

Conversations for Reflection: Designing Support for Reflection-on-Professional Action

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Abstract

This paper puts forward a preliminary model of *Conversations for Reflection*. This model helps address the practical problem of helping people develop their professional expertise. The model follows from the theory of reflective practice, current understanding of accounting behaviour in interaction, and the insights and recent developments in LAP theory and research. The model specifies procedural conditions that support the public testing of private assumptions, the surfacing of dilemmas, and the public discussion of sensitive issues.

1 Transformations and Transitions in Expertise: A Puzzle for LAP

A common workplace issue involves the development of an individual's competence to perform their work—that is, how is it that doctors, mechanics, lawyers, engineers, system designers, pharmacists, sales agents, teachers, journalists and so on become good at what they do? This is a pressing issue in the early stages of a person's career as she or he transitions from novice to expert practitioner. The issue does not go away as people are expected to become more effective at what they do. Furthermore, people are often challenged to transform the expertise they have developed in solving one class of problems so that it can be used to address another class of problems. While people routinely manage these transitions and transformations in their expertise, it is no small matter for them, the organizations in which they work, or for those who use their services or products.

These transformations and transitions in expertise present a puzzle for theory, research, and practice within the language/action perspective (LAP). LAP has been used primarily to understand the conduct of work by incorporating a communicative action perspective into modelling of the flow and completion of work and other collaborative tasks. That is, a principle goal has been to develop better depictions of work that lead to better procedures and technologies to support that work. While LAP can clearly advance the theory and practice of organizational and information system design to improve work, what, if anything, can it contribute to addressing the transitions and transformations in expertise that individuals must manage throughout their career?

This paper addresses this puzzle. First, a LAP perspective on expertise is put forward using Schön's theory of the reflective practitioner as a starting point. Second, developments in LAP relevant to modelling reflective inquiry are discussed. Third, a preliminary model of reflective inquiry, the *Conversation for Reflection* (CfR) is put forward. Fourth, some general issues about supporting the CfR are discussed and two CfR inspired applications are briefly discussed.

2 Professional Practice and Reflective Inquiry

2.1 Schön's Concern

Schön (1983) outlines a theory of how professionals think in action that addresses a problem he finds in the conventional, technocratic conceptualization of professional practice. In the technocratic view, professional decision-making is understood to be a bureaucratic exercise where professionals resolve choices by searching for the appropriate rule within an established body of technical knowledge and then correctly applying it to the situation at hand. The professional's expertise is characterized by his or her ability to possess and apply an established body of knowledge. Professional practice applies but does not develop the basic knowledge for practice—there is a sharp divide between theory and practice.

Schön, in contrast, theorizes that professional practice is fundamentally a design process in which professionals work to turn given situations into preferred situations. From the perspective of design, professional practice involves a series of moves leading to the creation of an action, object, or plan that resolves, manages, or transforms the problematic aspects of a given situation. Professional practice is not bureaucratic rule application so much as it is a dialectical process of problem-framing and problem-solving based on the practitioner's personal theory of practice. Schön gives several examples to illustrate this from the work of planners, architects, and therapists. In so doing, he shows that professional expertise not only entails technical knowledge but also judgement—that is, the artful competence of handling complexity, instability and value-conflict when engaging people and problematic situations. Theory and practice blend together.

Schön's concern is with the way that the traditional, technocratic view of professional expertise and action undermines the capacity for professionals to understand what they do and thus their effectiveness in doing it. The key to professional practice, then, lies in the ability of professionals to reflect-in-practice, which is reflecting while doing, and to reflect-on-practice, which is reflecting after the doing. Schön's name for the opportunities for professionals to engage in reflection to improve their theory of practice, is *reflective inquiry*. The triggering events for reflective inquiry are the dilemmas, disagreements, and conflicts professionals experience in taking action. This includes the dilemmas internal to a practitioner's understanding of the world, interpersonal conflict, and disagreement with professional and organizational norms of behaviour. Improving one's practice involves not only resolving and managing dilemmas, disagreements, and conflict but in refining the habits of thought and action used in interpreting and pursuing resolution and repair of the inevitable hitches, glitches, and breakdowns in work and professional action. Reflective inquiry embraces the idea that human development is achieved in learning how to participate in different kinds of human activities.

2.2 What does LAP have to do with Reflective Inquiry?

Schön's theory of reflective practice was pathbreaking in the way it conceptualized the communicative, interactional basis of decision-making, knowledge, and learning in professional practice. The challenge lies in creating institutions that support reflection and interactional spaces conducive to "the public testing of private assumptions, the surfacing of dilemmas, and the public discussion of sensitive issues" needed for practitioners to improve their theories of practice (Schön, 1983, p. 328). However, Schön provides only the broadest outline for the type of interaction central to reflective inquiry. Here is where LAP can help. First, LAP's fundamental model, the *Conversation for Action* (CfA), can be used to articulate the object for reflection-on-practice. Second, theory and research within LAP on modelling communication can inform the development of a model of *Conversations for Reflection* (CfR)

to be used in creating procedures and technologies to support reflection on action. The first point will be developed here and the second point in section three that follows.

It is worth raising again the question: how do professional practitioners become good at what they do? The answer developed here, working from the theory of the reflective practitioner, is that over time they become good at the types of interactions in which they engage. Practitioners get better at deploying their technical knowledge because they figure out how to participate in work—that is, the artful competence of handling complexity, instability and value-conflict when engaging people and problematic situations. This is due in part to repeated performance and in part to their ability to reflect-in and reflect-on their performances in work-based interactions. Learning to participate in professional practice and organizational life is not simply a problem of knowledge but of communicative skill and reasoning about communication and interaction.

From the orientation of LAP, organizations and fields of professional practice are organized around networks of conversations and networks of actions within conversations. Organizational and professional life involves working out the commitments and obligations associated with professional action. It can be said that in becoming good at what they do practitioners learn, and reflect upon, the recurring patterns of communicative acts—conversations—that constitute their professional and organizational actions. For instance, there may be a fundamental CfA around which a practitioner's work is organized. The practitioner over time comes to understand the CfA, how it breaks down, and how to repair those breakdowns. The practitioner also learns to anticipate breakdown and invoke other conversations preparatory to the CfA.

The CfA, and other conversations modelled within LAP, can serve as objects of reflective inquiry where the practitioner develops more effective and appropriate participation including better on-the-fly prevention and repair of breakdowns. Indeed, practitioners can learn and reflect on:

- what counts as an initiating act and a completing act for a conversation and the variety of paths to completion for a conversation.
- how to participate in these conversations and to perform actions to bring about the preferred form of conversation.
- how different types of conversations breakdown and how to repair that breakdown.
- the networks of recurrent conversations that constitute the organization or field in which they work.
- the focal conversation for action and its preparatory or supporting conversations

Other items could be added to the list but it suffices to illustrate that professional expertise is bound up in a person's understanding of interaction and participation in work. LAP can be used to articulate this important basis of the expertise involved in professional action.

While LAP research typically orients toward modelling recurrent conversations as they take place in actual conduct, it is only a small but useful step to use LAP to articulate for reflection the conversational underpinnings of practitioners' theories of practice. What is needed is to further specify a model of reflective inquiry to foster reflection on the communicative and interactional underpinnings of expertise.

3 Towards a Model for Reflective Inquiry

Theory and research in LAP provides direction for modelling reflective inquiry. While the previous section identified LAP as an important means for specifying what counts as professional expertise, this section uses LAP to go in a different but related direction. This section considers how theory and research in LAP can contribute to developing a model for reflective inquiry on practitioner's theories of professional action. First, alternatives to the CfA within LAP are discussed as a basis for modelling reflective inquiry. Second, insights from theory and research developing the CfA are discussed as a basis for developing a model for reflective inquiry.

3.1 Alternatives to the CfA for Modelling Reflective Inquiry

The principle model for interaction within LAP is the Conversation for Action (CfA). The CfA models the dance between two primary uses of language first defined by Searle (1969): *directives*, the way people use words to get others to do things, and *commissives*, the ways people commit themselves to doing things. The model specifies the network of moves involved in the interplay of requests and commissives directed toward cooperative action. The CfA does not model interaction organized around the other things that people do with their words. As Searle (1969) points out, people also perform *assertives*, by telling others how things are, and people perform *expressives*, by expressing feelings and attitudes. Assertives and expressives are important to reflective inquiry since it is through such actions that individuals, groups, organizations, and communities discover and develop the grounding for their individual and collective actions.

Interestingly enough, early theoretical developments in LAP point to additional patterns of interaction to be modelled. For example, Winograd and Flores (1986) identify the conversation for possibilities as a kind of conversation that opens new backgrounds for CfAs. Winograd (1986) also identifies conversations for clarification that anticipate and handle breakdowns in the CfA and conversations for orientation that aim to create a shared background for future CfA. These alternative models have not received as much conceptual attention as the CfA.

The conversation for orientation is particularly noteworthy in regard to modelling reflective inquiry. Winograd (1986, p. 208) explains that "in a conversation for orientation, the mood is one of creating a shared background" that includes „specific knowledge, interpersonal relations, and general attitudes.“ As Winograd points out, „the mood here is not directed towards action, but it is important to recognize how critical it is for people to develop shared orientation as the basis for future effective action and appropriate interpretation of language acts (p. 208).“ The conversation for orientation is not specified as a model of interaction but if it were it would address what might be called the interplay of *assertives* and *expressives* in the formulation of grounds for effective and appropriate action.

Aspects of the conversation for orientation can be found in everyday organizational life, as Winograd exemplifies by referring to orientation meetings that aim to help newcomers understand what is required to function in an organization and encounters where people *tell stories* or *shoot the bull*. A full model of conversations for orientation would draw from and idealize basic interactional practices such as story-telling and accounting.

Conversations for orientation suggest a developmental purpose for some patterns of interaction that take place at work. These interactions prepare people to be full, competent actors in the conversations for action around which work is organized. Indeed, certain techniques and technologies for knowledge management, such as gIbis that captures of design rationale (Conklin and Begeman, 1988), could be understood as supporting conversations for orientation.

The conversation for orientation provides some basis for modelling reflective inquiry. It acknowledges the role of assertives and expressives and it recognizes that people surface their assumptions about how things are and their attitude towards how things ought to be. As a model for reflective inquiry, however, the conversation for orientation has a key limitation. Reflective inquiry involves more than transmitting shared background because it involves people in actively engaging and testing their background assumptions—that is, some form of argumentation where doubt, disagreement, or opposition is expressed and managed.

3.2 Layers of discourse in Modelling Reflective Inquiry

An important theoretical development in LAP is the emergence of generic, layered models of communication (e.g., Lind & Goldkuhl, 2003; Weigand & de Moor, 2004). The introduction of layers in LAP models provides a way to conceptualize the expression and management of doubt, disagreement, and opposition.

van Reijswoud (as cited in Weigand & de Moor, 2004), for example, distinguishes the success layer, which is similar to the basic CfA model, from the discussion and discourse layer. The discussion layer is what happens to correct or repair failures in the success layer. The discussion layer draws upon the *discourse layer*, which is the common ground shared by parties to the activity.

Another example is the recent work by Weigand & de Moor (2004) that models the role of argumentation in the CfA as a means for securing the relationship between communicative action and common ground. This work shows how the interplay between directives and commissives is repaired, when it breaks down, by participants invoking relevant common ground, which includes agreements about states of affairs as well as the normative dimension of interaction (e.g., conversational roles and actor obligations).

These innovations address the complexities involved in the legitimate completion of a CfA. The innovations elaborate the basic logic of the CfA by specifying the possibilities for repair through clarification or argumentation that fixes the relevant grounding for the action. These innovations, moreover, are applicable to communicative action in general and not just to the interplay of directives and commissives in the CfA. Thus, a more general and abstract theory of generic, layered patterns of action emerge. The improvements offered by these innovations will be important in developing a model of reflective inquiry.

4 Conversations for Reflection: A Model for Reflective Inquiry

Drawing on the theory of reflective practice and the insights and recent developments in LAP theory and research discussed above, this section proposes, albeit in preliminary form, the *Conversation for Reflection (CfR)* model. The CfR is intended to provide a model from which procedures and technologies can be developed (and assessed) for supporting reflective inquiry on theories of professional practice. The model specifies procedural conditions that support the public testing of private assumptions, the surfacing of dilemmas, and the public discussion of sensitive issues. The goal of the model is for practitioners to engage each other in ways that improve their theories of practice

4.1 Accounting Sequences as a basis for CfR design

The CfR is an idealized version of the ordinary activity of accounting. The CfR model promotes critical reflection on practice by preserving some features of how accounting sequences unfold while designing out other features. Using accounting as the ordinary practice to model is relevant to reflective inquiry because accounts are undertaken in the

context of problematic events. The classic distinction is that some accounts are *excuses* while others are *justifications* (Scott & Lyman, 1968). Excuses admit that an act was bad but deny that the speaker had full responsibility while justifications accept full responsibility for an action but deny or minimize its presumed badness. When accounting a person engages in the broader activities of reason giving and explaining and, as Tracy (2002, p. 79) points out, accounts are highly rhetorical in that „they are speech acts crafted to accomplish the interactional goal of being seen as reasonable.“ Thus, accounts mark what the accountee takes to be reasonable and what the account-recipient assesses to be reasonable and in so doing highlights important collective commitments.

It should be highlighted that the CfR emphasize reflection-on-action not reflection-in-action. Reflection-on-action enables participants to take stock of how the way they account for troubles and frame troubles through stories orients and blinds their thinking and acting. There will always be a gap between what one knows in performing an action and the description of that action. According to Schön (1983), this is not a problem for reflective inquiry but an opportunity since even incomplete and inadequate descriptions of intuitions often provide enough material for critiquing and restructuring intuitive understanding to produce new actions or framings of what is problematic (p. 276-277).

The ordinary activity of accounting involves at least two participants. One person, the accountee, puts forward an account to another with the aim that it will be accepted. The completion of an accounting sequence happens when the account is accepted, which is a relevant and preferred second part to the account, or when the account is rejected, which is a relevant but dispreferred second part to the account (e.g. Pomerantz, 1978). The completion of the sequence breaks down when the felicity conditions for an account do not hold, such as when the account is not seen to be relevant, is produced for the wrong listener, when its veracity is questionable, when the account invokes faulty assumptions, or when the speaker's sincerity or motive in issuing the account is questionable. These are all matters to which the person offering the account can be held accountable and which lead to different paths for completing the account sequence (see Aakhus, 2004, for related discussion).

In everyday interaction there is a *preference for agreement* in accounting sequences. That is accounts are designed to be acceptable and responses to accounts are designed to heighten the possibility for the account being accepted (Pomerantz, 1978). The preference for agreement subdues, downplays, and glosses over the expression or expansion of doubt, disagreement, and opposition that could arise over the performance of the account. This happens for example when accounts are produced in the shortest possible version with the least amount of details on which one could be challenged. It also happens when response to accounts downplay what is doubtful or disagreeable.

4.2 The CfR Model

The CfR model only partially resembles naturally occurring accounting activity. It attempts to draw upon routine behaviour and re-design it to achieve the normative ends outlined in the theory of reflective practice. The most obvious difference between the CfR and ordinary accounting is that the CfR attempts to design out the preference for agreement by fostering breakdown in the accounting sequence (see Aakhus & Jackson, 2004, for related discussion about designing discourse). The CfR models conversation intended to lead participants to insight into their theory of practice by surfacing or drawing into attention consequences of their theoretical orientation that were previously taken for granted and not understood.

The primary feature of the CfR model is an account-opposition sequence (see Figure 1). The first move is an account where a person reconstructs an event by portraying what happened, what was problematic, and what the event signifies. Accounts ordinarily seek acknowledgement of what has been expressed and acceptance of what has been asserted.

However, to promote reflection accounts need to be made accountable. It is important then the accouter take on certain obligations in producing an account. The accouter is expected to articulate their experience with enough clarity that recipients get some sense of having been there and can appreciate what the accouter finds problematic and relevant. The CfA is an alternative to the ordinary completion of the accounting sequence. Thus, the second basic move is *opposition*. The point is not to be antagonistic and hostile but instead to make the account engage with doubt or disagreement. The CfR withholds the conditionally relevant, preferred response to an account and promotes opposition. The CfR highlights the role of opposition to make explicit what an account presumes by challenging what is asserted and raising doubts about what is expressed with an account. The opposer is obligated to raise doubts about the expressive aspects of an account or disagreement with the assertive aspects of an account. That disruption helps generate material for reflection and engagement with the grounding of actions.

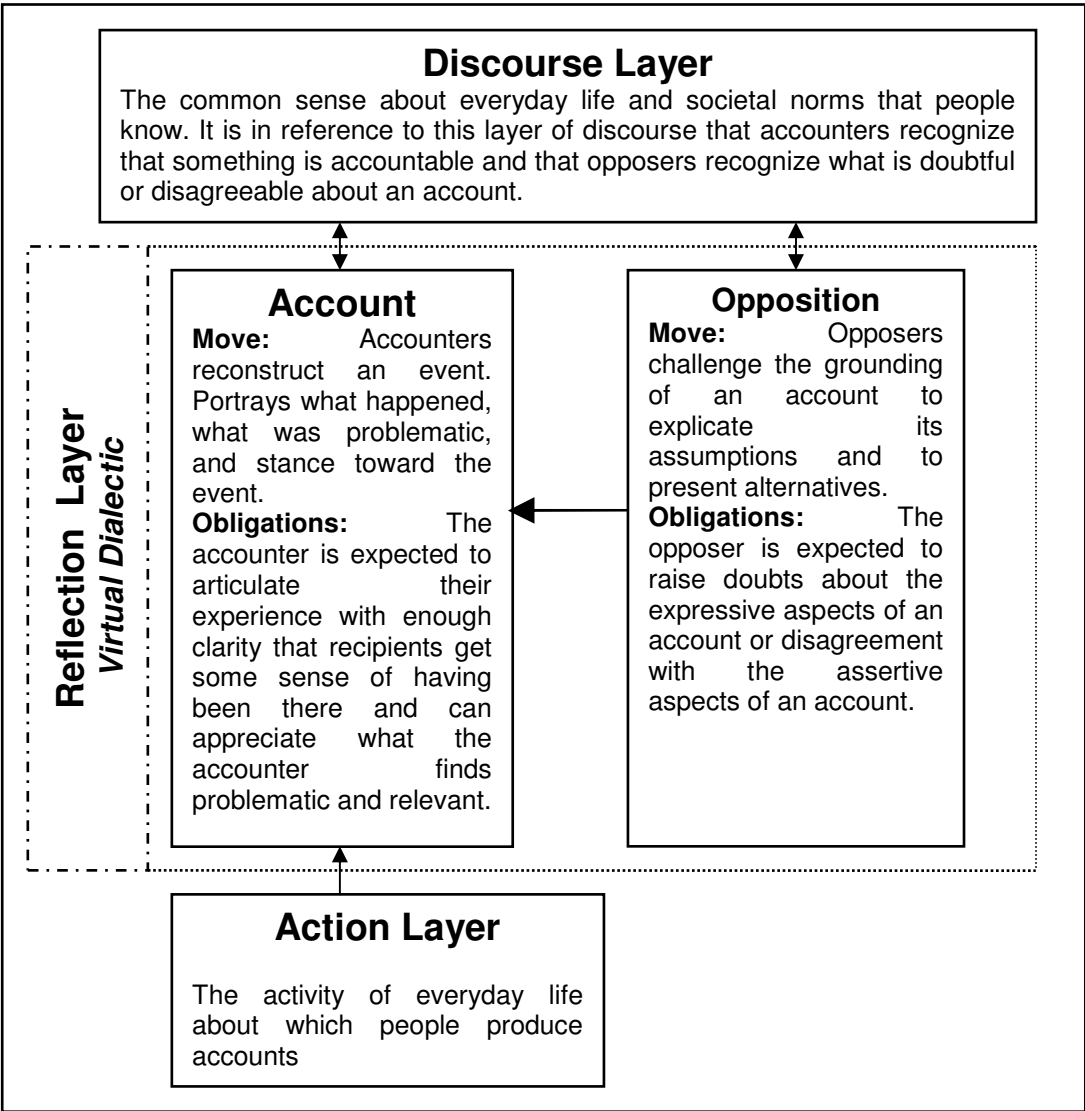


Figure 1: Conversation for Reflection

The account-opposition sequence is embedded between two layers. One layer is the action layer which is the activity of everyday life about which people produce accounts. It is similar to the success layer in van Reijswoud's model. However, the CfR is not a model of reflection-in-action but a model of reflection-on-action so CfR begin with accounts about something that has happened. The participants then engage in a reflection layer, or *virtual dialectic*, about what has happened. This layer is similar to the discussion or argumentation layer in other models. The other layer is a discourse layer, which as in other models, is the common sense about everyday life and social norms that people know. It is in reference to this layer of discourse that accounters recognize that something is accountable and that opposers recognize what is doubtful or disagreeable about an account.

The CfR model is a general model meant to guide the development of institutions and interactional spaces for reflection. It is a model not a literal representation. As such, it is partially descriptive about how reflective conversations work and partially normative about how reflective conversations ought to work. It is useful because it can be used to assess practical circumstances to create procedures, techniques, and technologies to realize a CfR in a practical circumstance.

5 Designing Support for CfR

Since reflective inquiry may not happen of its own accord or be implemented in social-psychological or socio-political conditions conducive to its conduct, it is necessary to develop procedures, techniques, and technologies that can help people produce reflective inquiry. This section discusses some general issues in developing support for CfR and briefly describes some specific applications inspired by the CfR.

5.1 Micro and Macro Support

The CfR requires two classes of support. Micro-support focuses on enabling the basic account-opposition interaction to happen. Macro-support focuses on capturing and re-representing the products of the account-opposition interaction for further use.

5.1.1 *Micro-Support of the CfR*

The generative feature of the CfR is the dialectical pairing of accounts with opposition. The CfR spells out what should happen in these moves. Micro-support is the design of procedures, techniques, and technologies that function like tools or props for making the moves through which people construct reflective inquiry. Micro-support opportunities lie in the guidance a tool provides for focusing accounts and opposition (see Figure 2). In general, micro-support for accounts should help the participant provide the fullest account possible of what happened. This includes expressions of attitudes and background assumptions/beliefs. More specifically, micro-support will vary depending on the professional practice, whether the participants are novices or experts, and the learning goals for the setting.

Accounts highlight and hide aspects of the state of affairs described and reveal and conceal feelings and attitudes about those states of affairs. In general, the oppositional move should further draw unexpressed premises into relief and maximize the expression of doubt or disagreement over what is said. Micro-support for oppositional moves should help make the expression of doubt and disagreement relevant to the account made. In addition, oppositional moves should be encouraged to make explicit the common sense and social norms brought to bear in expressing doubt and disagreement.

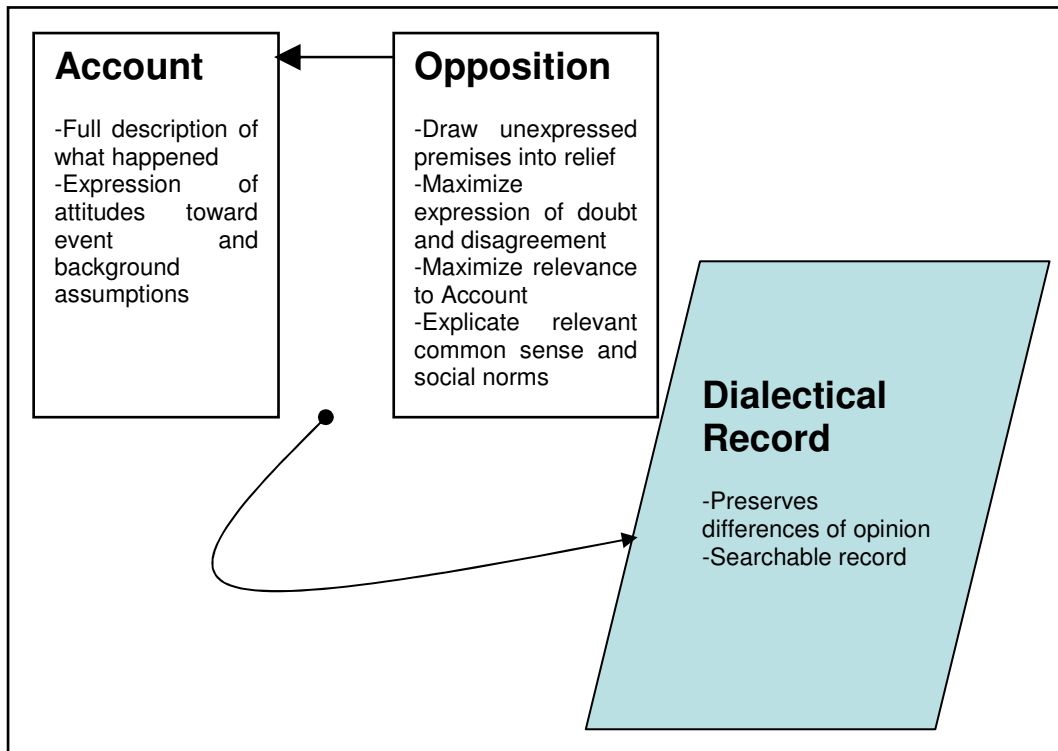


Figure 2: General Support for the Conversation for Reflection

5.1.2 Macro-Support of the CfR

The CfR model incorporates macro-features of reflective interaction (see Figure 2). The purpose of the account-opposition dialectic is to surface assumptions for testing and critique. The product of the virtual dialectic is a *dialectical record* of accounts and opposition – that is if this captured and articulated. Macro-support for a CfR should provide a mechanism to record the accounts and oppositions. First, capacity to search the record provides another form of interactivity that can promote individual and collective inquiry into the grounding of action in a group, organization, or community. In particular, participation at this level should promote searches for evidence to disconfirm given orientations toward action available in the group, organization, or community. Second, the accumulation of accounts in a dialectical record provides a basis for identifying patterns of accounting and opposing. These patterns may be evident in surface linguistic features such as particular phrases or forms of expression. These patterns may also be implicit and index tacit assumptions difficult to detect in one or two responses but more easily detected in a large corpus of responses. These assumptions can be summarized and presented back to the participants in the CfR to further expand the reflective inquiry being supported.

The building of the dialectical record does not suppress the differences articulated in the virtual dialectic. This is consequential for aiding reflection on theories of practice in at least two ways. First, it provides a resource for individuals to encounter differences and engaging their own perspective of practice. Second, when the record and its production are made into an object of reflection, that contributes to understanding how the collective reasons about communication and interaction in work and professional life. For instance, after repeated participation in a CfR it may become apparent that novices have particular ways of understanding, or ways of describing and framing, an aspect of practice. This understanding

may differ markedly from how expert-practitioners conduct themselves. The macro-support can then provide an opportunity for deeper, critical reflection on practice and specific cases for the novices to work from.

5.2 Designs based on the CfR

Two working applications based on the CfR model will be briefly discussed in this section. While both applications are designed for very different contexts, both applications address issues of surfacing background assumptions about action for testing and refinement. These applications support individual participant's development as competent participants in the CfA constitutive of their work organization and professional communities. These two examples focus on the transition from novice to expert.

5.2.1 Dilemmas of Communication experienced in Workplace Internships

This application was motivated to solve the practical problem of guiding students in workplace internships to reflect on their work experiences. At one level, the situation presents a problem of providing a discourse space for students who cannot otherwise meet their instructor or classmates face-to-face. At another level, the situation presents problems of discourse that students would face even when meeting face to face such as coherent production of accounts, time to receive adequate feedback, preference for agreement, and conflict avoidance. Electronic media were used as a resource for restructuring interaction to address these problems. The CfR provided a guide to designing the application (for additional discussion of the application see Aakhus, 2001).

The account-opposition sequence in this setting was designed to help the students focus on surfacing and testing their assumptions about the role of communication in work and professional life (see Figure 3). The accounting took the form of an *update* focused on describing a dilemma the intern experience at work. The update contained several questions encouraging elaboration of the dilemma, how others might handle the situation, and what the intern learned from the situation. The opposition was designed as a response to the update. The response contained several questions encouraging participants to raise doubts about specific points in the updates. The application also helps build a dialectical record that is searchable.

Several alternative variations on this format have been developed and implemented. These alternatives emphasized a slightly different focus by encouraging interns to report important moments where their speaking rose to the demands of the situation or failed to. The responses have also been re-organized to encourage opposers to first summarize an update before expressing doubt or disagreement with the update.

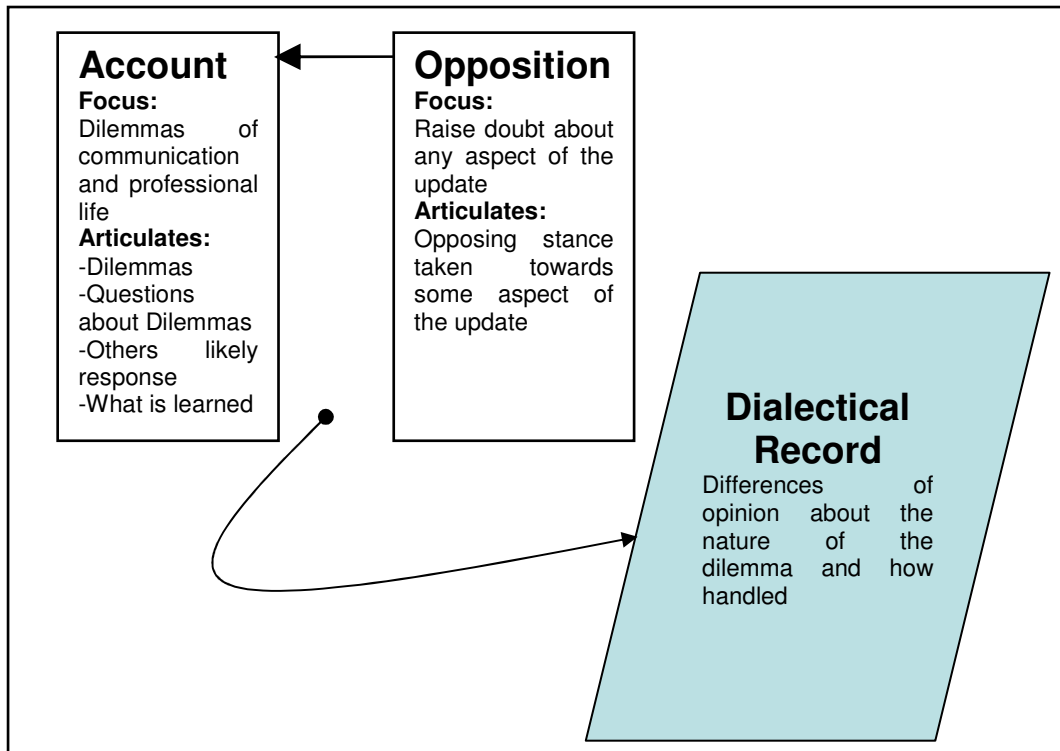


Figure 3: Support for Dilemmas of Communication CfR

5.2.2 *Difficult Conversations experienced in Medical Clerkships*

This application is used by third year medical students going through their „clerkship,“ which is a rotation of field experiences in different medical settings. Medical students observe and experience many difficult conversations during their clerkships. The way medical students make sense of what they observe or do in these difficult conversations is consequential for how they come to understand medical practice and their own subsequent behavior. Yet, the opportunities for discussion and guidance regarding these situations tend to be haphazard. So, an application based on the CfR was developed that enabled the medical students to reflect on difficult conversations (for further discussion see Makoul, Aakhus, Altman, & Flores, 2004).

A key issue in designing and implementing the application was constructing a safe-space for the medical students to discuss these difficult conversations (see Figure 4). The accounting took the form of posts asking students to describe the difficult conversation and the ways in which it went well and did not go well. The opposing took the form of responses asking how the opposer would have handled the situation and whether it was similar to any experience of the opposer. Students reported that the DC Forum was easy to navigate and valuable. It is now seen as part of the curriculum, not an add-on. The DC Forum is filling a void by facilitating reflection and dialogue about communication challenges.

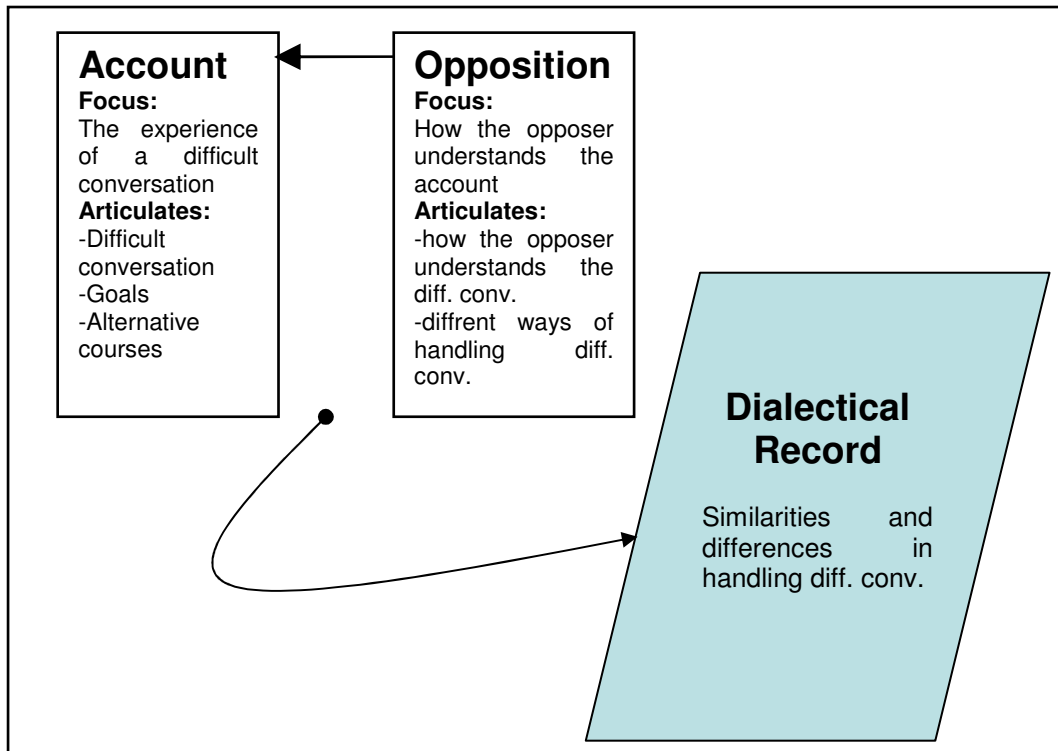


Figure 4: Support for the Difficult Conversations CfA

6 Conclusion

This paper has developed a preliminary model of CfR. The model is motivated by the limits of the CfA and the need for a complementary model that addresses the interplay of assertives and expressives in formulating the grounds for effective and appropriate action. The model is grounded in the everyday practices of accounting and the normative ideal of reflective practice. The micro and macro features of reflective interaction were described and two applications based on the CfR were introduced. Additional conceptual work is needed to further develop the theory of argumentation underlying the reflective discussion layer – virtual dialectic – and to further specify the social-psychological conditions and socio-political conditions conducive to reflective inquiry. Finally, a more comprehensive model of the CfR will include empirical research on the use and effectiveness of applications developed based on the CfR.

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