeney, Danaher, and McColl-Kennedy 2015; Vargo and Lusch 2016), there is much to learn about the interdependent nature of value cocreation and its impact on nonreferent and referent beneficiaries, as their interdependencies are constituted in self-adjusting systems. Much value research tends to portray cocreation as dyadic, reciprocal, and often exchange-based (Ballantyne and Varey 2006; Fitzpatrick et al. 2015; Grönroos and Voima 2013) and/or acknowledges that “value is cocreated with others through multi-party interactions” (Frow and Payne 2018, p. 67) in service systems (Frow and Payne 2018; Sigala 2019). However, the focus remains restricted to the referent beneficiary view of value outcomes (Beirão, Patrício, and Fisk 2017; Vargo and Lusch 2016), remaining largely silent regarding the value outcomes for nonreferent beneficiaries involved in complex value cocreation that may occur within or beyond market exchanges. These unaddressed issues support calls from the global service community for deeper scrutiny and revision of the understanding of how multiple actors coordinate value cocreation and how they impact value (Ostrom et al. 2015). Specifically, service scholars have prioritized how value cocreation is coordinated in multiple-actor settings and how the nature of coordination impacts cocreated value in terms of both negative and positive value outcomes (Ostrom et al. 2015, pp. 138-139). These topics motivate our research, which aims to explore how multiple actors coordinate value cocreation in service systems and how this impacts value.

To bridge these knowledge gaps and explore how interdependent relations among multiple actors constitute and are constituted by self-adjusting service systems as well as how coordinating actors dialectically impact value outcomes, we adopt a relational perspective (Kelleher et al. 2019; McNamee and Hosking 2012). We draw upon the concept of orchestration, which Breidbach, Antons, and Salge (2016) employed to depict how nonreferent beneficiaries—specifically firm-centric actors (e.g., case managers in hospitals) who act as interlocutors—
coordinate value cocreation on behalf of both nonreferent beneficiaries (e.g., medical staff) and referent beneficiaries (e.g., patients in service systems). By extending orchestration to customer-centric nonreferent beneficiaries (i.e., family caregivers) in human-centered, multi-actor social care service systems, we theoretically and empirically examine the relations among multiple interdependent actors in service systems, with particular attention given to how these relations impact both the coordination of value cocreation and codestruction and value as a general concept. A revised relational perspective of value cocreation is valuable, as it challenges the notion that both value creation and value are based on mutually beneficial exchange and self-interest (Fitzpatrick et al. 2015; Vargo and Lusch 2016).

Our work contributes theoretically and practically to service research in three important ways. First, we “zoom out” (Nicolini 2009, p. 1391) beyond process- and outcome-based dyadic perspectives of value cocreation to explicate how multiple actors orchestrate value cocreation and codestruction in service systems. This aligns with the core concept of Axiom 1 and FP1: service in which actors leverage resources for the benefit of themselves and/or others (Vargo and Lusch 2004, 2008, 2016). Second, we “zoom in” (Nicolini 2009, p. 1391) to differentiate and delineate (MacInnis 2011) three orchestration mechanisms—assembling, performing and brokering—that vary depending on the prior, current, and anticipated relations among interdependent actors. These orchestration mechanisms, we propose, reveal how actors create, access, mobilize, and share resources within service systems. Thus, we answer the call for more empirical research on actor resource integration (Edvardsson et al. 2014). Third, we “zoom back and forth” to characterize additional forms of relational value in elaborating the mutually generalized oscillation among interdependent actors, which features nonreferent and referent beneficiaries’ contested, interactive, relativistic, and multiform experiences of negative and positive value outcomes that emerge in the orchestration of value cocreation. Building on previous research that has highlighted that oscillation takes place between the micro-, meso-, and macro-levels (Chandler and Vargo 2011; Chandler and Lusch 2015) and that actors are interdependent during value cocreation (Lusch, Vargo, and Gustafsson 2016), we illustrate how referent and nonreferent beneficiaries’ positive and negative value outcomes oscillate in relation to each other.

We structure the article as follows. To motivate and position our study, we review and integrate systemic and relational perspectives on value cocreation, providing a conceptual foundation upon which we can understand the coordination of value cocreation and its impact on value in service systems. We then present the relational engagement approach (Davis and Ozanne 2019) to explore the orchestration of family caregiving, in which nonreferent beneficiaries (i.e., family caregivers) coordinate value cocreation on behalf of dependent referent beneficiaries (i.e., family members and relatives). Subsequently, we characterize relational value and delineate three orchestration mechanisms that are interlinked with relational value. We conclude with the theoretical contributions and managerial implications of the findings and outline an agenda for future research on value orchestration in a range of complex service systems.

**Coordinating Value Cocreation in Service Systems**

*Overview*
Contemporary perspectives on value cocreation increasingly embrace the multifaceted and complex nature of value cocreation in service systems (Lusch and Vargo 2011; Meynhardt, Chandler, and Strathoff 2016; Wilden et al. 2017). There is emerging consensus at the grand theory level that systemic value cocreation involves multiple actors and always beneficiaries (Lusch, Vargo, and Gustafsson 2016; Vargo and Lusch 2016). Such perspectives distinguish between different types of fixed and preconstituted multilevel (i.e., micro, meso, and macro) actors (Chandler and Vargo 2011; Figueiredo and Scaraboto 2016; Meynhardt, Chandler, and Strathoff 2016), including “private sources” (e.g., self, friends, and family), “market-facing sources” (i.e., other entities involved in barter or economic exchange), and “public sources” (i.e., public institutions and governments; Vargo and Lusch 2011, p. 184). Actors at each level pursue different goals, perform different functions, and continuously interact to cocreate value (Lusch, Vargo, and Gustafsson 2016; Storbacka et al. 2016). In this case, value refers to the net change in the well-being of the actors (Lusch and Vargo 2014).

Increasingly, value cocreation is considered to extend beyond interactions among collaborating actors, and it is presented as a central coordinating mechanism in dynamic service ecosystems (Edvardsson, Gustafsson, and Roos 2005; Ferguson, Paulin, and Bergeron 2010). That is, interactions among multiple actors are a core building block, or a “microfoundation for value cocreation” (Storbacka et al. 2016, p. 3008), in service systems (Vargo and Lusch 2016). This is reflected in FP8 of SD logic: “a service-centered view is inherently beneficiary oriented and relational” (Vargo and Lusch 2016, p. 8).

In line with this, a range of theoretical perspectives have been used to explain how multiple actors at different levels of aggregation co-coordinate value cocreation (Kjellberg, Nenonen, and Thomé 2018). In general, institutions and institutional arrangements broadly characterize the coordination of value creation among actors at the meso- and macro-levels in service systems and are constitutive of markets (Kjellberg, Nenonen, and Thomé 2018). This aligns with FP11 of SD logic, which states that “value creation is coordinated through actor-generated institutions and institutional arrangements” (Vargo and Lusch 2016, p. 8). Such institutions and arrangements include meanings, beliefs, rules, norms, laws, and practices as well as their interrelations. Practice theory, as it addresses routine activity, has been broadly used to characterize interactions among individual actors at the microsocial level in service systems (Vargo and Lusch 2016).

In summary, recent systemic perspectives characterize resource integration among multiple actors participating in practices at the microlevel. Both resource integration and practices, in turn, are coordinated through institutions and institutional arrangements (FP11; Vargo and Lusch 2016). While the interdependent and relational nature of systemic value cocreation is a central FP of SD logic, multi-actor exchange remains characterized by referent beneficiaries’ self-interest and not a broad social interest, in which the normative obligations to give, receive, and reciprocate among interdependent referent and nonreferent beneficiaries are given equal importance (Arnould and Rose 2016). To address the interdependencies among actors coordinating value cocreation and how they impact value and the self-adjusting nature of the service system, we consider the dynamic process of interaction among interdependent actors.

*Missing Links—Actor Relationality and Interdependencies in Service Systems*
Service research has traditionally viewed value cocreation as involving resource integration among actors, predominantly in dyads (i.e., actor to actor; Grönroos and Voima 2013; Neghina et al. 2015). Less attention is directed to relations among multiple actors and the service system as advised by SD logic (Vargo and Lusch 2016). In line with the dyadic view, relationality can be defined as the intersubjective relatedness between one person (“I”) and an Other person (“Other”) that is actualized in the interaction space of their co-actions. (Fitzpatrick et al. 2015, p. 464)

Relationality is viewed as an outcome of interaction, namely, the relational response (at any time) between dyadic actors, who may “co-ordinate, co-operate or collaborate” (Ballantyne and Varey 2006; Fitzpatrick et al. 2015, p. 468). Because this perspective focuses on the customer–service provider dyad, important modifications are required to encompass the relationality among multiple market and/or social actors. Furthermore, since service exchanges are described as reciprocal (Chandler and Vargo 2011), there appears to be a tacit assumption that referent beneficiaries are agentic, independent, and capable of actively engaging with other actors to access and integrate resources and cocreate value. Loosening this assumption, however, allows for a greater degree of interdependence among actors in service systems.

More recently, the markets-as-practice perspective on relationality has emerged. This perspective characterizes multiple actors who coordinate value cocreation as interdefined and plastic (Kjellberg, Nenonen, and Thomé 2018). That is, actors only “become” actors when they mutually recognize and orient toward other relevant (though unspecified) actors in a situation to cocreate value (Kjellberg 2018; Peters 2018). This supports the view that practices, not just institutions and institutional arrangements, constitute wider systems (Kjellberg 2018). Also, the perspective challenges extant systemic perspectives, in which actors are fixed entities with predefined roles aggregated at the micro-, meso-, and macro-levels and remain unchanged during and following cocreation (see Chandler and Vargo 2011; Meynhardt, Chandler, and Strathoff 2016). However, the markets-as-practice perspective remains limited by the continued assumption that referent beneficiaries are agents in their own value cocreation and only focus on economic actors and the market and does not account for other social actors in broader service systems.

Applying the principles of problematization (Alvesson and Sandberg 2011), we propose a third relational perspective on value cocreation that does not assume that actors are fixed entities that aggregate at fixed levels (i.e., the micro-, meso-, and macro-levels in service systems). The need for this type of perspective has resulted in calls for exploring questions such as “How can we study different levels of value and context simultaneously?” (Wilden et al. 2017, p. 14). A relational perspective focuses “on what people do together and what their ‘doing’ makes” (McNamee and Hosking 2012, p. 1) and suggests that the “doings” of multiple interdependent resource-integrating actors constitute and are constituted through value cocreation. The ongoing interdefinition of multiple resource–integrating actors means that actors do not maintain their constitution, configuration, and agency while they coordinate value in service systems; their meaning and roles change as they themselves become resources for value cocreation (Kjellberg 2018; Peters 2018). That is, both the “markets as practice” (Kjellberg, Nenonen, and Thomé 2018) and the relational perspectives on value cocreation problematize “the distinction between micro and the macro by refuting the a priori hierarchy between both” (Arsel 2016, p. 33) and
highlight how actors and resources morph and interweave during value cocreation. While it may be empirically helpful to situate actors at different levels in service systems (i.e., micro, meso, and macro) to address the scalability of value cocreation in service systems, at an ontological level, interactions among interdependent actors take place at the same level (Kjellberg 2018). Next, we elaborate upon how multiple interdependent actors orchestrate value cocreation and experience value in the empirical context of family cocreation, specifically, family caregiving.

From SD logic and systemic perspectives, families are characterized in terms of institutional orders or arrangements or 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” (Friedland and Alford 1991, cited in Vargo and Lusch 2016, p. 13). From a relational perspective, families are seen as central relational units comprising interdependent actors in service systems (Epp and Price 2008; Rogan, Piacentini, and Hopkinson 2018). Family members form “contingent relations across time to produce an emergent whole with a collective identity” (Price and Epp 2016, p. 60) and maintain a range of individual, collective, and relational goals in relation to value cocreation (Epp and Price 2011). In line with the relational perspective, for this study, we define families as interdependent actors who share their lives over long periods of time bound by ties of marriage, blood, or commitment, legal or otherwise, who consider themselves as family and who share a significant history and anticipated future of functioning in a family relationship. (Galvin, Bylund, and Brommel 2004, p. 6, cited in Epp and Price 2011, p. 38)

Following Epp and Velagaleti (2014, p. 912), by characterizing family caregiving from a relational perspective, we seek to recognize the dynamic, informal, and often unpaid nature of family cocreation or caregiving that occurs as family members adapt and respond to dependent relatives’ needs. Family caregiving may involve making trade-offs when identifying and integrating scarce resources, discarding current care resources, and adopting new ones as the relative becomes increasingly dependent as their illness progresses.

**Method**

In line with the participatory principles of transformative service research (TSR; Ostrom et al. 2010), our empirical study followed a relational engagement approach (Davis and Ozanne 2019; Ozanne et al. 2017) and included both academic and nonacademic stakeholders throughout the research process to increase its societal impact. As many countries struggle with the economic and social challenges of providing aging and/or vulnerable individuals with access to resources in social care and public and private health-care systems (Colombo et al. 2011), these individuals’ family members often need to coordinate and balance between the absence and presence of resources, assembling alternative and/or complementary resources where possible. Globally, in line with demographic, economic, and sociocultural changes, the number of family caregivers has grown significantly in recent years (Verbakel 2018). This has led to reduced employment opportunities and health challenges for caregivers (Brimblecombe et al. 2018), necessitating increased support to maintain and sustain their physical, psychological, and emotional well-being. By involving those most impacted by the research (Ozanne et al. 2017)—
family caregivers—a relational engagement approach prioritizes responsive information exchange with or in relation to participants, and by association their dependent relatives and representative organizations, rather than for them.

As deep stakeholder involvement is core to relational engagement, the lead author worked with three caregiver associations (two national and one regional) to achieve the cocreated research objective: to deepen the understanding of the nature, experience, and impact of family caregiving. Once the project brief was agreed upon, they collaboratively designed the research process and discussed and identified a range of desired outcomes in advance, including the development of caregiver support, public awareness, and policy workshops in relation to caregiver issues and support requirements. All three partner organizations worked together to support the lead researcher’s data collection and enable members to voluntarily participate in the study.

Data Collection and Analysis

Data were collected through loosely structured in-depth face-to-face interviews, conducted in an informal conversational style (Landridge 2007) by the first author, with 22 caregivers (12 women and 10 men). Table 1 offers additional details about the family caregivers (primary orchestrators), family members (co-orchestrators), and relatives being cared for (referent beneficiaries). Care was provided for parents, spouses, adult children, and neighbors who suffered from stroke, Alzheimer’s disease, cancer, and other physical and psychological illnesses. Many family relatives received care at home, some transitioned to a care home while the family caregivers continued to provide support, and a limited number died due to illness or age.

Table 1. Interview Participants.

<table>
<thead>
<tr>
<th>Primary Orchestrator</th>
<th>Co-orchestrators</th>
<th>Referent Beneficiary/Dependent Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niamh</td>
<td>Husband and adult children</td>
<td>Cared for her mother, who suffered from dementia, in her own home and visited and supported her father at a residential home.</td>
</tr>
<tr>
<td>Robert</td>
<td>-</td>
<td>Cared for his mother.</td>
</tr>
<tr>
<td>Andrew</td>
<td>-</td>
<td>Cared for his father, who had a stroke and now lives in a nursing home.</td>
</tr>
<tr>
<td>Emma</td>
<td>Husband and adult children</td>
<td>Cared for her husband, who requires long-term care following a severe stroke.</td>
</tr>
<tr>
<td>Fidelma</td>
<td>Husband and adult children</td>
<td>Caregiver for her daughter, who had profound physical and mental disabilities.</td>
</tr>
<tr>
<td>Sebastian</td>
<td>-</td>
<td>Cared for his elderly mother, who subsequently died.</td>
</tr>
<tr>
<td>Harry</td>
<td>-</td>
<td>Provided long-term care for his father, who had cancer, in his home</td>
</tr>
<tr>
<td>Rachel</td>
<td>Husband</td>
<td>Cared for her younger sister, who had Down Syndrome, for her entire life after their mother died. Also cared for her brother in his home and in the hospital.</td>
</tr>
<tr>
<td>Suzanne</td>
<td>Husband and two teenage children</td>
<td>Cared for her late father, who had cancer, and now cares for her mother, who has Alzheimer’s disease.</td>
</tr>
<tr>
<td>Christina</td>
<td>-</td>
<td>Cared for her late husband in their own home and was frequently assisted by her adult son, who is married with children.</td>
</tr>
<tr>
<td>Name</td>
<td>Relationship</td>
<td>Care Details</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gemma</td>
<td>Partner</td>
<td>Cared for her sister, who had cancer, in her sister’s home but did not live there. Gemma’s sister was also cared for by her own husband and daughter who lived with her.</td>
</tr>
<tr>
<td>Simon</td>
<td>Wife and adult daughter</td>
<td>Cared for his father, who had dementia, in his father’s home, and now visits him daily in his nursing home.</td>
</tr>
<tr>
<td>Eimear</td>
<td>Partner</td>
<td>Moved back to the family home to care for her mother, who was immobilized following a severe stroke. Also cared for her elderly father at home.</td>
</tr>
<tr>
<td>Kate</td>
<td>Father, partner, and their son</td>
<td>Cared for her late mother, who had dementia, and currently cares for her father, who had a stroke, in her childhood home.</td>
</tr>
<tr>
<td>Elaine</td>
<td>Husband and teenage children</td>
<td>Cared for her mother, who had Alzheimer’s disease, in Elaine’s childhood home and continued to provide care after her mother transitioned to a residential institution.</td>
</tr>
<tr>
<td>Jerry</td>
<td>-</td>
<td>Cared for his wife at home after she suffered a stroke.</td>
</tr>
<tr>
<td>Damien</td>
<td>-</td>
<td>Cared for his adult teenage son, who has mental health difficulties and lives in an assisted living community setting.</td>
</tr>
<tr>
<td>Luke</td>
<td>-</td>
<td>Cared for his mother, who had dementia, in the home where he lived his entire life. His sister assisted some weekends, and his brother was not involved.</td>
</tr>
<tr>
<td>Matthew</td>
<td>Brother, wife, and two children</td>
<td>Moved back with his family to be near his mother, who initially continued to live in her own home. Both sons were actively involved in their mother’s care. His mother now lives in a residential home near her other son, and Matthew visits regularly.</td>
</tr>
<tr>
<td>Roseanna</td>
<td>-</td>
<td>Cared for her late husband, who had Alzheimer’s disease, in their home. None of their children or other family members lived in the same country.</td>
</tr>
<tr>
<td>Noreen</td>
<td>-</td>
<td>Cared for her widowed mother in her family home. One her brothers, who is married, was also involved in the caregiving. After her mother’s death, she cared for her uncle, who lived alone.</td>
</tr>
<tr>
<td>Ultan</td>
<td>-</td>
<td>Cared for his mother, who had a stroke, in his childhood home. His two brothers live abroad.</td>
</tr>
</tbody>
</table>

During the interviews, which lasted 60–120 minutes, family caregivers were invited to share their personal stories about becoming a family caregiver and to recount their experiences of caring for an ill family member who, in many cases, became more dependent over time (for the exploratory interview protocol, see Online Appendix A). Immediately after each interview, the first author recorded her experience, reflections, and observations from the interview as voice memos, which were subsequently transcribed along with the full interview. The diversity of family caregiving contexts enabled identification and comparison of a rich variety of caregiving practices and experiences (Epp and Velagaleti 2014).

The data analysis, which followed Spiggle’s (1994) qualitative interpretation guidelines, was intended to explore how families coordinated and experienced the provision of care for dependent relatives. All four authors employed a constant comparison approach (Charmaz 2006), first independently and then collaboratively, moving back and forth between the data and theory to reveal differences and similarities (Spiggle 1994). This resulted in a cocreated, nuanced understanding of the nature and orchestration of family caregiving for dependent relatives.

The orchestration of value cocreation was ultimately categorized into three mechanisms: assembling, performing, and brokering. Also, in relation to the nature of value, binary opposites were identified (cf. Barnhart and Peñaloza 2013), resulting in four interrelated relational value outcomes that ranged from positive to negative. The trustworthiness of the findings was ensured by independent coding and interpretation of the data set and subsequent recoding and agreement on the final themes by all four researchers (Grayson and Rust 2001).
In line with the relational engagement research approach, the first author performed member checking by presenting, discussing, and reviewing the draft findings with the participants and their representative organizations both during and after the data collection (Davis and Ozanne 2019; Ozanne et al. 2017). The first author also conducted two participatory workshops with the participants to identify and cocreate resources to support family caregivers, including a life coaching workshop, two peer support videos cocreated by family caregivers, and a policy workshop with nationally elected public representatives, policy makers, service providers, and academics. The findings of the interviews are reported in the next section using pseudonyms to protect the participants’ anonymity.

**Findings**

**Overview**

Our findings, which are presented in Figure 1 and elaborated upon in Tables 2 and 3, provide important insights into the dynamics of value cocreation among multiple actors and the multifaceted impact of these dynamics on value in service systems. We define orchestration as the coordination of value cocreation by actors (i.e., nonreferent beneficiaries, specifically primary orchestrators and co-orchestrators) on behalf of dependent actors (i.e., referent beneficiaries). We refer to interactor interdependencies among family members as relative ties and to interactor interdependencies among family members and other actors as nonrelative ties. Orchestration is required when referent beneficiaries experience resource shortage and/or are unable to independently access, mobilize, or configure resources within service systems to cocreate value. We identify three mechanisms involved in orchestration—assembling, performing, and brokering—and provide an overview of them in Table 2. We argue that orchestration is a primary means by which relational value is cocreated, which we identify as the mutually generalized oscillation among interdependent actors’ (i.e., referent and nonreferent beneficiaries') interactive, relativistic, and multiform experiences of negative and positive well-being in service systems (Table 3). The desired relational value for the referent beneficiary functioned as a mobilizing force in service orchestration, providing direction and energy to cocreation. This led orchestrators to strive for an increase in or stabilization of referent beneficiaries’ well-being, often in a selfless or self-giving way.
**Figure 1.** Orchestration of Relational Value in Service Systems.
It is necessary for orchestrators and co-orchestrators to coordinate value cocreation on behalf of referent beneficiaries when referent beneficiaries experience an absence or shortage of resources and/or are unable to independently access, mobilize, or configure resources within service systems to cocreate value.

<table>
<thead>
<tr>
<th>Orchestration Mechanisms</th>
<th>Illustrative Example</th>
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</table>
| **Assembling:** Orchestrator(s) identify, access, and configure resources in relation to referent beneficiaries linked by relative ties. | When reflecting upon his own caregiving experience, Andrew emphasized the importance of delegating roles and tasks to with co-orchestrators:  

_A huge thing would be family, I mean ours didn’t work. Give everybody a role to share the burden according to everybody’s capacity ... if you have a good family, you can do that. At the time when I left work, coincidentally, my four siblings were all out of work. None of them were working. They were busy with other things. In hindsight, I should have stamped my foot a little bit harder._ (Andrew) |
| **Performing:** Orchestrator(s) directly integrate resources to cocreate value in relation to referent beneficiaries linked by relative ties. | As a full-time primary orchestrator for his dependent mother, Luke described how he had to provide personal care as she was no longer capable of performing many tasks independently:  

_I was doing personal care [assistance with going to the bathroom, showering etc.] as well with her [his mother] long before she went in [to a home] because she didn’t know how to do it. And funny enough, we both cried our eyes out the first time it happened because she knew she didn’t want it and I knew I didn’t want to do it, but we had no choice. It broke both our hearts to do it. It was very hard, you know._ (Luke) |
| **Brokering:** Orchestrators coordinate, negotiate, and mediate with other non-referent beneficiaries without relative ties or a shared history/anticipated future of value cocreation. | Harry recounted how he mediated and negotiated with nonreferent beneficiaries (i.e., health professionals) to obtain physiotherapy for his father after a severe stroke and then agreed to discharge him from a residential care setting to care for him full-time at home:  

_I was ill-prepared for my Dad being discharged home. Do this, don’t do that to this, from the physiotherapist ... The sisters said, “your Dad is going home on Sunday” – this was Friday. Sister, I said, “I’m going to say something now that I thought I’d never say. I am refusing to accept him until he has suitable physiotherapy.” What she said hurt me. She said we need the beds. I said, “Is the bed more important than the occupant?” They kept him in another fortnight._ (Harry) |
Table 3. Relational Value.

<table>
<thead>
<tr>
<th>Relational Value</th>
<th>Illustrative examples of how relational value emerges through assembling, performing, and brokering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional well-being</td>
<td>In assembling residential care for his mother, Matthew experienced emotional struggle and guilt while identifying and accessing resources. These changes to resource integration generated emotional costs for Matthew but ultimately resulted in emotional gain for his mother, who was settled and happy in the home: Yes, and I would honestly say I picked up the phone every month for a period of 6 months before I actually dialed to the [care assistance] scheme to get it sorted out. I picked it up and put it down, couldn’t do it, couldn’t do it…. I am not sure I can tell you how difficult it is, you know, you have emotions of guilt, of feeling like a failure, why can’t you do this, it … It is the worst decision of my life and the best decision of my life because she [his mother] has blossomed since she went into the care home … she has company and friends … she is happy. (Matthew)</td>
</tr>
<tr>
<td>Emotional well-being outcomes oscillated between emotional gain and loss.</td>
<td></td>
</tr>
<tr>
<td>Social well-being</td>
<td>In assembling and performing care for his father, Harry experienced social isolation and lost friendships; however, his relationship with his father strengthened: You have the losses and you have the gains…. And the gains outweigh the losses. The losses you have include the loss of contact with friends; I lost the ability to socialize … people eventually stop calling…. While previously he wasn’t a very emotional man, in the latter years, he used to kiss the face of me. “My golden boy, my golden boy.” We bonded, we became best friends … Nothing could compensate me for what I got back. I got back 10 times more than I put in, I got back love. And what price can you put on love? (Harry)</td>
</tr>
<tr>
<td>Social well-being outcomes oscillated between connection and isolation.</td>
<td></td>
</tr>
<tr>
<td>Physical well-being</td>
<td>In assembling and performing care for her mother, Suzanne experienced a negative effect on her own physical health. She also described the physical well-being trade-offs. For example, while her own health suffered and she became burnt out, the physical well-being of her mother (i.e., the referent beneficiary) improved and stabilized under her care:</td>
</tr>
<tr>
<td>Physical well-being outcomes oscillated between strength and deterioration.</td>
<td>I just, it just became too much for me. I was struggling with my own health, I was struggling with looking after my mam, and the stress of it … But I found that when she [her mother] was staying with me, I was able to stabilize that. So she would have been at a good level … I feel that I somewhat neglected my own girls – during that time, my husband had to change jobs […] my own girls doing their exams, and then they had to move to go to college. It was a lot of upheaval … and to be honest at times, I just felt that I had no backup…. My kids are telling me now that they had no childhood … they feel that they have missed out on a lot… (Suzanne)</td>
</tr>
<tr>
<td>Financial well-being</td>
<td>In assembling and performing care for his father, Andrew experienced significant financial loss, as he had to quit his job to care full-time for his father. Subsequently, in brokering care, Andrew secured funding that enabled his father to be cared for in a nursing home, where his future care needs were fully secured:</td>
</tr>
<tr>
<td>Financial well-being outcomes oscillated between enrichment and impoverishment.</td>
<td>I had domestic leave, I used annual leave, force majeure … I eventually officially came out of work full-time … the care requirement was 24x7 … financially, I destroyed myself…. The home help coordinator originally said that they were tied by budget restrictions. I completely disputed that on various grounds. We were approved for the [national residential care support] scheme in May … then the funding came available, and the next bed that came up he was in … My Dad is very well taken care of and we visited every day – his care needs were secured for the duration of his life. (Andrew)</td>
</tr>
</tbody>
</table>

Throughout our findings, we refer to family caregivers and other family members as primary
orchestrators and co-orchestrators, respectively, and to dependent relatives as referent beneficiaries. Other actors, such as health and social care professionals, are referred to as other nonreferent beneficiaries. Below, we explicate the nature and mechanisms of orchestration.

Assembling

Building upon Price and Epp (2016), we define assembling as an orchestration mechanism that requires the orchestrator(s) to identify, have access to, and configure resources in relation to referent beneficiaries linked by relative ties. Our findings reveal that orchestrators coordinated with co-orchestrators, including partners, siblings, and adult children, to assemble resources to care for referent beneficiaries. The strength of relative ties impacted the nature of this coordination process and determined whether one or more nonreferent beneficiaries orchestrated value cocreation on behalf of the referent beneficiary. For example, other family members perceived Suzanne, a primary caregiver for her mother, who suffered from dementia but lived independently, as the primary point of contact regarding care. Suzanne performed this orchestrator role due to her love for her mother and enduring family ties, while other family members provided limited support:

I’m down as my mum’s next of kin, so because all the doctors and nurses have always contacted me and any of the caregivers, I’ve always been the one to put things into place…everybody contacted me. She came to depend on me. She wouldn’t accept help from anybody else or accept an answer from anybody else, only me, because she kept saying, “I know best. Suzanne knows me”…or “Ask Suzanne.” So, I was her spokesperson as well as everything else for her. (Suzanne)

It was common for one family member to implicitly become the “assigned” primary orchestrator who was responsible for assembling resources on behalf of the referent beneficiary and, by proxy, other co-orchestrators, as different family members were absent or abdicated their care responsibilities. Assembling often necessitated prolonged coordination of family members by one primary orchestrator. This was evident in the case of Christina, who convened a family conference with her children (co-orchestrators) to reach a consensus regarding the optimum care solution for her husband (referent beneficiary) over the course of his long-term rehabilitation from a stroke:

The family were 100% behind me; they kept on saying to me, “but Mum, this is for Dad’s sake; this is for Dad’s care that we have to do this” (Christina)

In other cases, the primary orchestrator could not always perform assembling and orchestration of family members. This sometimes led to dysfunction, conflict, and, in extreme instances, value obstruction. In Suzanne’s case, value obstruction occurred as the period of care extended beyond the short term and “they [other family members] all started to get fed up” (Suzanne). Despite Suzanne’s best efforts to assemble, access, and configure resources to meet her mother’s ongoing care needs, she discovered that other family members had, without consulting her or the care staff, removed her mother from the nursing home and failed to provide any alternative support or resources:
And they [my siblings] kept saying, “don’t be worrying, we’ll do whatever we can to help you”.... [I was] stabbed in the back. Absolutely awful. I just felt that all the work that I had done...to protect my mam to make sure that she was being well looked after, that they just took out [of the nursing home] and left a vulnerable person at home again...they put her back in her old home, with no home help assistance or anything. They never contacted anybody, she had no support. She had absolutely nothing. (Suzanne)

In summary, assembling involved varying levels of orchestration among referent and nonreferent beneficiaries ranging from cooperation to dysfunction or value obstruction, depending on the degree to which nonreferent beneficiaries assumed or abdicated their role as orchestrators. Building on Price and Epp (2016), assembling thereby not only reveals the central influence of relative and nonrelative relations and the interdependency among nonreferent and referent beneficiaries but also underlines the importance of shared, unified commitment to collective and mutually desired value on behalf of the referent beneficiary. When this is absent, value obstruction occurs.

Performing

Performing is an orchestration mechanism in which orchestrators directly integrate resources to cocreate value in relation to referent beneficiaries linked by relative ties. Specifically, performing involved primary and co-orchestrators who coordinate to provide a wide range of physical, emotional, social, and psychological support. Their responsibilities grew as the referent beneficiary’s illness progressed and they became more dependent over time. Eimear had to single-handedly provide physical and medical care to her dependent elderly parents every day:

When my mum got sick, basically I had the two of them [her mother and father]. I gave up my life with the two of them, and that’s the way it’s been....since she had a stroke, my mum has struggled because she pretty much lost the use of her right arm, but that’s it, they could do nothing else for themselves. Cooking, dressing, toileting, appointments, medical appointments, everything, you know, was down to me. I mean, it’s a drastic change from before and after. An absolutely drastic change, you know. (Eimear)

Performing entailed both resource creation and sustained long-term resource integration as orchestrators “became” social resources that were required to be present and available for the referent beneficiary. This is exemplified by Eimear’s claim that “I gave up my life for the two of them.” In addition to time and personal commitment, performing often resulted in significant financial loss for the orchestrators, particularly if they were the sole primary orchestrators, as they had to forego full-time paid employment to provide full-time unpaid care to the referent beneficiary. The consequence of constant performing negatively impacted orchestrators’ well-being. Christina revealed that she and her co-orchestrators were “living on their nerves” and “absolutely exhausted” because of the intensity and longevity of care required, often without other actors or care resources.

For some orchestrators, performing involved simultaneous or sequential resource integration, provision of care for more than one referent beneficiary (e.g., both parents or a dependent spouse and child), or a sequence of caring responsibilities. In Harry’s case, performing required
simultaneous coordination and direct provision of care for more than one referent beneficiary. First, he cared for his mother for over 15 years, and then he cared for his father for another 10 years:

_I had my mam in a chair and my dad in a Zimmer frame. It was rough. I had no one to turn to. …In August [states year], Dad had a massive stroke. I was ill-prepared for washing him in the bed, that sort of care. I had to learn. I looked after him until he died. I had no respite whatsoever for my mother, until the last 4 months of her life. I was exhausted caring for both my mum and dad. (Harry)_

While performing enabled both of Harry’s parents to remain at home during their respective illnesses, it negatively impacted Harry's well-being in the long term. In summary, performing necessitates ongoing human and social presence and continuous orchestration on behalf of referent beneficiaries. In other words, the orchestrators must provide the primary resources for value cocreation: their time and presence. In this way, the orchestrators themselves become both crucial (social) resources and actors in the orchestration of value cocreation on behalf of referent beneficiaries. Without a continuous physical and social presence, orchestrators cannot “become” these social resources.

Brokering

Brokering is an orchestration mechanism in which orchestrators coordinate, negotiate, and mediate with other nonreferent beneficiaries without relative ties or a shared history or anticipated future of value cocreation. Specifically, brokering involves a family member (primary orchestrator) who, alone or in collaboration with other family members (co-orchestrators), coordinates with other actors, such as general practitioners, public health-care nurses, therapists, and day care and residential care providers (nonreferent beneficiaries without relative ties). Often, it requires orchestrators to navigate the precarious arena of formal health-care programs and choose complex (and sometimes costly) public and private health-care options on behalf of referent beneficiaries who do not necessarily have the physical and/or cognitive capacity to do so themselves. Brokering extends beyond requesting and securing formal care provided by a nonfamily member; it also includes coproduction of care plans with health-care professionals on behalf of the referent beneficiary. This was particularly important for family members who required treatment, ongoing support, and recovery for mental health issues, as explained by Damien:

_My involvement with the development of my son’s care program is not fully completed as it were; I am back in there because I am caring for him [son] and speaking to him every day. I have been very involved in trying to put a care plan in place for him because there seems to be a bit of a gap in this area regarding psychiatric hospitals, what happens to patients afterwards, and how they can stay out of these places. (Damien)_

For Damien, brokering involved continuously liaising with mental health professionals to access and secure formal mental health services, which are scarce and underfunded, on behalf of his son and coordination with other family members (co-orchestrators) to ensure that ongoing support would be available for his son as he transitioned from hospital care to recovery and then to
dependent living in the community. Damien was acutely aware of his responsibility to access and secure resources for his son due to the “gap…regarding the psychiatric hospitals” in the rural area in which he and his son lived.

Brokering also involved multiple orchestrators who organized and advocated as a collective actor to improve access to resources on behalf of other current and future dependent actors (referent beneficiaries) throughout the service system over time. For example, Fidelma, who orchestrated the care of her profoundly disabled daughter for several years, opined the lack of social and health resources, training, and quality standards provided by the government and public health/social care systems:

Now the only problem there is that I had [national public healthcare body] people coming in to help me. The [national healthcare body] does not train them, so I have been fighting them for 5 years regarding training for people coming into people like [her daughter] for a start. While funding has been sanctioned, [it] remains a bureaucratic monster. We are waiting and waiting and waiting. (Fidelma)

As evidenced by Fidelma’s description of the relevant national public health authority as “a bureaucratic monster,” brokering involved perseverance to secure the resources needed to meet her daughter’s complex care needs. Several participants, including Eimear, reported that the absence or inaccessibility of resources within the system required family members to collectively engage in sustained advocacy on behalf of family members:

The support is not enough in any way, shape, or form. It really and truly isn’t. You get things done yourself by sheer determination and gritting your teeth and battling, and it’s like battle battle battle battle battle. And the only way for you to survive is to become a different person. To become an argumentative person. And a pushy person. And an “oh hold on a minute” person. (Eimear)

In summary, brokering involved negotiating and securing access to scarce or absent resources in a service system. Resources may be limited based on geographic location, financial means, rigid bureaucratic structures, and/or lack of information or knowledge (operant resources). Overall, the orchestration of value cocreation through assembling, performing, and brokering required orchestrators to invest physical resources, including energy, emotion, and strength (Arnould, Price, and Malshe 2006), to secure scarce resources and engage other actors in resource integration on behalf of referent beneficiaries. Orchestration of each of the value-cocreation mechanisms competed for the caregivers’ resources, as described by Suzanne: “So, between trying to look after my mam and taking on the responsibility of organizing her daily routine as well, I must say it was tough. Very, very tough.” Performing takes up so much of the referent beneficiary’s mental and physical resources that he or she may be unable to invest in assembling and brokering, leaving the referent beneficiary relatively isolated and responsible for personally enabling value cocreation. Hence, orchestration generated a range of positive and negative value outcomes for both referent and nonreferent beneficiaries. We expand upon this next.

Relational Value
Overview. While SD logic states that “value is uniquely and phenomenologically determined by actors” (Vargo and Lusch 2016, p. 10), our findings revealed a range of negative and positive value outcomes for coordinating nonreferent and referent beneficiaries. These outcomes emerged from the orchestration of value cocreation and were due to the inherent relationality of the experience. We characterize this mutually generalized oscillation as interdependent actors’ interactive, relativistic, and multiform experiences of negative and positive relational value. Specifically, primary orchestrators, co-orchestrators, and the referent beneficiaries for whom they provided care experienced relational value as having a positive or negative impact on their well-being over time. As summarized in Table 3 and elaborated upon below, relational value emerged through the orchestration of resources during assembling, performing, and brokering and was illustrated by oscillating well-being outcomes including emotional (gain–loss), social (connection–isolation), physical (strength–deterioration), and financial (enrichment–impoverishment) well-being.

Emotional well-being—Oscillating experiences of gain and loss
Nonreferent and referent beneficiaries’ experiences of orchestration and emotional well-being oscillated between emotional gain and loss. In some cases, primary orchestrators prioritized positive emotional well-being for referent beneficiaries to the detriment of their own. For example, while reflecting on her role as a primary orchestrator, Eimear noted that she always prioritized her mother’s care needs over her own:

On a day-to-day basis, every decision I make, pretty much, is made pretty much with my mum in mind, for her benefit, you know, “how can I do this so how can I do that?”.... You can make a decision but you have two [her mother and father] to fit in with my family’s life....your life is not your own, it is somebody else’s. (Eimear)

This example shows that the referent beneficiary’s emotional well-being serves as a reference point for the primary orchestrator’s value cocreation and mobilizes resource integration. In other cases, orchestrators retrospectively categorized emotional well-being outcomes as more positive than they had initially. For example, Matthew (Table 3) describes how, as part of assembling, he initially struggled emotionally with the decision to put his mother, who suffered from dementia, in a care facility: “it was the worst decision of my life and the best decision of my life.” However, after transitioning, his mother became happier and more content in the secure and structured residential setting. In other words, while Matthew and his family initially experienced emotional tension while assembling and performing care and navigating health-care professionals’ shortcomings through brokering, they ultimately achieved alignment between Matthew’s mother’s needs and the resources available in the service system, generating positive relational value.

Christina also oscillated between a sense of loss and gain during orchestration, as she noted in a reflection on the emotional journey that accompanied her husband’s illness. She stated how her husband had “earned” the right to be cared for and that she “owes” it to him, as his wife and primary caregiver, to orchestrate his care. She rationalized this arrangement as just and fair, which indicates generalized mutuality based on relative ties. Her attitude reflects a shared history and anticipated future of value cocreation, with value equitably traded or bartered intergenerationally among family members (i.e., husband to mother and wife to husband) within
the service system. As her husband’s medical dependency increased, she became deeply committed to “repaying” her husband’s love. She was reluctant to move him to a nursing home, despite his need for full-time care. Following her husband’s death, she reassessed and reframed the impact of sustaining orchestration on her well-being and revealed post hoc feelings of sadness and restriction:

Since he passed, I realize how hard it was then, but at the time I didn’t, I honestly didn’t. There were times when I was worn out, and I did find it very restricted. There was a lot of sadness. (Christina)

Hence, the emotional well-being of orchestrators during and after referent beneficiaries’ illnesses precipitated ongoing positive and negative reassessment, reflexivity, and reframing of emotional well-being outcomes.

Social well-being—Oscillating experiences of connection and isolation
Nonreferent and referent beneficiaries’ experiences of orchestration and social well-being oscillated between isolation and connection. As presented in Table 3, Harry experienced isolation from friends, colleagues, and family while caring for his father. However, as his friends “stopped calling,” he became closer (“best friends”) to his father. Once his father transitioned to a full-time care home, Harry had to work hard to gradually rebuild his social network.

Matthew moved his family from abroad, returning to the small rural community in which he grew up, to help take care of his mother. This displaced his family, leading his daughter to declare, “I miss my friends.” Matthew said, “I’m not much good at keeping friends,” indicating that he also experienced isolation. After relocating, Matthew joined an Alzheimer’s disease support group, which became a valued social outlet as his mother’s social capabilities deteriorated due to her dementia.

Social well-being was also impacted by the social norms and expectations of orchestrators as well as referent and other nonreferent beneficiaries. In many cases, orchestrators struggled with the burden and expectation of orchestration on behalf of the referent beneficiary, reflecting the conflicting nature of relational value and its related compromises. Often, orchestrators expressed a deep sense of duty or obligation underpinned by deep social bonds and relative ties: “what choice have I? I’ve got to do it, you know” (Christina).

Orchestration, particularly assembling and performing, involved significant resource commitment on the part of orchestrators. Orchestrators have to be physically and socially present, which restricts their ability to maintain close ties beyond the referent beneficiary or their immediate family. While this deepened their relationship with the dependent relative, it often resulted in strained family relations and social isolation from friends and colleagues. When orchestration or caregiving ceased, such as upon the death of the referent beneficiary, the freed resources led to a void in social connection for the caregiver, which was not necessarily counterbalanced by an increase in social well-being within the wider service system.

Physical well-being—Oscillating experiences of strength and deterioration
Nonreferent and referent beneficiaries’ experiences of orchestration and physical well-being oscillated between strength and deterioration. These experiences arose when the orchestrator’s physical health deteriorated as that of the referent beneficiary improved/stabilized. As highlighted in Table 3, while orchestrating her mother’s care, Suzanne’s physical health increasingly suffered as her mother’s health improved. Although emphasizing the joy she experienced from caring for her mother, she also noted that sacrifices were necessary. The deterioration in her physical well-being required her to refocus on rebuilding her strength and resilience once orchestration was no longer required:

I had to rebuild that strength and focus on how I was going to get my life back because I had given up so much. And like I say, I wouldn’t take any of it back at all, because it was a joy, as much as my mam kept saying, “I’m a burden to you.” But she wasn’t a burden; I would never say that. But it just got too much for me. (Suzanne)

Other orchestrators experienced similar interdependent physical well-being outcomes. For example, Luke described severe deterioration in his own health due to the relentless care regimen required for his father:

I burnt myself out completely. I ended up in hospital for a month. I had one night’s sleep in 6 weeks and I was up and down [to tend to him] every 5 minutes. (Luke)

Hence, orchestration reduced the resources available to the orchestrator, other family members, and actors, which in turn negatively influenced their physical well-being. At the same time, assembling, brokering, and performing benefited the physical well-being of referent beneficiaries. Given the severe physical burden of caregiving and the need to be constantly present for the referent beneficiary, orchestrators’ ability to engage in self-care or care for others (besides the referent beneficiary) may reduce. Therefore, this study extends Berry and Bendapudi’s (2007) finding that enabling the physical well-being of patients impacts their caregivers to also include family members who orchestrate their care.

Financial well-being—Oscillating experiences of enrichment and impoverishment
Nonreferent and referent beneficiaries’ experiences of orchestration and financial well-being oscillated between enrichment and impoverishment. These oscillations occurred when orchestrators incurred a financial loss to ensure the (financial) needs of the referent beneficiary were met or, when paid, formal care was replaced by unpaid, family-provided care. As orchestration necessitated the reallocation of resources, especially time and the social and physical presence of the orchestrator, orchestrators experienced impoverishment, since these resources could not be used for other purposes (e.g., employment, career development, or earning a pension).

As outlined in Table 3, Andrew experienced significant deterioration in his financial circumstances due to orchestrating his father’s care. He claimed that “financially, I’ve destroyed myself” by giving up full-time, paid employment to provide care for his father full time. It was not until he lobbied health-care professionals (brokering) that he finally secured government funding to relocate his father to a home and ensure that “his care needs are secured for the duration of his life” (Andrew). However, over the long term, Andrew’s orchestration of care for
his father led him to be unable to afford a house of his own, which negatively impacted his financial and mental well-being:

_I’ve consigned myself to a life of poverty... what was I thinking? You know. So, I lost something huge.... I’m unlikely to ever own my own home. I’ll be living on very little money if I’m paying rent._ (Andrew)

In other words, orchestration ultimately led to oscillating financial well-being for Andrew and his father. Andrew experienced financial impoverishment, while his father’s financial status was enriched as his care needs were fully subsidized for the remainder of his life.

Orchestration often retrospectively resulted in enriched financial well-being for the state (nonreferent beneficiaries with nonrelative ties) when care was primarily provided by caregivers in the home. This reduced the financial cost of care provided by residential homes and hospitals; orchestrators became unpaid social care resources, replacing or augmenting available private and public care support and professionals in service systems:

_The government is saving so much by the caregivers who work from home, as opposed to government-funded care, which takes over after three years if you are paying the full whack. If you can’t afford to pay the full whack, the government pays it anyway, so the cheaper option is the home care provision._ (Niamh)

In summary, oscillating relational value (i.e., emotional, social, physical, and financial well-being) emerged from orchestration. Specifically, the well-being of interdependent actors oscillated from positive to negative as a result of orchestration that prioritized positive outcomes (i.e., emotional gain, social connection, physical strength, and financial enrichment) for the referent beneficiary. In contrast, negative well-being outcomes (i.e., emotional loss, social isolation, physical deterioration, and financial impoverishment) were experienced by nonreferent beneficiaries, particularly primary orchestrators. Rather than involving reciprocity, self-interest, and mutual exchange (Fitzpatrick et al. 2015; Vargo and Lusch 2016), relational value involved direct displacement of value from (co-)orchestrators to referent beneficiaries. While, in some cases, the orchestrator experienced positive emotional and social value outcomes, frequently, negative physical and financial outcomes resulted in an overall loss in relational value. However, the state was enriched or benefited as part of the wider service system, as it did not have to publicly fund or provide formal care for ill individuals; the family orchestrated resources and shouldered the emotional, social, physical, and financial costs.

Discussion

Adopting a relational perspective, this article details how multiple interdependent actors coordinate value cocreation in service systems and how this impacts value. By revealing how referent and nonreferent beneficiaries constitute and are constituted through orchestration and by distinguishing their agency to cocreate value, our study makes three main contributions to the literature. First, we theoretically and empirically characterize the orchestration of relational value cocreation and value among interdependent nonreferent and referent beneficiaries in service
systems, challenging the notion that value creation is based on mutually beneficial exchange and self-interest (Fitzpatrick et al. 2015; Vargo and Lusch 2016). Second, through differentiating and delineating three nonreferent beneficiary-led orchestration mechanisms (assembling, performing, and brokering), we reveal how the absence and presence of resources and/or nonreferent beneficiaries are central to the orchestration and/or obstruction of value cocreation for and with referent beneficiaries. Third, we characterize the multiform, beneficiary-interdependent nature of relational value as oscillating social, emotional, physical, and financial well-being outcomes, thus revealing the entwinement of referent and nonreferent beneficiary value in service systems. We examine each contribution in detail next.

Our first contribution is a theoretical and empirical extension of orchestration to include how nonmarket-facing social actors orchestrate value cocreation on behalf of dependent referent beneficiaries in service systems. We build on the earlier firm-centric concepts of orchestration and service orchestrators, which involved the way in which case workers in health-care settings coordinated referent beneficiaries (patients) to optimize coproduction outcomes (Breidbach, Antons, and Salge 2016). Specifically, we outline how nonreferent beneficiaries, or orchestrators (in our study, family caregivers), exercise agency to actively leverage resources and enable value cocreation on behalf of referent beneficiaries outside the traditional confines of the service–supplier and patient–supplier dyads in service systems.

Orchestration among social actors in families is underpinned by the logic of generalized exchange or mutuality. This is based on kinship ties and intergenerational time (see Arnould and Rose 2016), which create a mutual history, present, and future for cocreation. For this reason, relations and interactions among orchestrators and dependent referent beneficiaries are not just reciprocal but are shared and thus become socially endogenous to the service system. We reveal that a balance between giving and receiving is not necessarily achieved through current service-for-service exchanges between persons but may take place intergenerationally among interdependent social actors over time. In contrast, service coproduction that is led by market-facing actors (Spanjol et al. 2015; Vennik et al. 2016), who prioritize medical organizational, economic, and other value outcomes that impact immediate medical treatment (Breidbach, Antons, and Salge 2016), tends to focus on shorter term, depersonalized, and service-for-service exchanges. Also, service systems that focus on contemporaneous and often immediate value outcomes involve extant characterizations of mutual reciprocity (Bagozzi 1995; Merz, He, and Vargo 2009) and balanced centricity (Gummesson 2008).

Drawing upon the metaphor of the kaleidoscope, which reveals an everchanging, shifting view, we reveal the “dark side” of value orchestration: value obstruction. We extend recent TSR studies, which highlight that differentiated/unequal access to resources may constrain value cocreation and impact vulnerability (cf. Black and Gallan 2015; Rosenbaum, Seger-Guttmann, and Giraldo 2017). In our study, value obstruction resulted when orchestrators were absent or unavailable and/or intentionally disassembled or withheld resources to cocreate value on behalf of referent beneficiaries. This process intentionally or unintentionally led to value codestruction. However, in contrast to prior research, which limits value codestruction to a negative outcome of resource integration among interdependent actors (Skålén, Aal, and Edvardsson 2015), our findings revealed a more latent, albeit sustained, form of codestruction, when the absence of actors and/or resources obstructed the orchestration of positive value by nonreferent beneficiaries.
for referent beneficiaries. We thereby empirically extend Plé and Chumpitaz Cáceres’s (2010) theoretical position that congruent expectations among actors regarding the way in which available resources should be used during their interactions lead to value cocreation, while incongruent expectations lead to value obstruction and codestruction. In contrast with family orchestration in other settings, where tensions are resolved by cocreating family solutions (Epp and Price 2008; Epp and Velagaleti 2014), we reveal how both orchestration and obstruction led to oscillating, interdependent, and contemporaneous positive and negative relational value outcomes. Our findings empirically address how “notions of co-creation and co-destruction should be viewed conceptually as representing a value variation space rather than as being dichotomous or mutually exclusive” (cf. Cabiddu, Moreno, and Sebastiano 2019, p. 1).

Our second contribution addresses the call “to advance the theoretical study of service orchestration […] by exploring the micro practices and specific tools of service orchestration” (Breidbach, Antons, and Salge 2016, p. 472) and how those resources contribute to the service system. Our findings reveal that the absence and presence of resources to cocreate relational value required orchestrators to “become” social resources through an ongoing commitment of time and effort to assemble, perform, and broker on behalf of referent beneficiaries. In contrast to earlier research, which claims that market actors or orchestrators merely manage resources for coproduction (Breidbach, Antons, and Salge 2016; Epp and Price 2011), we generate further insight into how interdependent actors’ resources emerge and how the system itself “becomes” in and through orchestration.

Our study demonstrates how interdependent, value cocreating actors change and are changed by the orchestration of value cocreation over time in ways akin to the everchanging arrays of a kaleidoscope. Thus, we build upon Price and Epp’s (2016) assertion that the relations and capacities of human and nonhuman constituents of service systems are contingent upon each other and are continuously unfolding. Through differentiating and delineating the three orchestration mechanisms—assembling, performing, and brokering—we empirically demonstrate how “systems of service exchange are continually being formed and reformed through the enactment of practices” (Vargo and Akaka 2012, p. 211), partially resembling the management and organization practices that firms employ to craft and cocreate value propositions between firms and customers. However, while cocreating value propositions enables “the maximal utilization of the firm’s knowledge and skills, allowing it to interact with other parties” (Skålén, Gummerus, von Koskull and Magnusson 2015, p. 153), our findings reveal how social, nonmarket actors in the form of nonreferent beneficiaries engage in these co-orchestration practices. Specifically, they access the resources of other (social) actors, often outside the relatively stable health-care system, to optimize value for referent beneficiaries. In this way, the actors expand the access and availability of resources for referent beneficiaries—and indeed the service system itself—both by “becoming” resources and by engaging in practices that shape and are shaped by the service system, its institutions, and its institutional arrangements. Even so, while the system may become denser and richer when orchestrators integrate resources, such system adjustments may take place at the expense of referent and nonreferent beneficiaries, resulting in oscillating well-being outcomes.

Our third contribution is our characterization of the interdependent and oscillating nature of relational value for both nonreferent and referent beneficiaries. While SD logic states that
systemic value cocreation is inherently relational (Vargo and Lusch 2016, p. 8), it does not define the nature of relationality. Implicitly, at the microlevel, relationality seems to refer to primarily static or fixed dyadic actors who interact to cocreate value from an economic perspective. Hence, beneficiaries are explicitly and implicitly understood as referent beneficiaries (Vargo and Lusch 2016). In contrast, in taking a relational perspective on value cocreation, our study recognizes how shared sociality and generalized mutuality (as outlined above) come into play with regard to the integration of resources in caregiving. It also provides empirical support for the theoretical assertion that generalized mutuality influences the “normative expectation of how actors in a given situation ought to behave, it guides future interactions and develops broadening networks” (Arnould and Rose 2016, p. 11). We expand the characterization of relationality in service systems beyond dyadic interactions, revealing that both value and orchestration are relational in nature. Whereas firm-led service orchestrators (cf. Breidbach, Antons, and Salge 2016) must rely on short-term exchanges based on laws or service processes, contracts (i.e., relative ties) between orchestrators and co-orchestrators are based on social norms, expectations, and shared sociality among actors. Hence, our kaleidoscopic relational perspective begins to reveal how orchestration and institutions interrelate and how orchestrators, orchestration, and relational value impact institutional arrangements and expectations in service systems over time.

Our findings reveal that not only orchestration but also value has a “dark side” (i.e., value obstruction). While value cocreation research has predominantly focused on positive value outcomes, there has been increased focus on negative value outcomes and value codestruction (cf. Echeverri and Skålén 2011; Skålén, Aal, and Edvardsson 2015; Spanjol et al. 2015). Indeed, few TSR studies have examined both the positive and negative impacts of value cocreation on well-being (Anderson and Ostrom 2015). In contrast, our findings outline how interdependent beneficiaries experienced physical, emotional, social, and financial well-being across kaleidoscopic, intersecting continua that oscillated between positive and negative poles (i.e., value for a referent beneficiary in one dimension might be detrimental for a nonreferent beneficiary in that or another dimension). Well-being outcomes ranged from strength to deterioration (physical well-being), gain to loss (emotional well-being), connection to isolation (social well-being), and enrichment to impoverishment (financial well-being) and were dynamically and retrospectively reevaluated over time. However, the relational nature of both orchestration and value presented a paradox that impacted ongoing and future orchestrations in service systems. Relationality is created by the interwoven relations and the resource-depleting impact of dependent referent beneficiaries’ deteriorating health on the system. When orchestrators’ physical, emotional, social, and financial well-being deteriorated so much that they could no longer care for their dependent relatives, they had no choice but to broker external resources, enroll other orchestrators, and/or abdicate their orchestration role. These findings contrast with those of Mele et al. (2018), who suggest that agency’s “dark side” is that actors may deliberately seek benefits for themselves at the cost of other actors and the system’s viability. Our findings suggest that intention to harm others may not be present during value obstruction; rather, orchestrators may desire or need to balance personal, relational, and collective well-being and/or improve relational value outcomes for themselves, other co-orchestrators, and relational beneficiaries, making value obstruction unavoidable. This, we argue, is similar to the fact that relational value necessarily produces both negative and positive
outcomes when value obstruction, the relational opposite of orchestration, is endogenous in service systems.

Managerial Implications and Future Research Directions

Our study has important implications for service managers and practitioners. We extend the concept of service orchestration (Breidbach, Antons, and Salge 2016) to include nonbeneficiary-led orchestration, deepening service practitioners’ understanding of how social actors, either separate from or in relation to market actors, orchestrate value for dependent beneficiaries. These beneficiaries may include underaged children; physically or mentally frail individuals, friends, and neighbors; and pets. Our findings show how those involved in orchestration for vulnerable, dependent referent beneficiaries or those within relational units, such as families, are central for understanding value cocreation in service delivery and service systems.

Familial orchestration is, in our view, a prevalent phenomenon that ranges from the mundane (such as childcare or carpooling) to transitional (e.g., education planning, fostering, or downsizing) to the extraordinary (special celebrations and vacation planning, as highlighted by Epp and Price [2008]). Specifically, familial orchestration influences family decision-making since it calls for negotiations within the family as to whose well-being is prioritized during cocreation. Our findings raise further questions about resource allocation and access in service systems that may, in fact, require defining the family unit and identifying who belongs in the first place.

Orchestration may entail challenges if the family disintegrates or orchestration ceases suddenly, if several orchestrators start competing with each other, or if the oscillating value outcomes conflict or decrease beyond what is tolerable for any actor. Service providers can leverage familial orchestration by identifying and targeting orchestrators and developing value propositions that enable flexibility between orchestrators’ and other nonreferent beneficiaries’ resource integration, as well as by creating communication channels that allow multi-actor interaction and information exchange.

Our findings regarding orchestration extend beyond health and social care to a broad range of complex service systems, including education, consultation, user-driven and open innovation, public services, and social robotics, which necessitate sustained optimization of interactor resources and value cocreation. Distinguishing between the assembling, performing, and brokering mechanisms of orchestration helps service organizations support nonbeneficiary-led orchestration and the coordination of resource integration among multiple interdependent actors over time. Furthermore, recognition of the interrelations among different orchestration mechanisms and relational value outcomes may decrease the negative impact of orchestration for orchestrators and improve value outcomes in the overall service system (Vargo and Lusch 2016).

Our findings highlight how the absence or presence of resources in service systems lead nonreferent beneficiaries to individually or collectively spontaneously aggregate to configure resources or address resource gaps in the wider system. Sustained and sustainable management of scarce resources have important implications for orchestration beyond health and social care for many other complex service systems, including global supply change and agricultural and city planning, and can help ensure the renewal of marine and other ecosystems through the provision of ecosystem services.
Our findings also have important implications for service providers, public policy makers, and state-level actors charged with optimizing coproduction in health-care systems. While traditional notions of service coproduction (e.g., Bendapudi and Leone 2003; Lengnick-Hall 1996) prioritize the integration of patients into provider-led processes to augment service design and quality outcomes (e.g., Payne, Storbacka, and Frow 2008), outcomes may not always align with referent beneficiaries’ or orchestrators’ desired value, for example, care provided for as long as is practical or feasible in the home. While previous research in the specific context of health and social care has studied the coordination mechanisms in which patients engage, such as partnering, team management, pragmatic adapting, passive compliance, and insular controlling (McColl-Kennedy et al. 2012), and those in which service employees, such as case managers, engage (Breidbach, Antons, and Salge 2016), our study highlights that which family member should orchestrate or coordinate certain tasks, such as power of attorney and financial transactions on behalf of relatives, is not always clear or agreed upon within the family. Cases of reluctant orchestration may also occur when one feels obliged to care for a divorced or difficult partner or an estranged or abusive relative, which may adversely impact coproduction and indeed cocreation possibilities and be particularly detrimental for the orchestrator’s well-being.

Finally, while it seems beneficial for orchestrators to be collaborators in service systems from a firm-led orchestration or coproduction perspective, at the individual or societal levels, the costs of this may be significant, as orchestrators’ resources become depleted. Indeed, examples such as brokering depend on the skills and energy of the service orchestrator as, our findings suggest, resource allocation within service systems, such as health care, may be biased toward patients with capable orchestrators, likely leaving others (i.e., lone patients) in a far weaker position. Hence, the latter patients suffer twice: first, due to a lack of social support from family members, and second, due to a lack of service orchestrators. As orchestrators within families often prioritize the well-being of dependent relatives above their own, which impacts all family members by affecting, for example, childcare, who works, when and for how long, and where the family is located (e.g., near relatives, schools or employers), service organizations need to acknowledge and recognize the relational and collective as well as individual goals of family members when designing family support systems and service offerings (cf. Epp and Price 2008). In the specific context studied here, family caregivers could be supported through physical, emotional, social, and financial resilience programs to avoid burnout. Specialized initiatives, including “caring for the caregiver” programs, health and well-being training, social events, and networking, in conjunction with programs providing practical knowledge and skills about financial management, opportunities to return to work, and retirement planning, are fundamental to coping with and transitioning from care in the long term and, ultimately, sustaining social care systems and optimizing relational value for interdependent actors over time.

Future research could identify which orchestration mechanisms require which resources, which resource configurations are transferable across actors, and how social actors “become” or “unbecome” resources for value cocreation. This would be useful not only in service systems dominated by social-actor-led value cocreation, like those mentioned, but also in situations involving technology-led orchestration. Future research on technology-led orchestration by, for example, virtual personal assistants (e.g., Amazon Echo), Internet of Things applications in smart homes, and driverless cars, could use real-time data and dynamic-dependent referent beneficiary feedback for improved analysis of the efficiency of resource use. Such research could
also expedite and optimize the brokering of tailored service system interventions while balancing well-being outcomes such as personal security and data protection in relation to the use and storage of personal data, in addition to emotional and social well-being. Further, in line with the view that empathetic and intuitive tasks are more difficult to transfer to technological agents than mechanical and analytical tasks (Huang and Rust 2018), future research could investigate where and when private social orchestrators can identify, access, and configure resources in complex social systems better than technology-led service orchestrators.

Acknowledgements
The first author gratefully acknowledges the financial support of the Irish Research Council (IRC) New Foundations program for this study. The authors gratefully acknowledge the anonymous informants who collaborated with this study and generously shared their experiences in family caregiving, as well as the three participant caregiver representative associations. Finally, the authors would like to thank the two anonymous reviewers, the assistant editor, and editor for their generous feedback and substantial help in shaping the article.

Declaration of Conflicting Interests
The author(s) declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Irish Research Council (New Foundations Program).

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Supplemental Material
Supplemental material for this article is available online.
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