

1	CHAPTER
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New Directions for Relational Coordination Theory

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6 Abstract

7 Relational coordination theory makes visible the humanistic process underlying the technical process of
 8 coordination, arguing that coordination encompasses not only the management of interdependence
 9 between tasks but also between the people who perform those tasks. This chapter introduces relational
 10 coordination theory, then proposes five potential directions for its further development, each of which
 11 deepens the contribution of the theory to positive organizational scholarship. The first proposed direction is
 12 to develop the social psychological foundations of relational coordination theory, placing it more firmly into
 13 the context of relational theory. The second is to extend relational coordination theory from its focus on
 14 role relationships to include personal relationships and to explore the interplay between them. Third is to
 15 broaden relational coordination networks beyond the core workers who have typically been considered, to
 16 include multiple other participants: so-called *noncore workers* who nevertheless play key supporting roles in
 17 the work process, the customer herself as a key participant in the work process, and participants outside
 18 the focal organization who are involved in the same supply chain. Fourth is to extend the theorized
 19 outcomes of relational coordination beyond outcomes for the organization and its customers to include
 20 outcomes for workers as well. The fifth proposed direction is to go beyond the linear model of
 21 organizational change implicit in relational coordination theory and to consider a more dynamic and iterative
 22 model of change. These new directions will be previewed briefly in anticipation of their future development.

23 **Keywords:** Relationships, communication, coordination, relational coordination

24 Positive organizational scholarship (POS) is a human-
 25 istic approach to the study of organizations, empha-
 26 sizing the importance of subjectivity, intersubjectivity,
 27 and meaning at work (Cameron, Dutton, & Quinn,
 28 2003). Relational coordination theory contributes
 29 to POS by offering a theory of coordination that
 30 makes visible the humanistic process underlying the
 31 technical process, arguing that coordination encom-
 32 passes not only the management of interdependence
 33 between tasks (Malone & Crowston, 1994) but also
 34 the management of interdependence between the
 35 people who perform those tasks. The theory reveals
 36 the intersubjectivity of the coordination process,
 37 therefore paying close attention to the quality of com-
 38 munication and relationships among participants,
 39 as well as to the technical requirements of the work.

This theory shares common threads with other inter-
 subjective or relational approaches to the coordination
 of work (Bechky, 2006; Faraj & Sproull, 2000; Faraj
 & Xiao, 2006; Gittell, 2002b; Heckscher, 1994;
 Heckscher & Adler, 2006; Quinn & Dutton, 2005;
 Weick & Roberts, 1993) but differs in several impor-
 tant ways.

First, relational coordination theory starts by
 conceptualizing coordination as occurring through a
 network of relational and communication ties among
 participants in a work process, where a work process
 is a set of interdependent tasks that transforms inputs
 into outcomes of value to the organization. Second,
 this theory identifies three distinctive dimensions of
 relationships—shared goals, shared knowledge, and
 mutual respect—that together are argued to underlie

1 the effective coordination of work. Third, these
 2 dimensions are conceived as existing between work
 3 roles rather than between individual participants.
 4 Fourth, the theory explains how relational forms of
 5 coordination influence quality and efficiency out-
 6 comes, and how this influence is weaker or stronger
 7 depending upon the nature of the work. Fifth, and
 8 finally, the theory explains how formal organizational
 9 structures can be designed to support relational
 10 forms of coordination, rather than suggesting that
 11 formal structures are necessarily substitutes or
 12 impediments to relational coordination. Despite
 13 providing a unique perspective on coordination,
 14 and despite promising results of empirical testing
 15 thus far (as well as perceived usefulness to multiple
 16 practitioner communities), the theory of relational
 17 coordination remains at an early stage of development.
 18 This chapter describes these theoretical propositions
 19 at greater length, then proposes five new directions
 20 for its further development.

21 **Relational Coordination Theory**

22 Mary Parker Follett appears to be the first theorist to
 23 have proposed a relational theory of coordination.
 24 She accepted the then-prevalent argument that the
 25 primary function of organizations was to coordinate
 26 work. She argued uniquely, however, that coordina-
 27 tion at its most effective was not a mechanical process
 28 but rather a process of continuous interrelating
 29 between the parts and the whole. In her words:

30 It is impossible . . . to work most effectively at
 31 coordination until you have made up your mind where
 32 you stand philosophically in regard to the relation of
 33 parts to wholes. We have spoken of the relation of
 34 departments—sales and production, advertising, and
 35 financial—to each other, but the most profound truth
 36 that philosophy has ever given us concerns not only the
 37 relation of parts, but the relation of parts to the whole,
 38 not to a stationary whole, but to a whole a-making.
 39 (Follett, 1949, p. 91)

40 Consistent with Follett's argument, Thompson
 41 (1967) later suggested that coordination as a process
 42 of reciprocal relating, or "mutual adjustment," can
 43 indeed be beneficial. But he offered a contingency
 44 argument, suggesting that this is true only when
 45 tasks are reciprocally interdependent, or in other
 46 words, when outcomes from one task feed back
 47 and create new information for participants who
 48 are performing related tasks (Thompson, 1967).
 49 Moreover, Thompson saw mutual adjustment as
 50 playing a limited role in organizations. Because
 51 mutual adjustment is prohibitively costly, he argued,

coordination more commonly occurs through coord- 52
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Since then, the nature of work has changed. 55
 Work is characterized by increasing levels of task 56
 interdependence, uncertainty, and time constraints, 57
 expanding the relevance of mutual adjustment beyond 58
 what Thompson originally foresaw and forcing the 59
 exploration of coordination as a relational process. 60
 Organizational scholars have responded by devel- 61
 oping relational approaches to coordination that 62
 build on Follett's concept of coordination, including 63
 the concepts of sense-making (Weick & Roberts, 64
 1993), expertise coordination (Faraj & Sproull, 65
 2000; Faraj & Xiao, 2006), coordination as energy-in- 66
 conversation (Quinn & Dutton, 2005), role-based 67
 coordination (Bechky, 2006), and collaborative 68
 community (Heckscher, 1994; Heckscher & Adler, 69
 2006). As part of this stream, relational coordination 70
 theory has sought to extend Follett's work by offer- 71
 ing a unique way to conceptualize the relational 72
 dynamics of coordination, its expected outcomes, 73
 and its structural predictors. 74

First, the theory of relational coordination specifies 75
 the nature of relationships through which coordination 76
 occurs, proposing that these relationships include 77
shared goals that transcend participants' specific 78
 functional goals, *shared knowledge* that enables partici- 79
 pants to see how their specific tasks interrelate with 80
 the whole process, and *mutual respect* that enables 81
 participants to overcome the status barriers that pre- 82
 vent them from seeing and taking account of the work 83
 of others. Together, these three relational dimensions 84
 reinforce and are reinforced by communication that 85
 is frequent, timely, accurate, and problem-solving. 86
 For example, knowledge of what each participant 87
 contributes to the overall work process enables him or 88
 her to communicate in a timely way with participants 89
 in other functions, grounded in an understanding 90
 of who needs to know what, why, and with what 91
 degree of urgency. Shared knowledge also enables 92
 participants to communicate with each other with 93
 greater accuracy due to knowing not only their own 94
 specific tasks but also how their tasks relate to the 95
 tasks of participants in other functions. Shared goals 96
 increase participants' motivation to engage in high- 97
 quality communication, as well as increasing the 98
 likelihood that they will resort to problem-solving 99
 communication rather than blaming when things go 100
 wrong. Mutual respect increases the likelihood that 101
 participants will be receptive to communication 102
 from their colleagues in other functions, irrespective 103
 of their relative status, thus increasing the quality of 104

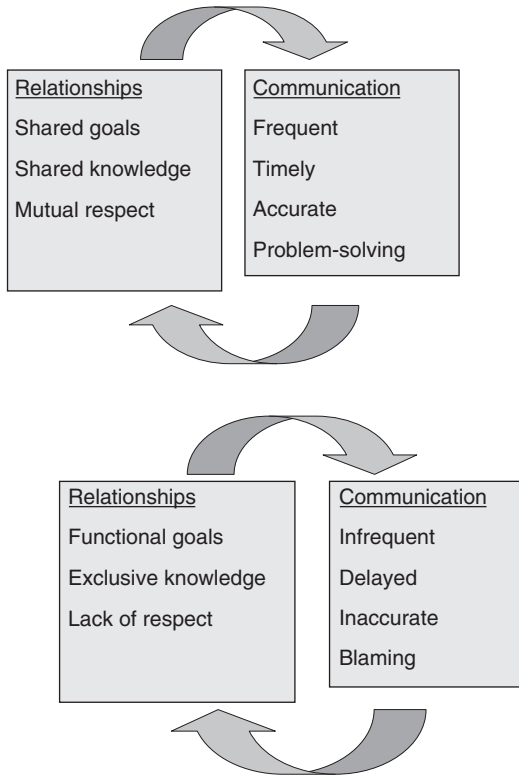


Fig. 30.1 Relational coordination as a mutually reinforcing cycle of relationships and communication.

1 communication, given that communication is a function of what is heard as well as what is said. Relational
 2 coordination is therefore defined as “a mutually reinforcing process of interaction between communication and relationships carried out for the purpose
 3 of task integration” (Gittell, 2002a, p. 301), as illustrated in Figure 30.1. Together, these mutually reinforcing relationship and communication ties form
 4 the basis for coordinated collective action (Gittell, 2006).
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 11 Second, consistent with Follett’s thinking about the relational approach to coordination, the relational dimensions of relational coordination are not
 12 personal relationships of “liking” or “not liking” but rather are task-based relationship ties. They are conceptualized as ties between work roles, rather than
 13 personal ties between discrete individuals who inhabit those work roles. We will revisit this aspect of the theory when we propose new directions for
 14 further theoretical development.
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 21 Third, the theory of relational coordination extends Follett’s work and subsequent work on relational forms of coordination by exploring *how* this
 22 approach to coordination is expected to impact performance. Follett proposed that a relational approach
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26 to coordination is more *effective* than more mechanistic approaches, but the theory of relational coordination proposes specifically that both quality and
 27 efficiency outcomes can be improved simultaneously, moving beyond the tradeoffs between quality and efficiency that are typically found, by enabling
 28 participants to achieve better results for customers while engaging in less wasteful and more productive utilization of resources. How? In contrast to the traditional
 29 bureaucratic form of coordination that is carried out primarily by managers at the top of functional silos, relational coordination is carried out via
 30 direct contact among workers at the front line, through networks that cut across functional silos at the point of contact with the customer. Relational
 31 coordination thus improves performance of a work process by improving the work relationships between people (shared goals, shared knowledge, mutual
 32 respect) who perform different functions in that work process, leading to higher-quality communication. Task interdependencies are therefore managed more
 33 directly, in a more seamless way, with fewer redundancies, lapses, errors, and delays.
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49 But this performance argument is not universalistic—rather, it is a contingency argument. Again going beyond Follett’s conceptualization, relational
 50 coordination theory builds on information processing and contingency theories by arguing that relational forms of coordination are particularly useful for
 51 achieving desired performance outcomes under conditions of reciprocal interdependence (Thompson, 1967), task and input uncertainty (Argote, 1982;
 52 Galbraith, 1972), and time constraints (Adler, 1995). When tasks are reciprocally interdependent, feedback loops are created among them, therefore
 53 increasing the need for relational coordination to enable participants to mutually adjust their actions in response to the outcomes of each others’ tasks.
 54 Furthermore, when task and/or input uncertainty is high, relational coordination becomes more important for enabling participants to adjust their
 55 activities with each other “on the fly,” as new information emerges in the process of carrying out the work. Finally, as time constraints increase, as in
 56 high-velocity environments, relational coordination becomes more important for enabling participants to adjust their actions rapidly in response to each
 57 other and newly emergent information, without wasting additional time referring problems upward for resolution.
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76 Relational coordination theory extends Follett’s work and subsequent theory in one final way, by arguing that, although relational forms of coordination can
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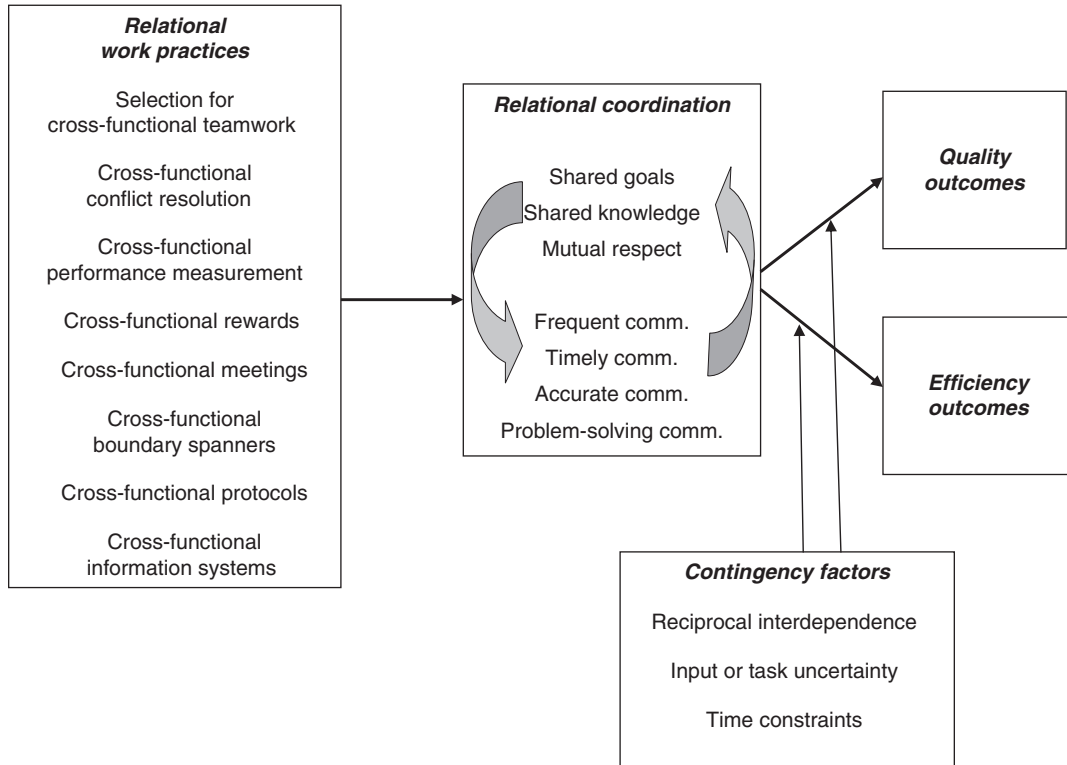


Fig. 30.2 Structure/process/outcomes model of relational coordination.

1 and do emerge spontaneously from the actions of
 2 individual actors, they are also fundamentally shaped
 3 by organizational structures. In organizations with
 4 traditional bureaucratic structures that tend to rein-
 5 force functional silos, relational networks are expected
 6 to exhibit strong ties within functions and weak ties
 7 between functions, resulting in fragmentation and
 8 poor handoffs among participants at the front line of
 9 production or service delivery. By contrast, in organi-
 10 zations with structures that cut across functional silos
 11 (structures that include, for example, selecting par-
 12 ticipants for cross-functional teamwork, measuring
 13 and rewarding participants for cross-functional
 14 teamwork, resolving conflicts proactively across func-
 15 tions, developing work protocols that span functional
 16 boundaries, designing jobs with flexible boundaries
 17 between areas of functional specialization, and
 18 designing boundary spanner roles to support the
 19 development of networks across functional boundar-
 20 ies), relationship and communication networks are
 21 expected to be more cohesive. These cross-cutting
 22 structures represent a redesign of traditional bureau-
 23 cratic structures, and together they constitute a rela-
 24 tional work system that strengthens cross-functional
 25 networks of relational coordination without sacrific-
 26 ing the benefits of the division of labor.

Together, these extensions of Follett’s relational 27
 approach to coordination suggest a structure/pro- 28
 cess/outcomes model in which relational modes of 29
 coordination represent the process component; qual- 30
 ity and efficiency performance represent the outcomes 31
 component moderated by task interdependence, 32
 uncertainty, and time constraints; and relational 33
 work practices represent the structure component. 34
 (See Figure 30.2 for an illustration.) This theory thus 35
 departs from information processing and organization 36
 design theories, which have tended to argue that 37
 networks *replace* formal organizational practices as 38
 information processing demands increase (Argote, 39
 1982; Galbraith, 1972; Tushman & Nadler, 1978), 40
 and post-bureaucratic theory, which argues more 41
 universally that bureaucratic structures are *replaced* 42
 with networks in the ideal post-bureaucratic organi- 43
 zation (Heckscher, 1994). By contrast, relational 44
 coordination theory calls for the redesign rather 45
 than the replacement of formal structures, specifi- 46
 cally redesigning these structures to reinforce and 47
 strengthen relational processes across functional 48
 boundaries, where they tend to be weak (Gittell, 49
 Seidner, & Wimbush, 2010). In so doing, relational 50
 coordination theory contributes to high-performance 51
 work systems theories, proposing—along with Leana 52

1 and Van Buren (1999), Collins and Clark (2003), Evans
2 and Davis (2005), Vogus (2006), and others—a type of
3 high-performance work system that strengthens
4 employee–employee relationships, distinct from but
5 potentially complementary to the high-performance
6 work systems that reinforce employee commitment
7 to the organization, or that build individual employee
8 knowledge and skills.

9 Although relational coordination theory is at a
10 relatively early stage of development, it has received
11 a fair amount of empirical support. Findings thus
12 far suggest that relational coordination is an empiri-
13 cally coherent concept that meets standards of both
14 internal and external validity. Furthermore, findings
15 thus far suggest that the strength of relational coordi-
16 nation ties among participants in a work process
17 predict an array of quality and efficiency outcomes
18 that are of strategic importance to organizations
19 (e.g., Gittell, 2001; Gittell et al., 2000; Gittell,
20 Weinberg, Bennett, & Miller, 2008; Gittell,
21 Weinberg, Pfefferle, & Bishop, 2008; Weinberg,
22 Lusenhop, Gittell & Kautz, 2007). The contingency
23 hypotheses in relational coordination theory have
24 been explored to a more limited extent, with initial
25 findings suggesting that the performance effects of
26 relational coordination increase as input uncertainty
27 increases (Gittell, 2002b). The hypothesized predictors
28 of relational coordination have also received empirical
29 support, with evidence suggesting that cross-cutting
30 formal organizational structures do indeed increase
31 the strength of relational coordination ties as
32 reported by participants (Gittell, 2002a,b, 2002b;
33 Gittell, Seidner, & Wimbush, 2010; Gittell,
34 Weinberg, Bennett, & Miller, 2008).

35 Although further empirical testing is under way,
36 the theory itself is also in need of further develop-
37 ment. Accordingly, the following section proposes
38 five directions for further development of relational
39 coordination theory.

40 **New Directions for Relational** 41 **Coordination Theory** 42 *Building the Social Psychological Foundations* 43 *of Relational Coordination Theory*

44 Relational coordination theory is relatively unique in
45 specifying the relational dimensions of coordination—
46 shared goals, shared knowledge, and mutual respect—
47 and specifying how these relational ties reinforce
48 and are reinforced by communication ties to enable
49 the effective coordination of work. But one promising
50 new direction for relational coordination theory is
51 to explore more deeply its relational underpinnings,
52 returning to social psychological theories that posit

the self as a self-in-relation, then connecting those 53
underpinnings in a coherent way to the organiza- 54
tional phenomenon of coordination. 55

Theorists as early as Follett (1924) have argued 56
that relationships are the fundamental building block 57
of human identity. “Reality is in the relating,” argued 58
Follett, “in the activity between” (p. 36). Furthermore, 59
when we consider “the total situation,” we come 60
face to face with the “possible reciprocal influence of 61
the subject and object” (p. 37). Through this recip- 62
rocal influence, or what she calls a circular response, 63
“we are creating each other all the time” (p. 41). 64
Elaborating the argument, she claims further that 65
“I can never influence you because you have already 66
influenced me; that is, in the very process of meeting, 67
by the very process of meeting, we both become 68
something different” (p. 42). 69

Consistent with Follett, Buber (1937) argued 70
that the self is always by necessity constructed as a 71
“self-in-relation,” meaning that the human subject is 72
defined through its relationships with other subjects. 73
Based on this argument, Buber challenges the Cartesian 74
foundations of Western ontology, in essence replacing 75
“I think, therefore I am” with “I relate, therefore I am.” 76
Freud (1930) also gives primacy to relationships, but 77
treats the broken relationship as the starting point 78
for the human condition, arguing that “a primary 79
separation [of infant from mother], arising from 80
disappointment and fueled by rage, creates a self 81
whose relations with others or ‘objects’ must then be 82
protected by rules, a morality that contains this 83
explosive potential” (p. 46). He points to an urge 84
toward union with others, and calls it *altruism*, a 85
replacement for or perhaps a return in a more lim- 86
ited way to the “oceanic feeling” that is left behind 87
on the path to moral development. Connection 88
thus appears central to civilized life. 89

Miller (1976) transformed the psychology of 90
human development by questioning the Freudian 91
conception of human development as revolving 92
around individuation and separation. She theorized 93
that this conception is rooted in the male experience, 94
and is one that either ignores the female experience 95
or interprets the female experience as an anomaly or 96
a lack of full development. The prototypical devel- 97
opmental path, when considered from the stand- 98
point of the female experience, is growth through 99
connection, rather than growth through separation. 100
Miller argued that the one-sided view of develop- 101
ment ignores the reality that the human subject, and 102
our notion of individuality, is itself socially embedded, 103
meaning that individuation itself occurs through 104
mutual recognition by other human subjects. 105

1 Furthermore, Miller argues, life is possible only through
2 connection with others, starting with the mother at
3 birth. We are, therefore, relational by nature.

4 Building on Miller's argument, Mitchell (2000)
5 argued that attachment and relationality are so fun-
6 damental to the human condition that, contrary to
7 dominant psychological theories, a concept of drive
8 is not necessary to explain them. "To argue that we
9 need a concept of drive to describe what the indi-
10 vidual seeks in interactions with other people pre-
11 sumes that the individual qua individual is the most
12 appropriate unit of study. It assumes that the indi-
13 vidual, in his or her natural state, is essentially alone,
14 and then is drawn into interaction for some purpose
15 or need" (p. 105). "To define humans as relational is
16 quite different from specifying object-seeking as a
17 specific drive. . . . It is simply what we are built to
18 do, and we do it without intentionality" (p. 106).

19 The common thread among these theorists is
20 that relationships are fundamental to the life experi-
21 ence and identity of human beings. But what
22 insights, if any, can we gain from these theorists
23 regarding the role that relationships play in the
24 coordination of work? It appears that Follett was the
25 first to attempt to connect the relational nature of
26 human identity to the coordination of work. Follett's
27 writings suggest that a relational understanding of
28 human identity is somehow connected to a rela-
29 tional understanding of coordination. Just as human
30 identity and causality are characterized by reciprocal
31 influence, so too is coordination. Coordination,
32 Follett argued, is most effective when it occurs
33 through mutual adjustment among the factors of a
34 situation, starting early and continuing throughout
35 the process. What is the rationale behind this
36 intriguing parallel that Follett has identified between
37 the relationality of human identity, relationality of
38 the nature of causality itself, and relationality of the
39 coordination of work? Are these simply analogous,
40 or is there something more?

41 Other organizational theorists have drawn impor-
42 tant insights from social psychological arguments
43 regarding relationality, and over the past decade
44 have begun increasingly to apply the concept of
45 relationality to organizational life. Fletcher (1999)
46 introduced the concept of relational practice, arguing
47 that it tends to be "disappeared" from organizational
48 discourse and reward structures due to our tendency
49 to relegate it to the private sphere of women's work,
50 despite its potential to serve as a powerful driver of
51 organizational performance. Fletcher's work draws
52 particularly on Miller's insights regarding the gen-
53 dering of relationality, due to the tendency for males

to be socialized into the self-as-individual identity and
for females to be socialized into the self-in-relation
identity. Other scholars have continued the translation
of relationality from the realm of social psychology
into the realm of organizations, exploring relational
conceptualizations of job design (e.g., Gittell,
Weinberg, Bennett, & Miller, 2008; Grant, 2007;
Wrzesniewski & Dutton, 2001), learning (Edmondson,
1996, 2004; Nembhard & Edmondson, 2006),
professionalism (Adler, Kwon, & Heckscher, 2008;
Fletcher, 1999), and coordination, as we have seen
(e.g., Bechky, 2006; Faraj & Sproull, 2000; Faraj &
Xiao, 2006; Gittell, 2002b; Heckscher & Adler,
2006; Quinn & Dutton, 2005; Weick & Roberts,
1993). But these scholars have not addressed the
fundamental question of how the relationality of
human identity informs or explains the relationality
of organizational life. Furthermore, how does this
dynamic play out in contexts in which the relation-
ality of human identity is made relatively invisible
through a gendered process of socialization; that is,
when relationality is associated with female qualities
rather than human qualities more broadly? This
theoretical work remains to be done.

Extending Relational Coordination Theory to Include Personal Relationships

As noted above, relational coordination theory has
been built on the concept of relationships between
work roles, rather than relationships between unique
individuals. The strengths of role relationships are
clear from a logistical standpoint: They enable indi-
viduals to come and go without disrupting the web
of relationships through which work is coordinated,
thus facilitating scheduling flexibility for operational
benefits, as well as for accommodating the work/life
needs of employees. But are role relationships "real"
relationships, in the sense of having the humanistic
attributes and the potential for emotional connection
that gives relationships their power to shape organi-
zational life in a positive way? In other words, to be
consistent with the humanistic strengths-based ori-
entation of POS, must the concept of relational
coordination incorporate or account for personal
relationships, or can it focus solely on relationships
between roles, a foundation that is arguably more
flexible and sustainable over time? Much of relational
theory focuses on relationships between individuals
rather than roles, even in POS, where theorists have
explored how relationships drive organizational
performance as well as individual well-being (e.g.,
Dutton, 2003; Dutton & Heaphy, 2003; Dutton &
Ragins, 2007).

1 Gilligan (1982) offers insight into this question
 2 by comparing the trajectories of male and female
 3 moral development. She summarizes the research
 4 that supported established psychological theories
 5 that women tend to have a different moral sensibility
 6 than do men. Although psychologists from Freud
 7 onward had interpreted women's differences as a
 8 failure to complete moral development, Gilligan
 9 questioned that interpretation. She listened to the
 10 ways in which girls and women spoke about moral
 11 choices relative to the ways in which boys and men
 12 spoke about moral choices. What she heard was not
 13 a deficiency in moral development, but rather a
 14 distinct voice or conception of morality. As she later
 15 summed up: "The different voice . . . is a relational
 16 voice: a voice that insists on staying in connection . . .
 17 so that the psychological separations that have long
 18 been justified in the name of autonomy, selfhood,
 19 and freedom no longer appear as the sine qua non of
 20 human development but as a human problem" (p. xiii).
 21 The notion of deficiency had come from the assumption
 22 that male moral development, predicated on
 23 achieving separation and autonomy, was the normal
 24 human development, and that other paths that
 25 deviated from it could thus be judged as lacking.
 26 She argued that "instead, the failure of women to fit
 27 existing models of human growth may point to a
 28 problem in the representation, a limitation in the
 29 conception of human condition, an omission of
 30 certain truths about life" (p. 2).

31 In this respect, Gilligan's argument mirrors that
 32 of Miller, and provides additional research evidence
 33 to bolster it. But, in one of her studies, Gilligan
 34 finds other aspects of these alternative male–female
 35 moral codes, in addition to the contrast between
 36 autonomous and relational models of human development.
 37 In particular, when observing patterns of
 38 play among girls and among boys, she notices that
 39 girls play in smaller groups, have a greater focus on
 40 preserving relationships than on playing the game
 41 itself, and make less use of rules to govern their play.
 42 As Mead (1934) argued earlier, girls therefore learn
 43 less to take the role of "generalized other" and learn
 44 less the abstraction of human relationships. Gilligan
 45 states the contrast in the following way: "This conception
 46 of morality as concerned with the activity of
 47 care centers moral development around the understanding
 48 of responsibility and relationships, just as
 49 the conception of morality as fairness ties moral
 50 development to the understanding of rights and
 51 rules" (p. 19).

52 This notion of personal connection versus generalized
 53 connection emerges again in Gilligan's analysis

of Freud's (1930) "oceanic feeling," which gives rise
 to altruism. As Gilligan points out, this altruism is not
 specific to an individual person. It is a broader, more
 humanistic urge that does not require a personal relationship;
 rather, it is more a relationship among
 roles—e.g., between human being in a position to
 help and human being in need of help. One of her
 interviewees expresses a similar sense of collective
 connection, which Gilligan interprets in the following
 way: "In seeing individual lives as connected and
 embedded in a social context of relationship, she
 expands her moral perspective to encompass a
 notion of 'collective life.'" But Gilligan questions
 whether this is adequate, and whether indeed it
 qualifies as a connection at all.

Do generalized or role relationships even *count* as
 relationships? Can role relationships serve as a basis
 for effective coordination and at the same time as a
 source of positive connection at work? Or, must role
 relationships be supplemented by personal concern
 for individual people as specific human beings? If
 so, which precedes and gives rise to which?

Extending Relational Coordination Theory to Include a Broader Network of Participants

Another new direction for relational coordination
 theory is to extend the network of relational coordination
 to include a broader network of participants.
 These additional participants include workers who
 are considered to be "noncore" or peripheral to the
 strategic goals of the organization; customers, who
 are typically seen as recipients of products or services
 rather than participants in their production; and
 those who reside outside the boundaries of the focal
 organization and yet are participants in a work process
 that extends beyond the focal organization—often
 members of a supply chain or network.

Consider the noncore worker. Relational coordination
 in theory includes all workers who are engaged
 in interdependent tasks in a given work process. But
 the theory has evolved, through the studies that have
 been conducted, to focus on workers in the "operating
 core" of the organization, thereby neglecting participants
 who may be perceived to have "peripheral" roles
 but who nevertheless have tasks that are highly
 interdependent with those in the operating core.
 Thus, in practice, relational coordination theory has
 evolved toward a neglect of the noncore or peripheral
 worker, for example neglecting the skycap's role in
 the flight departure process, and neglecting the house-
 keeper's and nursing aide's roles in the patient care
 process, despite anecdotal evidence that these noncore

1 functions play critical roles in achieving the desired
 2 goals due to their interdependence with the so-
 3 called core functions. As Wright (2010) argues, “By
 4 expanding relational coordination theory to include
 5 noncore personnel, whole organizations may benefit
 6 from improved coordination through a greater
 7 understanding of the organizations’ core purpose;
 8 particularly in environments of change and uncer-
 9 tainty” (p. 1).

10 The explicit extension of relational coordination
 11 theory to include noncore workers would run counter
 12 to a more recent argument in the human resource
 13 management literature, the argument that human
 14 resource management is more “strategic” in its use of
 15 resources when it focuses attention on the core work-
 16 force—the so-called *knowledge workers* who are less
 17 replaceable and who drive those outcomes that are of
 18 strategic importance to the organization (Lepak &
 19 Snell, 1999). This argument is short-sighted from the
 20 standpoint of relational coordination theory, which
 21 implies that a work process (and its desired outcomes)
 22 is only as strong as its weakest link, thus suggesting
 23 that any participant whose tasks are included in that
 24 work process falls within the scope of strategic human
 25 resource management. Both relational coordination
 26 networks and the formal structures that are designed to
 27 support them should therefore be conceptualized
 28 explicitly as including both core and noncore workers.

29 Next, we can extend the relational coordination
 30 network to include the customer him- or herself as a
 31 key participant in the coordination of work. This
 32 move is already justified implicitly by the theory itself,
 33 to the extent that the customer is indeed expected to
 34 carry out tasks that are part of the work flow and are
 35 interdependent with the tasks carried out by employ-
 36 ees. The move to include customers in the network of
 37 relational coordination is also consistent with a grow-
 38 ing recognition of the customer as a key coproducer
 39 of outcomes in service settings. Motivations behind
 40 this trend include efficiency gains for organizations
 41 and, potentially, higher-quality outcomes, to the
 42 extent that customers can better customize services to
 43 meet their unique needs and can become empowered
 44 rather than passive recipients of services (Chappell,
 45 1994; Marschall, 2004). This move is also consistent
 46 with the paradigm of client-centered services, and in
 47 health care with the emerging paradigm of patient-
 48 centered or relationship-centered care, both of which
 49 recognize the client and/or patient as a focal point for
 50 provider interactions, and also as an active participant
 51 in the work process, at the very least providing input
 52 regarding desired outcomes and information that will
 53 better inform providers as to the nature of the tasks

that are needed to achieve those desired outcomes. In
 health care, for example, certain tasks are to be carried
 out by the patient, once labeled “compliance.” These
 include taking the correct medications at the correct
 times and engaging in appropriate exercise or diet.
 These tasks can readily be understood as coprodu-
 ction tasks that are critical to achieving desired health
 outcomes, when performed in cooperation with the
 care provider team. Engaging the customer in copro-
 duction in such settings is increasingly understood to
 require a relational process of some sort (Eaton, 2000;
 Safran, Miller, & Beckman, 2006; Stone, 2000;
 Suchman, 2006), suggesting the possibility that rela-
 tional coordination theory can be fruitfully extended
 to encompass the customer (Ple, 2009; Ryan, 2009).

Finally, we can extend relational coordination
 networks to include participants who are located
 outside the boundaries of the focal organization.
 Drawing upon Rousseau’s (1985) guidelines for the
 development of multilevel theory, Gittell and Weiss
 (2004) developed a multilevel model of coordina-
 tion networks in which relational coordination
 within organizations is conceptualized as extending
 beyond the organization to include relational coordi-
 nation with other organizations in the same supply
 network. Network concepts are highly conducive to
 being conceptualized at multiple levels, from indi-
 vidual to organizational to cross-organizational.
 More recent work by Gittell, Weinberg, and Hagigi
 (2010) shows how relational coordination networks
 can be modeled across a supply chain, thus hypoth-
 esizing that these networks tend to have modular
 characteristics, with stronger ties within organizations
 than across organizations, due to the limitations posed
 by bounded rationality. They hypothesize further
 that system integrator roles are required for effective
 coordination of these modular networks, that system
 integrators require system knowledge in order to
 play their role effectively, and that the integrator can
 either bridge structural holes or serve as a connector
 between modules in the network. This theorizing
 requires further development but is promising as an
 avenue for expanding the relevant participants in rela-
 tional coordination networks beyond the boundaries
 of a single organization to include the broader value
 chains in which organizations participate.

***Extending Relational Coordination Theory
 to Include Outcomes for Workers***

As argued above, relational coordination theory has
 well-developed hypotheses regarding the simultane-
 ous effects of relational coordination on quality and
 efficiency outcomes, particularly under conditions

1 of reciprocal task interdependence, task or input
 2 uncertainty, and time constraints. But the theory
 3 has largely overlooked the impact of relational coordi-
 4 nation on outcomes for workers themselves, taking
 5 for granted that more positive and more effective
 6 working relationships would serve as a source of job
 7 satisfaction for workers. What is needed is a theoretical
 8 exploration of how and why relational coordination
 9 might affect workers, considering the potential for
 10 both positive and negative effects. On the positive side,
 11 we might anticipate that relational coordination
 12 increases job satisfaction by increasing workers' ability
 13 to accomplish their jobs (Gittell, Weinberg, Pfefferle,
 14 & Bishop, 2008). We know that having the resources
 15 necessary to accomplish one's work is a source of
 16 employee satisfaction (Hallowell Schlesinger &
 17 Zornitsky, 1996) and, similarly, that social networks
 18 enable people to more effectively accomplish their
 19 work by increasing their ability to mobilize resources
 20 (Baker, 2000; Nahapiet & Ghoshal, 1998). Moreover,
 21 we know from organizational scholars that positive
 22 relationships are a source of well-being at work
 23 (Dutton, 2003; Dutton & Heaphy, 2003; Dutton
 24 & Ragins, 2007). Dutton and Heaphy (2003) argue
 25 that high-quality connections are energizing due to
 26 creating a keen attunement and high awareness of the
 27 needs of others, as well as recognition and validation
 28 of one's self by others. In addition, recognition and
 29 validation of one's professional contribution might
 30 be expected to lead to a heightened sense of profes-
 31 sional efficacy. These represent two compelling
 32 rationales for why relational coordination might
 33 enhance worker outcomes.

34 But on the negative side, it is important to explore
 35 the potential discomfort caused by transforming a
 36 siloed organization that values professional expertise
 37 and autonomy into a cross-functional organization
 38 that places increased value on relational competence
 39 and interdependence. This change may be experi-
 40 enced as a loss of professional status and autonomy
 41 that reduces satisfaction with work and other related
 42 outcomes, particularly for high-status workers
 43 (Adler, Kwon & Heckscher, 2008). In sum, rela-
 44 tional coordination theory should be extended to
 45 consider the potential for both positive and negative
 46 outcomes for workers that may result when organi-
 47 zations seek to bridge functional boundaries to
 48 achieve a more collective or systems perspective.

49 *Extending Relational Coordination Theory* 50 *to the Process of Organizational Change*

51 To date, relational coordination theory has not explic-
 52 itly addressed the question of organizational change.

But there is an implicit theory in the existing model, 53
 as portrayed above. One tenet of relational coordi- 54
 nation theory is that relationships and communica- 55
 tion networks reinforce one another in a virtuous or 56
 vicious cycle, suggesting that this cycle is mutually 57
 reinforcing and thus not easily reversed. Another 58
 tenet of relational coordination theory is that the 59
 positive cycle of relational coordination is supported 60
 by a set of cross-cutting organizational practices that 61
 span functional boundaries between participants 62
 who are engaged in a work process—a process of 63
 transforming inputs into outputs of greater value. The 64
 negative cycle of relational coordination is supported 65
 instead by traditional bureaucratic organizational 66
 practices that foster strong ties within functional 67
 silos at the expense of ties between functions. 68

69 But some have questioned whether the imple-
 70 mentation of a set of formal work practices—selecting
 71 for cross-functional teamwork, cross-functional per-
 72 formance measurement, cross-functional rewards,
 73 cross-functional conflict resolution, cross-functional
 74 protocols and meetings, and so on—is even be possi-
 75 ble in the context of a strongly negative cycle of
 76 relational coordination. Will participants adopt the
 77 newly introduced work practices and participate in
 78 them in a meaningful way, or instead, follow the
 79 letter but not the spirit of the newly introduced
 80 work practices, or even reject them outright? We
 81 know from theories of organizational change that
 82 numerous conditions are needed for change efforts
 83 to succeed. These conditions include a shared vision
 84 of the change, an understanding of the behaviors
 85 that are required for the change, and a belief that
 86 the change is necessary. To successfully implement
 87 practices that foster relational coordination may
 88 require, paradoxically, the shared goals, shared
 89 knowledge, and mutual respect that are supposed to
 90 be *outcomes* of those new work practices, not their
 91 antecedents. It is therefore likely that the theory of
 92 change implicit in the current theory of relational
 93 coordination is too simplistic and mechanistic, not
 94 taking sufficient account of the possibility that feed-
 95 back loops exist between the newly adopted struc-
 96 tures and the processes that they are intended to
 97 support. Indeed, a study that assessed the impact of
 98 external pressures on relational coordination found
 99 that more intense external pressures predicted higher
 100 relational coordination among participants, medi-
 101 ated by perceived work stressors rather than by
 102 changes in formal work structures (Gittell, 2008).
 103 Changes in formal work structures were the stron-
 104 gest predictor of relational coordination, suggesting
 105 the possibility that structural changes are important

1 for *sustaining* changes in relational coordination, but
 2 also suggesting the possibility that changes in rela-
 3 tional coordination may *precede* changes in formal
 4 work structures.

5 Conclusion

6 This chapter has outlined the basic contributions of
 7 relational coordination theory, and has proposed five
 8 new directions for further theoretical development:
 9 to deepen the social psychological underpinnings of
 10 the theory drawing upon relational theory; to
 11 explore and challenge the proposition that relational
 12 coordination ties are based on role relations to the
 13 exclusion of personal relations; to extend the reach
 14 of the relational coordination network to include
 15 additional participants in the work process under
 16 consideration (in particular, noncore employees,
 17 customers, and members of the organization's
 18 broader supply chain); to theorize about outcomes
 19 for workers, as well as for organizations and their
 20 customers; and finally, to explore and deepen the
 21 theory of change implicit in relational coordination
 22 theory. This chapter thus outlines an ambitious
 23 agenda for theory building that deepens the poten-
 24 tial contribution of relational coordination theory
 25 to the broader discipline of POS.

26 As noted at the beginning of this chapter, POS
 27 emphasizes the subjective and intersubjective experi-
 28 ence of work, thus highlighting the need for human
 29 beings to connect and relate. To the extent that orga-
 30 nizations create the conditions for connection and
 31 relationship to occur, they tap into this aspect of the
 32 human condition, thereby unleashing the potential
 33 for high levels of individual and collective perfor-
 34 mance. Although traditions outside of POS offer
 35 arguments about quality/efficiency trade-offs, rela-
 36 tional coordination theory argues that organizations
 37 move beyond that trade-off by tapping into the rela-
 38 tional nature of human beings.

39 At the same time, POS is the study of generative
 40 dynamics and endogenous resourcefulness. Relational
 41 coordination is the embodiment of organizational
 42 generativity and resourcefulness because, at its best,
 43 it brings together numerous parts of the organiza-
 44 tion in the pursuit of a shared and superordinate
 45 purpose. Relational coordination also captures the
 46 dynamics of generative dynamics because it is an
 47 inherently processual approach, as is evidenced in the
 48 interplay between shared goals, shared knowledge,
 49 and mutual respect and the ongoing communication
 50 needed to produce generativity and resourcefulness.
 51 Relational coordination theory thus provides grounded
 52 insight into the subjective and intersubjective process

of coordinating and into the dynamics and experi-
 53 ence of that process. 54

Positive organizational scholarship is also about
 55 finding meaning in work (e.g., Wrzesniewski &
 56 Dutton, 2001). Relational coordination theory sub-
 57 stantially contributes to that ideal because relational
 58 coordination at its best entails more connection
 59 through one's work and with one's work, enabling
 60 front-line care providers to better live out their pro-
 61 fessional ideals. Finally, relational coordination
 62 theory embodies the POS approach of viewing
 63 organizational strength as a distributed property of
 64 an organization, celebrating those on the front line
 65 and not only in the executive suite as drivers of
 66 organizational excellence. 67

References 68

- 69 Adler, P. (1995). Interdepartmental interdependence and coordi-
 70 nation: The case of the design/manufacturing interface. *71*
Organization Science, 6, 147–167.
 72 Adler, P., Kwon, S., & Hecksher, C. (2008). Professional work:
 73 The emergence of collaborative community. *Organization*
 74 *Science*, 19(2), 359–376.
 75 Argote, L. (1982). Input uncertainty and organizational coordi-
 76 nation in hospital emergency units. *Administrative Science*
 77 *Quarterly*, 27(3), 420–434.
 78 Baker, W. (2000). *Achieving success through social capital*. San
 79 Francisco: Jossey-Bass.
 80 Bechky, B.A. (2006). Gaffers, gofers and grips: Role-based coordi-
 81 nation in temporary organizations. *Organization Science*,
 82 17(1), 3–21.
 83 Buber, M. (1937). *I and thou*. New York: Simon and Schuster
 84 (Original work published 1923).
 85 Cameron, K., Dutton, J.E., & Quinn, R.E. (2003). *Positive orga-
 86 nizational scholarship: Foundations of a new discipline*. San
 87 Francisco: Berrett-Koehler Publishers.
 88 Chappell, R.T. (1994). Can TQM in public education survive
 89 without co-production? *Quality Progress*, 27(7), 41–45.
 90 Collins, C.J., & Clark, K. (2003). Strategic human resource prac-
 91 tices, top management team social networks, and firm perfor-
 92 mance. *Academy of Management Journal*, 46, 740–751.
 93 Dutton, J.E., & Ragins, B.R. (2007). *Exploring positive relation-
 94 ships at work: Building a theoretical and research foundation*.
 95 Mahwah, NJ: Lawrence Erlbaum Associates.
 96 Dutton, J.E., & Heaphy, E.D. (2003). The power of high-quality
 97 connections. In K.S. Cameron, J.E. Dutton, R.E. Quinn
 98 (Eds.), *Positive organizational scholarship: Foundations of a new*
 99 *discipline*. San Francisco: Berrett-Koehler Publishers.
 100 Dutton, J.E. (2003). *Energize your workplace: How to create and sustain*
 101 *high-quality connections at work*. San Francisco: Jossey-Bass.
 102 Eaton, S.C. (2000). Beyond “unloving care:” Linking human
 103 resource management and patient care quality in nursing
 104 homes. *International Journal of Human Resource Management*,
 105 11(3), 591–616.
 106 Edmondson, A.C. (1996). Learning from mistakes is easier said
 107 than done: Group and organization influences on the detection
 108 and correction of human error. *Journal of Applied Behavioral*
 109 *Science*, 32, 5–28.
 110 Edmondson, A.C. (2004). Psychological safety, trust, and learning
 111 in organizations: A group-level lens. In R.M. Kramer, &

- 1 K.S. Cook (Eds.), *Trust and distrust in organizations: Dilemmas*
2 *and approaches* (pp. 239–272). New York: Russell Sage.
- 3 Evans, W.R., & Davis, D. (2005). High-performance work systems
4 and organizational performance: The mediating role of internal
5 social structure. *Journal of Management*, 31, 758–775.
- 6 Faraj, S., & Xiao, Y. (2006). Coordination in fast response orga-
7 nizations. *Management Science*, 52(8), 1155–1169.
- 8 Faraj, S., & Sproull, L., 2000. Coordinating expertise in software
9 development teams. *Management Science*, 46(12): 1554–1568.
- 10 Fletcher, J.K. (1999). *Disappearing acts: Gender, power, and rela-*
11 *tional practice at work*. Cambridge: MIT Press.
- 12 Follett, M.P. 1924. *Creative experience*. New York: Longmans,
13 Green.
- 14 Follett, M.P. 1949. *Freedom and co-ordination: Lectures in business*
15 *organization by Mary Parker Follett*. London: Management
16 Publications Trust, Ltd.
- 17 Freud, S. (1930). Civilization and its discontents. *Standard*
18 *Edition*, 23: 64–145, London: Hogarth Press, 1961.
- 19 Galbraith, J.R. (1972). Organization design: An information
20 processing view. In J.W. Lorsch, & P.R. Lawrence (Eds.),
21 *Organization planning: Cases and concepts* (pp. 49–74).
22 Homewood, IL: Richard D. Irwin, Inc.
- 23 Gilligan, C. (1982). *In a different voice: Psychological theory and*
24 *women's development*. Cambridge, MA: Harvard University
25 Press.
- 26 Gittell, J.H. 2001. Supervisory span, relational coordination
27 and flight departure performance: A reassessment of post-
28 bureaucracy theory. *Organization Science*, 12(4): 467–482.
- 29 Gittell, J.H. (2002a). Relationships between service providers
30 and their impact on customers. *Journal of Service Research*,
31 4(4), 299–311.
- 32 Gittell, J.H. (2002b). Coordinating mechanisms in care provider
33 groups: Relational coordination as a mediator and input
34 uncertainty as a moderator of performance effects.
35 *Management Science*, 48, 1408–1426.
- 36 Gittell, J.H., Weinberg, D., Bennett, A., & Miller, J.A. (2008).
37 Is the doctor in? A relational approach to job design and the
38 coordination of work. *Human Resource Management*, 47(4),
39 729–755.
- 40 Gittell, J.H. (2006). Relational coordination: Coordinating work
41 through relationships of shared goals, shared knowledge and
42 mutual respect. In O. Kyriakidou, & M. Ozbilgin (Eds.),
43 *Relational perspectives in organizational studies: A research*
44 *companion*. London: Edward Elgar Publishers.
- 45 Gittell, J.H. (2008). Relationships and resilience: Care provider
46 responses to pressures from managed care. *Journal of Applied*
47 *Behavioral Science*, 44(1), 25–47.
- 48 Gittell, J.H., Fairfield, K., Bierbaum, B., Jackson, R., Kelly, M.,
49 Laskin, R., Lipson, S., Siliski, J., Thornhill, T., Zuckerman,
50 J. (2000). "Impact of Relational Coordination on Quality of
51 Care, Post-Operative Pain and Functioning, and Length of
52 Stay: A Nine Hospital Study of Surgical Patients," *Medical*
53 *Care*, 38(8): 807–819.
- 54 Gittell, J.H., Seidner, R., & Wimbush, J. (2010). A relational
55 model of how high-performance work systems work.
56 *Organization Science*, 21(2), 299–311.
- 57 Gittell, J.H., Weinberg, D.B., & Hagigi, F. (2010). *Modularity*
58 *and the coordination of complex work: The case of post-surgical*
59 *patient care*. Working Paper.
- 60 Gittell, J.H., Weinberg, D., Pfefferle, S., & Bishop, C. (2008).
61 Impact of relational coordination on job satisfaction and
62 quality outcomes: A study of nursing homes. *Human Resource*
63 *Management Journal*, 18(2), 154–170.
- Gittell, J.H., & Weiss, L. (2004). Coordination networks within
and across organizations: A multi-level framework. *Journal of*
Management Studies, 41(1), 127–153.
- Grant, A.M. (2007). Relational job design and the motivation to
make a prosocial difference. *Academy of Management Review*,
32(2), 393–417.
- Hallowell, R, Schlesinger, L., & Zornitsky, J. (1996). Internal
customer satisfaction, customer and job satisfaction: Linkages
and implications for management. *Human Resource Planning*,
19(2): 20-31.
- Heckscher, C. (1994). Defining the post-bureaucratic type. In C.
Heckscher, & A. Donnellon (Eds.), *The post-bureaucratic*
organization. Thousand Oaks, CA: Sage.
- Heckscher, C., & Adler, P.S. (2006). *The firm as a collaborative*
community: Reconstructing trust in the knowledge economy.
78 Oxford: Oxford University Press.
- Leana, C., & Van Buren, H.J. (1999). Organizational social
capital and employment practices. *Academy of Management*
Review, 24, 538–555.
- Lepak, D.P., & S.A. Snell. 1999. The human resource architec-
ture: Toward a theory of human capital allocation and develop-
ment. *Academy of Management Review*, 24: 31–48.
- Malone, T., & Crowston, K. (1994). The interdisciplinary study
of coordination. *Computing Surveys*, 26(1), 87–119.
- Marschall, M. (2004). Citizen participation and the neighbor-
hood context: A new look at the coproduction of local public
goods. *Political Research Quarterly*, 57(2), 231–245.
- Mead, G.H. (1934). *Mind, self and society: From the standpoint of*
a social behaviorist. Chicago: University of Chicago Press.
- Miller, J.B. (1976). *Toward a new psychology of women*. Boston:
Beacon Press.
- Mitchell, S. (2000). *Relationality: From attachment to intersubjec-*
tivity. Hillsdale, NJ: The Analytic Press.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual
capital and the organizational advantage. *Academy of*
Management Review, 23(2), 242–266.
- Nembhard, I.M., & Edmondson, A.C. (2006). Making it safe:
The effects of leader inclusiveness and professional status on
psychological safety and improvement efforts in health care
teams. *Journal of Organizational Behavior*, 27, 941–966.
- Ple, L. (2009). How does the customer co-construct the service
organization over time? An empirical study of the impact of
the customer on intra-organizational coordination. *Working*
paper.
- Quinn, R., & Dutton, J.E. (2005). Coordination as energy-in-
conversation. *Academy of Management Review*, 30(1), 36–57.
- Rousseau, D. (1985). Issues of level in organizational research: Multi-
level and cross-level perspectives. *Research in Organizational*
Behavior, 7, 1–37.
- Ryan, M. (2009). *Care coordination for senior patients with mul-*
tiple chronic diseases: Examining the association between orga-
nizational factors and patient outcomes. Ph.D. dissertation,
Heller School for Social Policy and Management, Brandeis
University, Waltham, MA.
- Safran, D.G., Miller, W., & Beckman, H. (2006). Organizational
dimensions of relationship-centered care: Theory, evidence, and
practice. *Journal of General Internal Medicine*, 21, S9–S15.
- Stone, D. (2000). Caring by the book. In M.H. Meyer (Ed.),
Care work: Gender, class, and the welfare state (pp. 89–111).
New York: Routledge.
- Suchman, A. (2006). A new theoretical foundation for relationship-
centered care: Complex responsive processes of relating.
Journal of General Internal Medicine, 12, S40–44.

- 1 Thompson, J.D. (1967). *Organizations in action: Social science*
2 *bases of administrative theory*. New York: McGraw-Hill.
- 3 Tushman, M., & Nadler, D. (1978). Information processing as
4 an integrating concept in organizational design. *Academy of*
5 *Management Review*, 3(3), 613–124.
- 6 Vogus, T. (2006). What is it about relationships? A behavioral
7 theory of social capital and performance. *Labor and Employment*
8 *Relations Proceedings*, 58, 164–173.
- 9 Weick, K.E., & Roberts, K. (1993). Collective mind in organiza-
10 tions: Heedful interrelating on flight decks. *Administrative*
11 *Science Quarterly*, 38, 357–381.
- Weinberg, D.B., Lusenhop, W., Gittel, J.H., & Kautz, C. 12
(2007). Coordination between formal providers and infor- 13
mal caregivers. *Health Care Management Review*, 32(2), 14
140–150. 15
- Wright, W. (2010). *Extending relational coordination as a* 16
high performance work system. Ph.D. dissertation propos- 17
al, Curtin University of Technology, Perth, Western 18
Australia. 19
- Wrzesniewski, A., & Dutton, J.E. (2001). Crafting a job: 20
Revisioning employees as active crafters of their work.
Academy of Management Review, 26(2), 179–120.