

Introduction

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“I suppose a good director is like a teacher. I think that someone like David Cronenberg was very much like a teacher, because there’s an openness, but a certain set of rules of behavior, and a certain conduct expected. But there’s an atmosphere that’s relaxed and conducive to exploration, and that is created by someone like Cronenberg”. Viggo Mortensen (Danish-American producer, actor, author, musician, photographer, poet and painter

Coordination is the process of interaction that integrates a collective set of interdependent tasks through coordination mechanisms like plans and rules, objects and representations, roles, routines and proximity (Okhuysen & Bechky 2009). However, in my grounded theory inductive qualitative study of two film crews what I have found was different: my observations revealed that, contrary to what one would expect, during a cyclical team developmental process that starts with formal coordination methods in the form of formal structures that include formal roles and specific role assignments, a creative team subsequently turns into uncoordinated methods in the form of informal practices to achieve team coordination, before its members finally revert back to their original formal roles at the end of a repetitive cycle. It is thus the use of uncoordinated methods that helps the creative team coordinate.

This “mystery” (Alvesson & Kärreman 2007) led to the following question: How can creative team coordination, in a temporary organization, be achieved through methods that go against current coordination beliefs?

1.1 Coordination

The formal study of coordination began with formal mechanisms of coordination during the rationalization of manufacturing work through its design and the subsequent design of management systems, where planning formal elements of organizations featured prominently (Okhuysen & Bechky, 2009) with a focus on uncertainties such as production technology (Woodward, 1970), task complexity (Perroe, 1967), workflow integration (Hickson, Pugh & Pheysey, 1969) and task interdependence (Thompson, 1967). Coordination thus resulted from the specification of exchanges between areas of work through roles, rules and structures, where systems could be articulated with specificity and precision (Okhuysen & Bechky, 2009). In such formalisation, the rules governing behaviour are precisely and explicitly formulated and roles and role relations are prescribed independently of the personal attributes and relations of individuals (Scott & Davis, 2007).

1.2 Static View of Coordination

Consequently, studies on organizational design (Galbraith, 1973; Tushman & Nadler, 1978) and structural contingency theory (Burton & Obel, 2004; Donaldson, 2001; Thompson, 1967), propose formally designed team structures, prioritizing information-processing interactions (March & Simon, 1958; Puranam, Raveendran, & Knudsen, 2012), and promoting team members' ability to coordinate their activities (Bresman & Zellmer-Bruhn, 2013; Bunderson & Boumgarden, 2010).

However, despite these efforts, it has been recognized that there is no one best way to organize (Adler 1995; Malone & Crowston 1994; Thompson 1967) as coordination mechanisms need to have sufficient flexibility to cope with uncertainty (Argote, 1982; Thompson, 1967), novelty (Adler, 1995), and problem complexity (Adler 1995; Ching, Holsapple & Whinston, 1992; Crowston, 1997). This led to the observation that these coordination mechanisms need to adapt to the interdependent working of actors and as a result the importance of the way these standardised procedures are enacted. This suggests tension between the standardised nature of tasks with rules to govern each activity and the mutual adjustment, informal communication and improvisation that occurs between actors to achieve tasks (Adler, 1995; Malone & Crowston 1994; Orlikowski 1996; Thompson 1967).

This static view of coordinating mechanisms thus has a number of limitations (Adler, 1995; Bate, Khan & Pye, 2000, Okhuysen & Bechky 2009) as hierarchies and rule-based systems have been found less useful in uncertain conditions (Argote 1982; Ching et al 1992; Crowston 1997), the way a service or technology is delivered through task coordinating is uncertain and hard to define and formalize (Faraj & Xiao 2006) and the processual way that people perform activities on an on-going basis in order to cope with the challenges of coordinating tasks that may change over time (Adler, 1995; Bate et al, 2000; Thompson 1967) has been overlooked by the literature.

1.3 From Static to Dynamic Coordination

The dynamic nature of coordinating mechanisms was considered by a new perspective that became evident because the boundaries of the organizations have blurred (Scott, 2004, Hargadon, 2003), interdependencies between different pieces of work may be uncertain or challenging to identify (Okhuysen & Bechky, 2009), and the fact that the static view of coordinating mechanisms failed to account for unplanned contingencies. These issues were accounted for by literature looking into the dynamic nature of coordination and more specifically informal and emergent coordination practices. Examples of such practices include dialogic coordination (Faraj & Xiao, 2006) where coordination is accomplished on the ground as the work progresses (Okhuysen & Bechky, 2009), emergent group responses to coordinate disaster relief (Majchrzak, Javernpaa & Hollingshead, 2007), and different types of mechanisms encapsulating how emergent practices assist in coordination including plans and rules, objects and representations, role, routines and proximity (Okhuysen & Bechky, 2009).

This dynamic nature of coordination mechanisms has also appeared in the literature of multidisciplinary team coordination used for the management of interdependencies among specialists within a group (Bruns, 2013; Kotha, George, & Srikanth, 2013; Majchrzak, More, & Faraj, 2012; von Krogh, Nonaka, & Rechsteiner, 2012) due to the fact that these teams face unpredictable interdependencies due to high task uncertainty (Argote, Turner, & Fichman, 1989; Cardinal, Turner, Fern, & Burton, 2011; Gardner, Gino, & Staats, 2012). The literature considers the role of both formal and informal team coordination mechanisms.

1.4 Creative Team Coordination

The dynamic nature of coordination becomes even more evident in creative group coordination because creativity seems to require a sense of independence from rules, restrictions, and even close relationships (Perry-Smith & Shalley, 2003) as creative work seems to happen outside the “ordinary grooves of thought and action” (Jevons, 1877; cited by Becker, 1995). On the one hand coordination of creative groups requires that group members enable the “fitting together” of activities (Argote, 1982) and the “organizing of individuals so that their actions are aligned” (Heath & Staudenmayer, 2000) within an agreed upon “problem domain” (Bailetti, Caoohahan, & DiPietro, 1994), the sum of these activities being labelled by Okhuysen and Bechky (2009) as “integration”. On the other hand coordination also requires allowing for independent work, which potentially enables “mis-fitting” interactions that can “mis-align actions” or push the group into unfamiliar “problem domains”, Harrison & Rouse (2014) labelling these countervailing interactions “de-integration”. To date, most theories of group creativity do not address the tensions from simultaneously needing to balance integration and de-integration, thus the need for a richer conceptual understanding of coordinating mechanisms that have sufficient flexibility (Jarzabkowski, Lê, & Feldman, 2012) to adapt to situations that require novelty.

1.5 Practice-based Perspective of Coordination

As this study takes a practice-based perspective, it is interesting to note that similar studies (Orlikowski, 2000) focusing on the coordination of knowledge work in teams as informally emerging patterns of interactions enacted through specialists’ everyday practices (Faraj & Xiao, 2006; Hargadon & Bechky, 2006; Kellogg, Orlikowski, & Yates, 2006) suggest that formally designed coordination structures may stifle knowledge creation (Okhuysen & Bechky, 2009).

This disconnect between formal structures and informal practices of coordination is fundamental (Gulati & Puranam, 2009; Soda & Zaheer, 2012) and limits our understanding of how organizations function (McEvily, Soda, & Tortoriello, 2014; Okhuysen & Bechky, 2009), as there is a lack of in-depth analysis of the process through which formal coordination structures and informal coordination practices interact in multidisciplinary teams, thus how teams coordinate remains incomplete. We thus need to explain how formal structures evolve when facing unpredictable and changing interdependencies, and how informal coordination practices are shaped by such evolving formal structures (McEvily et al., 2014).

1.6 Static and Dynamic Coordination Perspectives Combined

However, even considering how the two interconnect does not provide sufficient explanation of this study. Although the two are interconnected, and the evolvement of formal structures does lead to informal practices of coordination, this interconnection produced what is called “uncoordinated methods” which strangely enough generated group coordination.

In this research the author aims to explain what Alvesson & Kärreman (2007) call a “mystery” aiming to advance our understanding on how, in a temporary organization, the interconnection of formal structures and informal practices during a team developmental process leads to team coordination via the emergence of “uncoordinated methods”. More specifically, the author aims to show the conditions under which these methods are not harmful but in fact beneficial to coordination. Also, I aim to contemplate how this dynamic coordination process is not linear but repeats itself in perpetual cycles, where an initial formal team structure gives rise to formal coordination methods which then lead to uncoordinated methods, in the form of informal practices, that help achieve team coordination before the process unwinds and the team reverts to its initial formal structure.

More specifically, through an in-depth process study of two film production crew the author explores how a team developmental process in a temporary organization unfolds, starting with formal role structures acting as a formal coordinating mechanism which then transforms into informal practices, that although one would expect to be “uncoordinating” in actual fact help the team coordinate via “de-integration” and more specifically an extension of the formal role borders up to the point where team members temporarily change duties and responsibilities before reverting to their original formal roles, in a process that repeats itself in perpetual cycles. The author is explicitly interested in the importance of the cyclical team developmental process, the conditions under which it unfolds, how this group dynamic coordination develops, and why creative group members engage in specific coordinating behaviours.

Unlike (Grandori & Soda, 2006; Hulsheger, Anderson, & Salgado, 2009; Puranam & Raveendran, 2013; McEvily et al., 2014) who explored the processes through which formal structures evolve and how informal coordination practices are then shaped, establishing the grounds for informal practice-based coordination (Bruns, 2013), the author also contemplates the evolvement of “uncoordinated methods” that explain how they help the team coordinate. My focus on the team developmental process highlighting the emergence of what one would expected

to be “uncoordinated methods” is in line with calls for a need for a dynamic understanding of emergent, adaptive coordination in teams (Okhuysen & Bechky, 2009) and for a richer conceptual understanding of coordinating mechanisms that have sufficient flexibility to adapt to situations that require novelty (Jarzabkowski, Lê, & Feldman, 2012) in a way where the group needs to accommodate developing new ideas that threaten coordination and yet integrate these ideas and remain cohesive (George, 2007).

My analysis of the fieldwork reveals a team developmental process during which coordination is achieved through the emergence of practices that would appear to deviate from and challenge coordinating methods. Also, the findings reveal team coordination as an on-going cycle of activities.

In relation to the former, the fieldwork reveals that creative group coordination in a temporary organization can be achieved through methods that one would expect to challenge traditional methods of team coordination. More specifically, my model suggests that within formal role structures and the subsequent informal creation of a sub-team, team members enact practices where the sub-team de-integrates, allowing its members to initially pull role constraints further, then stretch and finally relax them, thus allowing for the emergence of ideas and alternatives not previously considered and enabling creative work via unpredictability and new understandings. For this to occur, team roles and structure flexibly adjust before the sub-team finally dismantles and its members revert back to their original formal roles. The unfolding of this process highlights how informal “uncoordinated methods” in actual fact support the team to coordinate. More specifically, I was struck by the fact that although these methods contributed to a state of “de-integration” in reality they gave the group the opportunity to temporarily search for and discover new puzzles, options, and directions on the way to the final creative solution, before integrating back to their initial formal roles.

What was also unexpected was that the existence of constraints, including role constraints as well as constraints imposed by both the script and the need for coherence, did not only contribute towards team member interaction that favoured team coordination, but at the same time assisted team members to continuously advance their thoughts and reach a satisfactory level of creativity.

In relation to the latter, the emergent theoretical model considers creative team coordination in a temporary organization as a perpetual cyclical team developmental process.

More specifically, this study highlights the key role of the emergence of a changing sub-team created to face job interdependencies and the discovery of new issues by paying particular attention to its initial formation, dynamic

re-structuring, revision, and final dismantling. This process is a necessary condition for creative group coordination because it allows for team members to integrate and de-integrate informally in such a way to be able to handle the interdependencies and new issues arising, while at the same time being creative.

As this process repeats itself with the shooting of a new scene, the model points to a cyclical team developmental process by explaining how, based on the scene's specific needs, an initial sub-team is formed to handle the preliminary phase of work, then depending on the initial output it is informally revised in terms of both its members and their respective duties and responsibilities in order to handle surfacing job interdependencies and emerging new issues, before finally dismantling and its members reverting to their formal roles.

The author's model also points to the dynamic interplay between formal coordination structures and informal coordination practices, suggesting that the latter are embedded within the former and that the two interact dynamically where informal practices arise as a function of expertise diversity, constituting second order practices. What is worth noting is that this dynamic interplay leads to a high level of flexibility as the sub-team adapts within changing formations, ensuring its members can interact in a way to achieve coordination while continuously advancing their thoughts toward reaching a satisfactory level of creativity. Formal structures are also present during the unfolding of the informal practices as the team leader relies on the formal role structures whenever it is considered necessary during the integration and de-integration process, in order to avoid the temporary de-integration getting out of control and leading toward a group structural breakdown. This supports the idea that the two elements are embedded within each other (Okhuysen and Bechky, 2009) and continuously, mutually, and dynamically interact.

The author offers three contributions based on the analysis.

First, this research contributes to the literature on creative group coordination by showing that it involves more than role structure, role enactment, and individual independent work within the group, that have been the primary theoretical focus. This study extends this theory to include a creative team developmental process and explain how it unfolds by contemplating the specific group coordination stages, therefore suggesting that team coordination in an on-going cycle of activities. The author proposes that theoretical accounts on how creative groups coordinate cannot be reduced in explaining how team members individually act or collectively interact, but also needs to consider the coordination process taking place, underlying the way the group flexibly adjusts during the dynamic interplay taking place between formal coordination structures and informal coordination practices.

Second, the analysis suggests several reasons why group members engage in specific coordination actions and behaviours. Therefore, in this study the author begins to theorise on the reasons why, highlighting three stages during this process that lead to this type of activity: the initial issues group members need to deal with, the identification and management of their jobs' interdependencies, and the evaluation of new options and alternatives based on the emergence of new issues.

Finally, this study shows the conditions under which methods expected to be "uncoordinated" and which seem to deviate and challenge traditional coordination methods can in fact contribute toward team coordination. This suggests that rather than being against creative team coordination, these emerging "uncoordinated methods" when operating in tandem with traditional coordinating methods can contribute positively. The study shows how these informal practices help the team de-integrate and also bolster creative work through sub-team members developing ideas, suggesting new directions, and synthesizing them into a final solution in a cyclical sub-team structural adaptation that is critical for creative team coordination. This flexible team restructuring develops informally, without the existence of a predetermined strategic process within the organization.

The author develops these contributions drawing from the literature on coordination, creative group coordination, formal and informal coordination mechanisms and their dynamic interaction including temporary organizations. The emergence of the importance of formal coordination structures and informal coordination practices led the author to incorporate literature on creative team coordination in order to develop an understanding on the dynamics of such a potential relationship. This review, served as a set of "orienting points" that anchored the research question, informed the methods, and provided direction for the analysis (Dutton, Worline, Frost & Lilius, 2006; Nag, Corley, & Gioia, 2007). The author's ideas and concepts emerged from the study itself through iterative cycles of thematic empirical analysis and consultations of the relevant literature (Strauss & Corbin, 1998).

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