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# Building common knowledge at the boundaries between professional practices: Relational agency and relational expertise in systems of distributed expertise

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## ABSTRACT

The article develops an earlier account of relational agency (*IJER* 2005). Its starting point is a view of practices as knowledge-laden and emotionally freighted sites of purposeful and expert activity. Arguments therefore draw on cultural historical analyses of activities, practices and the institutions that shape them. Relational agency in inter-professional activities is seen to be mediated by common knowledge which is built in interactions at the points where the boundaries of practices intersect. The focus will be the development of common knowledge, described by Carlile (2004, p. 557) as a capacity to 'represent the differences now of consequence and the ability of the actors involved to use it', at the sites of intersecting practices. The argument, supported by evidence from four recent studies of interprofessional work, is that building and using common knowledge is an important feature of the relational expertise required for working across the practice boundaries on complex tasks.

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## 1. Introduction

In this article I discuss the 'relational turn' in expertise (Edwards, 2010). The argument is that, as professionals work in and between work settings and engage with other specialist practitioners and with clients to negotiate interpretations of tasks and ways of accomplishing them, two features of collaboration may be observed. First practitioners come to recognise the specialist expertise that is distributed across practices and settings and second they bring to bear both their core expertise and an additional form of expertise, which I have called relational expertise.

The premise for developing the idea of relational expertise in the context of the welfare professions is twofold. The resources that others bring to collaborations on complex problems, such as children's trajectories of vulnerability, can enhance understandings and can enrich responses (Edwards, 2005); but working across practice boundaries in this way makes demands on practitioners. Responsive collaboration calls for an additional form of expertise which makes it possible to work with others to expand understandings of the work problem as, in activity theory terms, an 'object of activity' (Engeström, 1999). It also involves the ability to attune one's responses to the enhanced interpretation with those being made by other professionals. Relational expertise is therefore based on confident engagement with the knowledge that underpins one's own specialist practice, as well as a capacity to recognise and respond to what others might offer in local systems of distributed expertise.

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The idea that is at the centre of the research programme that has led to notions of distributed and relational expertise is 'relational agency' (Edwards, 2005, 2010). It was first introduced in a 2005 *IJER* article and the intention is to elaborate the concept in this one, by discussing how it is generated. In brief, relational agency involves a capacity for working with others to strengthen purposeful responses to complex problems. It arises in a two stage process within a constant dynamic which consists of:

- (i) working with others to expand the 'object of activity' or task being worked on by recognising the motives and the resources that others bring to bear as they, too, interpret it; and
- (ii) aligning one's own responses to the newly enhanced interpretations with the responses being made by the other professionals while acting on the expanded object.

In this article I focus on recognising how other professionals interpret and respond to work problems and the consequent building of the common knowledge which can then mediate relational agency in the heat of practice.

These ideas have been developed in studies of the prevention of the social exclusion of children and young people through early intervention at the first signs of vulnerability. These interventions have called for practitioners to recognise the complexity of a child's trajectory before responses are considered, as one professional acting alone is likely to miss some aspects of vulnerability (Edwards, Daniels, Gallagher, Leadbetter, & Warmington, 2009). Because of this starting point, how collaboration is understood is different from versions of networked support which are based on the interpretations of a single professional who asks others for the resources that she considers appropriate (Nardi, Whittaker & Schwarz, 2002).

There is no dilution of personal specialist expertise as a result of incorporating the motives and conceptual resources of others into specialist practice; quite the reverse. To avoid the downplaying of specialist knowledge in relational work we should distinguish between the ability to recognise and work with what matters for others and being able to do what they do. In this article I attempt to fill a gap in the analysis offered in the 2005 paper by examining what knowledge mediates the exercise of relational agency when practitioners work fluidly and responsively on complex tasks.

## 2. Boundaries: where practices intersect and common knowledge can be built

My analyses regard boundaries as spaces where the resources from different practices are brought together to expand interpretations of multifaceted tasks, and not as barriers between the knowledge and motives that characterise specialist practices. Importantly, the learning that occurs in these spaces is not a matter of learning how to do the work of others, but involves gaining sufficient insight into purposes and practices of others to enable collaboration.

The examples of work at the boundaries I present come from studies of inter-professional work. They are social constructions (Midgley, 1992) which separate different communication systems, meaning systems, priorities, time-scales and so on. Sometimes these historically developed differences may be small. For example, an educational welfare officer and social worker may be able to work to similar time-scales on similar priorities; but there are nevertheless differences in the backgrounds from which their actions spring (Taylor, 1995) which need to be understood.

These differences in background are evident when problems are discussed and responses agreed, as a lack of shared background means that there is also likely to be a lack of common knowledge that might mediate negotiations. Edwards (Derek) and Mercer have written about developing common knowledge as the basis for classroom teaching. They argued the sociocultural line and described its construction as: '(T)he expression of stance and counter-stance . . . a negotiative depiction of education, a rhetorical, argumentative meeting of minds. . .' (1987, p. 164).

The discursive meeting of minds that gives rise to common knowledge was also identified by Middleton in his 1996 analyses of team working in medical settings. Common knowledge based on shared experiences within a team can, as Middleton observed, offer resources for joint decision-making. However, we know all too little about how common knowledge is built at the boundaries of systems or practices.

Carlile's (2004) work on managing knowledge across boundaries is useful here. He found that knowledge held in common was particularly helpful in linking sub-units within an organisation so that knowledge could be managed across boundaries to provoke innovation. He made an important distinction between what he termed transfer, translation and transformation when knowledge enters new practices, and linked this distinction to how knowledge was mediated across boundaries by drawing on the knowledge that was held in common.

The argument went that knowledge mobilisation depends on the 'capacity of the common knowledge to represent the differences and dependencies now of consequence and the ability of the actors involved to use it' (2004, p. 557). He suggested that when the difference between what is known and what is new increases, the demands on the knowledge held in common, and therefore the capacity to work with the new knowledge, also increases.

Accordingly, simple 'transfer' may be possible when new ideas are not too distant from existing specialist knowledge in a practice, such as when paediatrician talks to a family doctor about a new treatment; but some translation may be needed when the doctor discusses the treatment with the child's parents. However, domain specific knowledge may need to be 'transformed' if it is to take on radically new ways of thinking such as a new focus on children's mental health in curriculum-oriented schools. This argument suggests that building common knowledge which enables quick transfer or makes translation easy, is an important prerequisite to quick and responsive relational work.

My argument is that efforts to create common knowledge at the boundaries of practices are important. These ‘inter’ spaces (Hartley, 2007), as Hartley has observed, have been set up as new solution spaces in the welfare services. We now need to know more about them by asking what goes on there to build the common knowledge that can mediate quick knowledge transfer between practitioners when they collaborate on complex problems.

### 3. Boundary work

The work on boundaries which builds on Churchman (Midgley, 1992; Ulrich, 1988), describes them as social constructions which define which knowledge or meaning system is considered relevant in interactions. They are therefore important to organisations. Santos and Eisenhardt (2005) suggest that boundaries serve organisational purposes including:

- demarcating power in decision-making in specific fields of action to ensure a sphere of influence;
- identifying the limits of an organisation’s resources to ensure that they are used to best advantage in a competitive market; and
- defining the organisation’s identity, its sense of ‘who we are’ in relation to other organisations.

Boundaries, according to this analysis, sustain practices, though they do not necessarily restrict their development. They are places where practices are alerted to changes which may affect actors’ relative power, their resources and identities. Working relationally at organisational boundaries, therefore, involves the personal challenges of negotiating expertise in settings where one may not be able to manipulate practices; and where the practices that were being protected by the boundary may themselves be destabilised by your actions. As Kerosuo (2003) has observed, organisational boundaries can be uncomfortable places.

### 4. What happens in the new boundary spaces?

What boundary practices are important for the development of common knowledge? In the Learning in and for Interagency Working (LIW) study (Edwards et al., 2009) we elicited what practitioners such as social workers, teachers and educational psychologists needed to know and be able to do to collaborate to support children’s wellbeing. The following features of their new inter-professional work seemed to form the basis of the common knowledge, both substantive and relational, that was mediating their collaboration in the field:

- Focusing on the whole child in the wider context.
- Clarifying the purpose of work and being open to alternatives.
- Understanding oneself and one’s professional values better.
- Knowing how to know who.
- Taking a pedagogic stance at work.
- Being responsive to others: both professionals and clients.
- Rule-bending and risk-taking.
- Creating and developing better tools for collaboration.
- Developing processes for knowledge sharing and pathways for practice.
- Learning from practice.

Here there are aspects of a boundary practice which include being alert to the long-term purposes of practices; understanding oneself and ones professional values; knowing how to know who; being pedagogic; and being responsive. There will of course be power differences between an educational psychologist and a social care assistant which are revealed in talk and decision-making, but these differences are not built into a pre-structured hierarchy at the boundary.

Typical spaces include strategic partnerships in local authorities, set up to prepare a local strategy to allow access to national funding by bringing together public, private and voluntary sectors (Powell & Dowling, 2006). They may be the Partnership Boards which bring together providers, local authority representatives and users to commission services (Edwards, Barnes, Plewis, & Morris, 2006). They may be constituted like the locality meetings where practitioners met regularly to share ideas and discuss children. Or they may be meetings set up to solve immediate problems, but which nonetheless develop as sites for sharing understandings and revealing expertise, such as the multi-professional meetings that take place in secondary schools across the UK to deal with vulnerable children (Edwards, Lunt, & Stamou, 2010).

Christensen and Laegreid outlined some of the problems of working across inter-agency boundaries. These include the time and other resources that are used when ‘working horizontally’; a tendency to be over ambitious; and unintended risks and uncontrolled consequences. Horizontal working across boundaries between organisations, they argue, also needs ‘cooperative effort and cannot be easily imposed from the top down’ so that ‘the role of a successful reform agent is to operate more as a gardener than as an engineer or an architect’ (Christensen & Laegreid, 2007, p. 1063). Evidence from our studies supports this analysis. We therefore need to examine in some detail how collaboration is nurtured in these spaces.

## 5. Evidence from the studies

The Children's Fund (CF) initiative, found in every local authority in England over the last ten years, allowed an examination of what was happening in a number of 'inter' spaces. The National Evaluation of the Children's Fund (NECF) (Edwards et al., 2006) worked with CF Partnerships Boards in 19 local authorities examining the Boards and the services they commissioned to prevent the social exclusion of vulnerable children. These services were in the same localities, allowing the initiative to develop local systems of professional support for children. In the more effective partnerships partnership programme managers supported locality-based practitioner meetings. These meetings functioned as 'boundary zones' (Konkola, 2001) between the different statutory and voluntary sector services that were receiving funding and needed constant organisation and support.

As boundary zones, the meetings were places where local expertise could be made explicit so that it might be drawn on later. The spaces were inhabited by workers from different practitioner backgrounds who recognised that collaboration would help with the complex problems that they were dealing with, as this practitioner explained:

It's about understanding at a deeper level. It's about connections. Maybe you are not sure about the child we are thinking about; but as we talk it through there may be a connection and if not for that child, maybe for another.

These spaces were springboards for horizontal linkages between practitioners who cut new trails across localities to reconfigure children's trajectories. The sessions were problem-focused with discussions about the purposes and principles of prevention. Here a practitioner outlines what she gained from them:

I think the very first step is understanding about what the sort of issues are. . . Professions have very, very different ideas about need, about discipline, about responsibility, about the impact of systems on families. . . So I think the first step is actually to get some shared understanding about effective practices and about understanding the reasons behind some of them. Understanding some of the reasons why we are seeing these sorts of issues in families.

These meetings demanded that practitioners looked outwards beyond their own services and kept open minds. They swallowed resources, but enriched inter-professional responses.

But setting up inter-professional social ties is not enough: the ties need to be oriented towards a reworking of practices to take forward the purposes of more fluid and flexible work. The expansive practice that began to emerge in some parts of the CF initiative consisted of generative negotiations of interpretations and responses which were propelled forward by the core idea of preventing social exclusion. A crucial feature in the places where it occurred was the ability to move beyond the 'here and now' of finding immediate solutions and to, in addition, reveal alternative possibilities which reflected the professional ideals of participants.

## 6. Alternative envisioning at the boundaries

Cultural Historical Activity Theory (CHAT) analyses of an ability to visualise alternative futures usually refer to Wartofsky's analyses of artefacts outlined by Cole (1996, p. 121). Cole explains that primary artefacts are those tools such as axes which are actually used in production; secondary artefacts are representations of primary artefacts and include recipes, beliefs and norms which preserve and transmit ways of acting and thinking; while tertiary artefacts, while still imbued by the human needs and intentions that shaped the other forms of artefact, present the possibility of an imagined world. Wartofsky described tertiary artefacts as follows:

The upshot, however, is that the construction of alternative imaginative perceptual modes, freed from the direct representation of ongoing forms of action, and relatively autonomous in this sense, feeds back into actual praxis, as a representation of possibilities which go beyond present actualities. (Wartofsky, 1973, p. 209)

Most CF locality meetings operated at the level of recipe exchange with a few examples of an emergent focus on prevention as an imagined artefact to be worked towards. However, the sessions run by the research team in the LIW study (Edwards et al., 2009) specifically encouraged participants to construct 'alternative imaginative' perceptions which might shape future action. Engeström (2007a), also drawing on Wartofsky, has described these new perceptions as 'where to tools' which, reflecting Wartofsky's concern with representing human needs and intentions, contain the germ cell of professional practice. Fig. 1 shows Engeström's categorisation of tools and their use. The term 'germ cell' in Vygotskian theory refers to the key concepts in an area of knowledge, their relationships with each other and any tensions in those relationships. The germ cell is therefore always open to change as it is taken into use in the world.

According to Engeström (2007a) the same tool or resource may be used in different ways depending on how the problem is being interpreted and how the expectations and social practices of an organisation shape how a tool might be used. In the LIW study, we observed that an assessment of a child may be used as a 'how' tool to arrange support; as a 'why' tool which may involve questioning the value of each option for the needs of the child, or as a 'where to' tool where the child, carers and practitioners discuss what they want for the child in the longer term. 'Where to' conversations start to reveal values and intentions and open up possibilities for the exercise of relational forms of agency on the part of practitioners and families. Therefore the idea that professional knowledge can be pinned down and controlled by 'how' tools, such as bureaucratic procedures, is seriously challenged by the idea of 'why' and 'where to' tools outlined by Engeström.

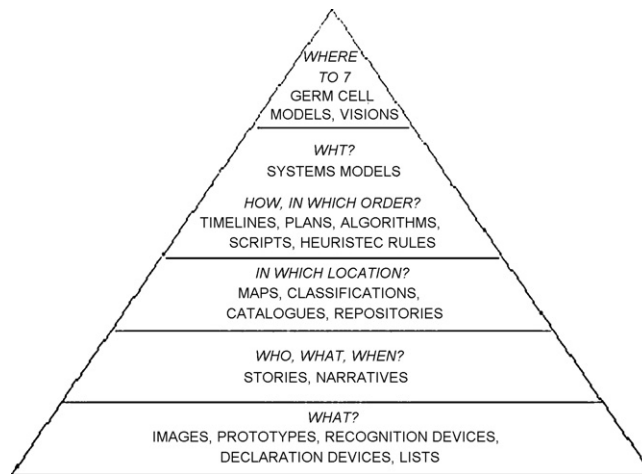


Fig. 1. Epistemic levels of mediational artefacts (Engeström, 2007a, 2007b).

## 7. Constructing sites for building common knowledge

But what are the structuring conditions that may give rise to discussions of 'where to' and 'why' and lead to the common understandings? The meetings in LIW study were inter-professional sessions of 2 h in length which were convened by the research team to elicit the concepts being developed by practitioners such as psychologists, social workers and teachers, as they developed inter-professional collaborations. The sessions were based on Engeström's Developmental Work Research (DWR) methodology (Engeström, 2007b) where practitioners are presented with evidence on their everyday practices as 'mirror data' which they then discuss.

DWR licenses questions about purposes and principles, and guides practitioners to ask fundamental questions about the 'why' and 'where to' of their practices. Attention to the 'why' and 'where to' of practice can also be achieved by using just some of the features of DWR. In a study of how secondary schools were adjusting to inter-professional work (Edwards et al., 2010), we structured the one feedback session we gave in each school by using extracts from interviews which revealed contradictions as mirror data and by employing the terminology of activity theory. In the practitioners' responses to the mirror data the 'why' of practice was inescapable.

I have suggested elsewhere (Edwards, 2009, 2010; Edwards & Kinti, 2009) that meetings which give time to revealing the 'why' of practices, are a prerequisite to relational work across boundaries within and between organisations. They serve three important functions in building the common knowledge which can mediate flexible responsive work with others. These are:

- Recognising similar long-term open goals, such as children's wellbeing, which give broad coherence to the specialist activities of practitioners.
- Revealing categories, values and motives in the natural language of talk about problems of practice.
- Recognising and engaging with the categories, values and motives of others in discussions of potential objects of activity.

Let us therefore turn to how the knowledge that matters for each practice is revealed in talk at the boundaries between practices.

## 8. Knowledge talk at the boundaries

My premise is that practitioners reveal the ready meanings of their practices in their use of categorisations: needy parent, single-mother, poorly educated carer and so on. These give insights into the practices in which they arise, and help other practitioners to develop the professional multi-lingualism that will allow them to negotiate across boundaries, or 'press the right buttons' as one LIW practitioner put it. Recognition of how categories are used does not imply access to the tacit knowledge held in practices, though it can open windows onto it. Engaging with the ready meanings of different discourse groups gives only limited access to what Taylor (1995, p. 69) describes as the background which 'makes certain experiences intelligible to us'. There will always be differences in how practices and purposes are understood by professionals working from different practices, and these differences can be generative.

Boundary talk is rarely neutral; there are strong emotional elements which reflect how discourses connect with identities. As Sarangi and Roberts explain, institutional discourse is 'a central means of socialization into the professions' (1999, p. 37). Consequently, for boundary spaces to generate common knowledge they need some managing. Meetings that focus on finding solutions, I propose, need to be augmented by the meta-level aim of developing mutual recognition by



revealing and discussing what matters in the intersecting practices. This is the role of Christensen and Laegreid (2007) 'gardener'. This work is the development of common knowledge at the boundaries.

Evidence from the LIW study suggests that narrative accounts of past, present and future practices reveal the conceptual resources, motives and values embedded in intersecting practices. As Bruner (2004) explains '*world making* is the principal function of mind' (2004, p. 691), and the narrative mode of world making allows participants to imbue concrete accounts of experience with meanings that can accommodate complexity and contradictions (Bruner, 2004). These meanings include, as Tsoukas observes, the motives that infuse the narratives allowing them to operate as a 'device for framing motives' (2005, p. 251).

However, LIW evidence also suggests that narratives can have different functions within conversations. Past and present narrative accounts may operate in the same way as Wartofsky's (1973) secondary artefacts, as representations aiming at preserving the status quo of established practices; but future-oriented accounts of desired possibilities may reveal tertiary artefacts with 'why' and 'where to' qualities which take knowledge sharing beyond mere exchange of information to a shared ascription to longer-term goals. Contrast how the following account is used as a secondary artefact by a senior teacher in a school in the LIW study, with the more 'why' and 'where to' future-oriented account of the educational psychologist at the same school. First the teacher reveals the categories that allocate children to specific levels of need that reflect the historical practices of the school:

... and if you think about the volume of youngsters that come to us with categories of special need, categories of 'school action plus' that's failed in primary schools, categories of need with kids who haven't made any progress, they're not regarded as special needs kids, they're not statemented, and yet their literacy is an issue, which is very often connected with bad literacy in the family, or need in the family. So if you think about the high risk categories of youngsters that transfer [from primary school], ... this child will not be in a target group they will just be a normal kid.

A few turns later the psychologist responds with a narrative of future intentions which attempts to disrupt existing categories and indicate future possibilities:

What we need to be doing is to be looking perhaps far more carefully at precisely what difficulties exist, why we think they exist and what support might actually be appropriate to help. And then recognise the paradigms that a whole range of professionals and voluntary sectors want to work from. ... What we're attempting to do, is to begin to support schools in coordinating this performance out there. And what I'm particularly interested in is, about opening schools up, making the boundaries more permeable and it's not just about you know people coming in and people going out. But I need clear purposes to what we're about, it has to be about making a difference for children and young people and their families.

Wertsch's notion of 'implicit mediation' (2007) suggests that knowledge is often carried in the natural language of the situation and is therefore different from the explicit mediation that occurs in the contrived conversations of formal teaching. In boundary spaces the natural language of the situation, might be seen to be the language of asserting particular representations at the expense of others. Indeed the use of a tertiary artefact to respond to a secondary artefact in the LIW example may be seen in such a way. In order to understand a little better the meta-level task of the 'gardener' we need to turn to the relational demands of the common knowledge that will ultimately mediate inter-professional work.

## 9. Creating common knowledge

Earlier I presented the features of boundary practices which seemed to form the basis of the 'common knowledge' that was mediating collaboration in the LIW study. These included 'knowing how to know who', 'taking a pedagogic stance at work' and 'being responsive to others: both professionals and clients', indicating a relational aspect of expertise which includes being alert to the standpoints of others and being willing to work with them towards shared ethical goals (Benhabib, 1992; Taylor, 1989, 1991).

Benhabib elaborates her view of what she terms 'communicative ethics' as a 'form of ethical cognitivism' (p. 51). She explains how an ethically grounded discursive rationality is produced, and in the process may offer some ground-rules for the relational aspects of knowledge work at the sites of intersecting practices:

In conversation, I must know how to listen, I must know how to understand your point of view, I must learn to represent myself to the world and the other as you see them. If I cannot listen, if I cannot understand, and if I cannot represent, the conversation stops, develops into an argument, or maybe never gets started. (Benhabib, 1992, p. 52)

This is not simply a description of conversational reciprocity driven by moral concerns about visions of the good life. Her agenda is ambitious:

What I propose is a procedural reformulation of the universalizability principle along the model of a moral conversation in which the capacity to reverse perspectives, that is, the willingness to reason from the others' point of view, and the sensitivity to hear their voice is paramount. (Benhabib, 1992, p. 8)

The capacity to reverse perspectives does not imply the seeking of consensus, but rather a willingness to 'seek understanding with the other and reach some reasonable agreement in an opened ended moral conversation' (Benhabib,

1992, p. 9). These practices of reaching ‘reasonable agreement’ are, I suggest, to be seen as the practices of generative boundary work in which ‘open ended moral’ conversations are the vehicle for the production of a value-laden common knowledge to which people can ascribe, contribute and argue against, and which in turn mediates what is seen as reasonable in professional action with vulnerable children. These conversations cannot be dismissed as knowledge transfer or knowledge exchanges; they are predicated on never knowing the ‘background’ (Taylor, 1995) on which the other draws with the result that the acknowledgement of differences can render them generative.

I have been suggesting that relational engagement with the knowledge and motives of others can produce a form of common knowledge which comprises a partially shared understanding of what matters for other contributing experts. This knowledge can then mediate responsive professional action. To aim at the latter, without attention to the former is, I suggest, an error.

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