The Evolution of the Communities of Practice Approach: Toward Knowledgeability in a Landscape of Practice—An Interview with Etienne Wenger-Trayner

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Abstract
Since its introduction by Jean Lave and Etienne Wenger in *Situated Learning: Legitimate Peripheral Participation* in 1991, the concept of communities of practice has been widely adopted by researchers and practitioners in different fields. This has been accompanied by continuous expansion and development of the theory behind the concept. In this interview, Professor Etienne Wenger-Trayner discusses the evolution of the theory of communities of practice in his own work over the past two decades. He talks about the origins of communities of practice as a theoretical approach, identifies three phases through which this theory has evolved, and reflects on his professional trajectory as a theorist and consultant. Using his career as an example, Wenger-Trayner elaborates on the notion of knowledgeability as a relationship individuals establish with respect to a landscape of practice that makes them recognizable as legitimate actors in complex social systems.

Keywords
groups/group processes/dynamics, knowledge management, organizational learning

Professor Etienne Wenger-Trayner

Etienne Wenger-Trayner is a globally recognised scholar in the fields of communities of practice and social learning theory. He received an undergraduate degree in Computer Science from the University of Geneva, Switzerland, an MSc in Information and Computer Science in 1984 and a PhD in artificial intelligence in 1990 (both at the University of California Irvine). For ten years, he worked as a researcher at the Institute for Research on Learning in Palo Alto, CA. Since then, he has been an independent researcher, consultant, author, and speaker. He is also a visiting professor at the universities of Manchester and Aalborg.

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Wenger-Trayner's seminal contributions include *Situated Learning: Legitimate Peripheral Participation* (co-authored with Jean Lave), in which the term 'communities of practice' was coined, and *Communities of Practice: Learning, Meaning and Identity* in which this concept was developed further. Although his analytical work on communities of practice started at the interface of anthropology and learning theory, his later contributions (Wenger & Snyder, 2000; Wenger, McDermott, & Snyder, 2002) target the practitioner audience and advocate the cultivation of communities of practice as a development approach in organisations. Over the recent years, through consultancy, Wenger-Trayner has helped organisations apply his ideas in the public and private sectors, including business, government, education, international development, and healthcare.

The Evolution of the Communities of Practice Approach

The theory of *communities of practice* is a socially situated, practice-based approach to learning that challenged influential cognitivist assumptions of learning as an individual process of acquisition taking place inside the learner's mind, predominantly within formal education contexts. Communities of practice are the primary loci of learning which is seen as a collective, relational and social process. According to this approach, it is the relational network, rather than 'before' and 'after' states of individual minds, that is key to understanding learning; people learn through co-participation in the shared practices of the 'lived-in' world; knowledge production is inseparable from the situated, contextual, social engagement with these practices; and learning is a process of identity formation, *i.e.* becoming a different person, rather than primarily the acquisition of knowledge products (Fuller, 2007; Murillo, 2011). According to Wenger (1998, 2000, 2010), this process is dual and involves realignment between the community-defined *regime of competence* and the individual *experience* of community members.

Over the last two decades, the theory of communities of practice has evolved and expanded in a number of directions, reflecting the interpretative flexibility of this approach and its popularity across disciplines and sectors (Cox, 2005; Kislov, Harvey, & Walshe, 2011; Li et al., 2009; Murillo, 2011; Wenger, 2010). It is possible to identify several main trends in this evolution. First, an *analytical perspective* on communities of practice focusing on spontaneous communities which involve minimal formalisation (Brown & Duguid, 1991; Lave & Wenger, 1991) became complemented by an *instrumental perspective.* The latter uses communities of practice as a knowledge management tool and calls for their deliberate cultivation within and across organisations (Wenger & Snyder, 2000; Wenger et al., 2002). Table 1 shows some examples of how these two perspectives have been applied in the management literature. Second, the analytical focus in the communities of practice approach is shifting from internal processes *within* individual communities towards interactions *between* groups co-located in complex, overlapping landscapes and constellations of interconnected practices (Wenger, 1998, 2010). Finally, the earlier conceptualisations of learning and identity formation as *legitimate peripheral participation* in a single occupational community (Lave & Wenger, 1991) were

broadened to include the notion of *knowledgeability* defined as the modulation of the individual's identification among multiple sources of accountability existing in the landscape of practice (Wenger, 2010; Wenger-Trayner, E. & Wenger-Trayner, B., in preparation).

Insert Table 1 about here

In this interview, Etienne Wenger-Trayner provides a theorist's reflection on the origins and evolution of the theory of communities of practice and explains how the development of his theoretical ideas was influenced by his position at a boundary between different disciplines and practices. He talks about the origins of the theory as a response to computational and cognitive approaches to learning, about the influence of social theorists, such as Lave, Giddens and Bourdieu, on his own theorisation of learning, and about the role of empirical data in theory development. Wenger-Trayner also reflects on the role of his own consultancy work in the evolution of the communities of practice approach and elaborates on his most recent theoretical developments, particularly the notion of knowledgeability in a landscape of practice. The final part of the interview discusses some practical implications of Wenger-Trayner's latest work, identifies those aspects of the communities of practice theory that remain underappreciated by management researchers and practitioners, and concludes by postulating *social learning capability* (Wenger, 2009) as the most fundamental aspect of the communities of practice approach.

Conversation with Professor Etienne Wenger-Trayner

Interviewer: What do you see as the most important events, milestones, developments that led you to creating this body of knowledge that we know as the theory of communities of practice?

Wenger-Trayner: Well, I was a teacher of French as a second language and then I went into computer science and discovered people like Seymour Papert and people who were doing some interesting things with computers educationally. That's when I went to UC Irvine, because their computer science department had a large group that were doing research on computer-based education. So I went into artificial intelligence; but always with an interest in learning. Actually, my first book is called *Artificial Intelligence and Tutoring Systems* (Wenger, 1987), and it's really an application of artificial intelligence to education and to learning. Afterwards, I was invited by John Seely Brown who was then the director of Xerox PARC. He was launching a new institute called Institute for Research on Learning, whose charter was to rethink learning. It was established in response to a report by the Department of Education entitled *A Nation at Risk* (NCEE, 1983) which suggested that the education system in the US was not effective enough. At the Institute, I started to work with anthropologists like Jean Lave, and to me, that was really an important transition in my life.

Interviewer: Why was this an important shift for you?

Wenger-Trayner: For me, it was more like a relief, because the problem that we had in computer science was the inability to account for meaning. In computer science, we were always assuming that there was meaning somewhere outside of the model, that some people would attribute meaning to these knowledge or information structures we were building. But the meaning was never inside the model. We could account for information and information processing, but we had very few tools to account for meaning. So it was good for me to talk with anthropologists who were making meaning a central part of the model, but then using the social world for that: making meaning was engaging in the social world. And this is basically how I became interested in the social theory of learning, because of the difficulty in cognitive approaches to learning to account for meaning making.

Coming from computer science, it could have been difficult for me to go through this shift, but I was already uneasy with the way that computer science was approaching cognition. So at some kind of intuitive level, I was looking for it. At a biological level I was still thinking, of course, that the brain is a set of electronic impulses and we can reproduce that to some extent with a computer. But that's not what human learning is fundamentally about. Human learning is fundamentally about making sense of the world. And we didn't have very good tools, in the community of computational approach to learning, to account for that. There was a tension about what is a scientific model of human learning, with different views of what counts as a model. Anthropologists were being accused of telling descriptive stories which lacked the predictive power of cognitive science. Computer scientists would say, "We can predict behaviour. We write an algorithm that we can test empirically." The concept of community of practice became an important element, because it was a way to say to a community of scientists, "Listen, we're not just telling stories. We have models; we can create models, too. It's not a cognitive model, but it is a model, still." The notion of community of practice and learning as a trajectory into a community, which was the first phase of our theorising (Lave & Wenger, 1991), then became a theme for the Institute. There were big fights, actually, before that happened. There were other things that were competing with it. But in the end, it was adopted by the Institute as their flagship perspective.

Interviewer: Do you see yourself as an anthropologist?

Wenger-Trayner: No, I think I'm a little too flaky for that. I think some people in cognitive anthropology may have been influenced by my ideas but I don't consider myself one.

Interviewer: Where do you position yourself? Do you identify with any particular professional or disciplinary groups?

Wenger-Trayner: I try to avoid those classifications. I just call myself a social learning theorist. That's as far as I go. So where would you place that? It is best understood as being halfway between social theory and learning theory. It's at the intersection of those two fields, I would say. Because even though I'm a learning theorist, I think I'm more influenced by people like

Giddens and Bourdieu and people who are more social theorists than learning theorists. But I'm a learning theorist; I'm not a social theorist, and I don't develop theories of society in general.

Interviewer: You have mentioned two very eminent social theorists. What was the role of their ideas in shaping the way you formulate your own theory?

Wenger-Trayner: I think that the most fundamental influence is this interest in the relationship between the person and social structure, not just the person as a learning entity. Community of practice became such an important concept for us, theoretically, because it was the embodiment of this view of learning as happening at the boundary between the person and social structure—not just in the social structure or not just in the individual, but in that relationship between the two. So in some sense, for us, the concept of community of practice has a little bit of the function of the notion of the cell in biology. The cell is a very important concept in biology because it's really the smallest structure that has all the elements of life, of the whole, if you will. So community of practice is a little bit like that. It's the simplest social structure that has all the elements of the perspective—learning interaction between social structure and the person, and the mutual constitution of the two.

Interviewer: How was this theme further developed in the second phase of your theorising, which is perhaps your most famous work: *Communities of Practice: Learning, Meaning and Identity* (Wenger, 1998)?

Wenger-Trayner: The best way to characterise the transition to this phase of the theory is as a figure/ground switch. In our previous work (Lave & Wenger, 1991), as the title of the book *(Situated Learning: Legitimate Peripheral Participation*) suggests, the concept of community of practice is present, but more as a context for the trajectory of learning into a community through legitimate peripheral participation. So in the first phase of theory development, we took the concept of community of practice for granted, and we theorised learning as moving into the community. In the 1998 book, I really switch that: I take learning for granted and then I say, "If people learn together, the result is a community of practice."

Interviewer: And why did this figure/ground switch take place?

Wenger-Trayner: Because I had done my ethnography in an office where I saw the formation of a community of practice in reaction to the situation that the claim processors found themselves in. For them the community of practice was also a result of their learning how to deal with that situation. Also, as a theorist, you start with some ideas but you still ask yourself, "What am I trying to say?" I remember a person telling me, "You have to be patient with me. I'm still trying to understand what communities of practice are." And my reaction was, like, "Well, me too. I'm still trying to understand what it is that we are trying to state here!"

Interviewer: In trying to understand what communities of practice are, what's the role of your ethnography, your empirical data?

Wenger-Trayner: Well, I would like to say it's all empirically based but the truth is that I'm a bit more of a philosopher than an empirical researcher. That's the truth. So that's why, for me, in some sense, consulting and research are not all that different, because they are two contexts in which my conceptualisation bumps against reality and I can see what resonates with people, what helps people make sense of the world. It's a bit embarrassing to say that, but still, I think that's true, that I'm so interested in theory that it doesn't matter if I'm consulting with a firm, helping a student with a piece of empirical research or having a conversation with a friend about my work. In all these contexts, I'm refining the theory.

Interviewer: What led you to consultancy?

Wenger-Trayner: When we started our work in the Institute for Research on Learning, our mission was to divorce learning from teaching and we started to think of learning as a phenomenon in itself. We had to rethink the assumptions that we were making about learning as the result of teaching and suggest future directions the education system should take on the basis of a better theory of learning. But in practice, very few people in education were ready for that. Business, on the other hand, was just in the middle of a crisis in the field of knowledge management.

The field of knowledge management was in crisis because it was really started by IT departments. The history of knowledge management is very much IT-oriented. In the mid-1990s this field was hitting the limitation of a technological approach to the management of knowledge. They had tried big Lotus Notes databases and stuff like this. Things were not producing the results that they expected. So the concept of community of practice then became an important insight for people interested in knowledge management. This was a different view of how knowledge exists in an organisation. If we think that knowledge is information, then it makes a lot of sense to have a big database, give people access to this database, and knowledge is managed. But if you assume that knowledge is not just information and it exists in these social communities that negotiate local forms of competence inside the organisation—many of them may be invisible to the organisation but still critical to the organisation's ability to succeed in what it is doing—then the responsibility of knowledge management is completely different. It doesn't mean that we abandon the systems, but the primary focus of knowledge management would be then on enabling those communities to function better. So for people in that field, all of a sudden the concept of community of practice became a turning point, if you will, in their view of what knowledge is and what it means to manage it.

So some companies, especially Philips from Europe, became interested in what we were doing. And also I started to speak at knowledge management conferences because I realised that businesses were very interested in this concept. I remember going to a knowledge management conference in Boston. It was in 1998, and I gave a talk and people liked the fact that I was talking about knowledge as something happening in social groups. Because at that time, you would go to a knowledge management conference and people would say, "Well, you know, knowledge is 90% people, 10% technology." But then the rest of the talk was about

technology—because they didn't have much to say about people as carriers of knowledge. And so I think there was also excitement; I think there was a readiness because they were practically facing the difficulty of the technology-based approach.

Interviewer: Did this change in an audience influence the way you further developed the theory?

Wenger-Trayner: Yes, but not as directly as you may think; because a big switch—but it's not a switch in the theory—was that the concept of community of practice which was originally an observational concept, an analytical concept, then became an instrumental concept because managers were not happy to just say, "Oh, this is a nice perspective on knowledge in my organisation." They also asked, "What do I do if I need to improve my business?" They wanted something much more instrumental than just a good analytical concept. So it was exciting to see when you create a concept, some people think: "Wow, this is really useful!" That's tempting to just go and see why. "Can I help you? Can we work together?"

Interviewer: There is a widespread criticism that actually everyone means by communities of practice what they want to mean. How do you deal with the multiplicity of interpretations of the theoretical body of work you have produced?

Wenger-Trayner: Well, first of all, I don't have a choice. I mean, the horse is out of the stable. What can I do—become the language police? I read that chapter in *Communities of Practice: Critical Perspectives* where Hughes (2007) makes that critique, that because of the variety of places where the concept has been adopted, it has become more and more academically useless as a concept because it means too many different things. I can see why an academic says that; and that's perhaps why I don't feel that I'm fully an academic, because I'm not so worried about that. For me, it's more like, "Does it make a difference in the world?" I'm a bit more interested in that than whether the concept is kept pure. The 1998 book was an academic book and it was critiqued by academics who wrote fairly critical reviews, in part saying: "this is just somebody's idea…", "the empirical basis of this is very weak…, "this is a guy who just spent a year in an office and wove a big theory that has thin anchoring in empirical facts..."—and I don't think that is an unfair critique, from that perspective. At that time, I was not so worried about those critiques because I was more interested in making a difference to people, like people in business who were adopting those ideas. I'm probably a little bit more worried now because I think I need to write another book; actually, my wife and I are working on another book that will become the third phase of the theory (Wenger-Trayner, E. & Wenger-Trayner, B., in preparation).

Interviewer: Do you want to elaborate a bit more on the most recent developments of the theory?

Wenger-Trayner: I told you about this figure/ground change between 1991 and 1998; I think perhaps now there is another figure/ground switch. Instead of focusing centrally on a community of practice and membership in that community of practice, the focus is more on

multiple communities and systems of practice, landscapes of practice, and identity as formed across practices and not just within practices. More practically, there's also an emphasis on learning capability as a characterisation of those systems and the relationships that exist within those systems.

Interviewer: What triggers this shift?

Wenger-Trayner: In part it is just trying to understand what the theory is really trying to contribute: "What am I trying to say? What is this about?" In part, this is a response to some critiques; and a response to the problems that my wife and I are facing in our consulting work. So there is this figure/ground change happening. That's where the concept of *knowledgeability* becomes very important, because if you are just talking about entering a single community of practice, then competence is a good way to think about the process. But once you interact with a landscape of different practices involving different institutions and activity systems and so on and so forth, then you need to know something about a lot of practices in which you have no membership and in which you have no claim to competence. And so that's why the concept of knowledgeability becomes an important concept that has interesting interactions with competence but is not the same as competence because it's a relationship to a landscape as opposed to a relationship to a practice.

The concept of knowledgeability was introduced because we needed to be able to talk about knowing something about practices in which one cannot claim competence. Knowledgeability is a state of the person with respect to a landscape, not with respect to a specific practice. In some disciplines, being knowledgeable *is* the competence. So if you are an anthropologist, becoming knowledgeable about a culture without being a member of it, *is* your competence. On the other hand, I would say the claim processors from my 1998 book are very competent but they are not very knowledgeable. They are very good at doing what they have been asked to do locally but they have little understanding of where their practice fits in the landscape. They have little ability, because of that, to contribute to the learning capability of the broader system. It's very important to have both competence and knowledgeability in balance. You don't want people to give up on competence; I think that would be a terrible idea. But then the price of mere competence is a kind of local narrowness that has cost for the learning capability of the system.

In general you can say, "I'm very knowledgeable about politics" although you're not a politician and you may be totally incompetent. But it's still contestable: a claim to knowledgeability is still a claim that has to be negotiated socially in different circumstances. Unlike competence, however, knowledgeability is negotiated without a community. There is not a clear community that says, "Yes, this is a knowledgeable member. We will recognise that." That's why I'm saying the burden is shifting a bit towards the individual because there is no community that defines what counts as knowledgeability. It's much more a claim that you make as a person in certain circumstances. What it means to be knowledgeable can be culturally defined, for instance, in the US most people would agree that if you don't know who Obama is you're not knowledgeable about politics. But in most cases it's really a relationship to the landscape where

you have to make a claim that is very much your negotiating how you relate to these different communities.

Interviewer: Would you say that it's becoming more of an agency-oriented kind of theory which might be better suited for the 21st century?

Wenger-Trayner: Well… I resist that even though I think it's true in a subtle sense. I resist that characterisation because the essence of the theory is still that learning happens in the relationship between the social and the individual. So I think that the DNA of the theory has not changed; but it is also true that if you are entering a single community, you may negotiate competence, you may resist the competence of the community, you may want to change it, you may want to contest it, but the community still does a lot of work for you in defining what competence is and what an identity of competence looks like. I would say that once you start working across multiple communities, many communities in which you have very, very thin membership, if any membership at all, then the definition of what counts as knowledgeability cannot be achieved by a given community. What I resist is this idea that we are moving from a collective society to an individualistic society, or a collective view of learning to an individual view of learning. That, I would resist because I still want to place learning at that interface, at that relationship between the individual and the social. But I would say that the burden of knowledgeability, if you will, the burden of identity is moving from the community toward the person although this still happens in relationship with a social world.

Interviewer: Could you please tell us about how you personally traverse the landscapes of practice which are relevant for you? How does your own knowledgeability develop through multimembership in different communities of practice?

Wenger-Trayner: Well, I'm a very good example of that, since I'm not simply an academic; I'm not simply a consultant; and I'm certainly not a consultant in one sector. So I deal with governments, education, healthcare, international development; very, very different places. If I was simply in one academic discipline, I could read the literature, read the right journals, and people would say, "Wow, this is really a competent member of our community." But if I traverse all these places there's way too much to read and to experience. There's no way that I can become competent in all these communities. So I have to define a little niche for myself that's going to allow me to be legitimate in what I'm doing. I have to claim some kind of knowledgeability. But I have very little help for doing that because there's no single community that is going to say, "Yes, you're competent." A claim to knowledgeability is still to be negotiated socially. You may refuse my claim to knowledgeability. It's not like knowledgeability is defined by someone else and then you just do it. It's still a claim that needs to be negotiated, and some people would view me as knowledgeable and some people would not view me as knowledgeable.

Interviewer: Is it possible to say that practitioners view you as knowledgeable because they see you as an academic?

Wenger-Trayner: Yes, for instance, they may think, "Wow, that guy is respected by academics." But academics may say, "Well, no, he's not a real academic." So you can play in a way; when you play across communities you can claim knowledgeability by claiming a form of membership in a certain community; and the members of different communities of practice in the landscape don't have many tools to check whether that's really true, except you say, "Oh, my book is cited by academics all the time." So yes, that's true, as you traverse across communities, there are always all sorts of ways to be a flake. I think you're probably right. And that's why it's so delicate; it's really delicate in the 21st century because the canons and pillars of identity are being destabilised by globalisation, by the complexity of things, by our ability to interact with a lot of different communities.

Interviewer: Talking about the appropriation of your theory by practitioners and academics, are there any aspects of your work that are important but remain underappreciated by people using your theory?

Wenger-Trayner: Yes, I think that the identity aspect of the theory has been underappreciated. Because I think that for business people, and not just for business people but for people in organisations in general, the idea of a community of practice is easier to handle than the idea of identity. The concept of community of practice is very concrete for people, "Oh, yes, community of practice—yes, I belong to one of those; I can see one of those." Identity is a bit more difficult. The field of knowledge management has not adopted my work on identity much at all. But I think it's actually essential because identity implies accountability; accountability implies a need to interact. The fact that people have to manage their identity across complex systems today is essential to knowledge management. Because you need to actually enable people to become what we call 'learning citizens'. I was at a knowledge management conference the other day and I started to talk about learning citizenship as an ethics of living in systems, by worrying about how your actions in that system affect the learning capability of the whole system. Now, those are aspects that I would love to see taken up because social learning capability is actually quite a profound way of thinking about social systems—whether your system is an organisation; whether it's a continent; or whether it's a network. There are different places where this perspective would be important.

Interviewer: The social systems you are working with as a theorist and a consultant have different, and maybe even conflicting, demands, cultures and systems of meaning. Do you experience any tensions as a result of your affiliation with different social systems? And if you do, how do you resolve them?

Wenger-Trayner: Well, I very much experience those tensions because I feel a bit incompetent wherever I go. At the same time, those multiple demands are useful to me because they force me to go to the essence. What I have appreciated in my life, even though I've been a bit of a troubadour, kind of going around, and a bit of a nomad, if you will, because I don't have a single place that really anchors me, it has also forced me to go deeper into trying to understand the DNA of my own thinking, because the more superficial features, they don't work very well. Your questions made me reflect: why do I enjoy actually constantly being at the boundary? Probably

because it keeps me on my toes and it forces me to think more deeply about my own theorising, because it's not accepted simply in one way. The concept of community of practice can be adopted by teachers who want to think about their students; by managers who want to think about their employees; by an international development organisation that wants to think about the relationship between two countries, trying to address a problem. What is it about this concept that allows it to metamorphose like this? You see? So it pushes you to be more focused on the essence of the theory than on a specific embodiment of it. And I think an idea of social learning capability is very much at the essence of the communities of practice approach, because it embodies the notion that learning is a socially constituted characteristic that involves the person and the social structure in these complex ways.

Concluding Thoughts

This interview sheds light on some of the aspects of the evolution of the communities of practice theory which have not been specifically discussed in the literature. Following this conversation, it is tempting to represent the development of the communities of practice theory as a three-phase process, with the first phase of theorising (Lave & Wenger, 1991) predominantly looking at the process of learning within communities, the second phase (Wenger, 1998) switching to the notion of communities of practice as such and describing boundaries and identities within and across them, and the third phase (Wenger, 2009, 2010; Wenger-Trayner, E. & Wenger-Trayner, B., in preparation) returning to the notion of learning, but locating it within complex systems of interconnected practices. Interestingly, although all the three phases of Wenger-Trayner's theorising tend to view learning as a process unfolding at the interface between individuals and social structures, the latest phase of theory development puts a stronger emphasis on individual actors and their trajectories and experiences in complex landscapes of practice. It suggests that the 'burden of identity' shifts from a community of practice to an individual and puts to the fore the notion of knowledgeability, which broadly refers to the complex relationships people establish with respect to a landscape of practice (Wenger-Trayner, E. & Wenger-Trayner, B., in preparation). As suggested by this interview, knowledgeability is not defined by the regime of competence of a single community, but gets negotiated within a broader landscape including a set of practices in which an actor does not claim competence. Engaging in different practices across the landscape, people find their individual ways of gaining knowledgeability. The latter can be successfully claimed even by individuals who are located at the boundary among multiple interrelated communities of practice and do not have full membership in some or most of those communities. At the same time, knowledgeability is not a purely individual characteristic as it can be contested and denied by other individuals and groups operating within a landscape.

The latest developments in Wenger-Trayner's theory which focus on the ideas of 'multimembership' and 'knowledgeability' of actors across the landscapes of practice resonate with his own professional trajectory both as a theorist and as a consultant. Throughout his career, Wenger-Trayner has always lived at the interface of multiple practices including

computer science, anthropology, learning theory, and management consultancy. Capitalising on his multimembership and boundary position, Wenger-Trayner has developed his knowledgeability of a complex landscape of relevant practices, which in turn advanced the communities of practice theory and legitimised his role as a consultant. As a theorist, regardless of the type of community that he has been in dialogue with, Wenger-Trayner has utilised the conversation to expose his theory to 'reality' and to refine it through reflecting on his ideas ("What am I trying to say? What is this about?") and evaluating their relevance to multiple communities he is working with. For instance, Wenger-Trayner's interactions with organisations that were looking for more than a purely analytical account of practice and learning, led to the development of an instrumental, managerialist perspective on communities of practice. At the same time, Wenger-Trayner's reputation as a well-known scholar has legitimised his entrance to the world of consultancy as a knowledgeable academic capable of having impact on organisations. Extrapolating from such observations on Wenger-Trayner's professional trajectory, one may argue that actors' participation in multiple practices within a landscape can only transform into knowledgeability if these actors actively and critically evaluate their experiences in different communities across the landscape and find ways to relate these experiences to other communities with which they interact.

The interview has a number of implications for management theory, particularly for our understanding of organisational change and learning. First, focusing on the interface between the person and the social structure, the theory of communities of practice can usefully complement existing accounts of learning in organisations, highlighting the interplay between individual and collective 'knowledges' as well as the mechanisms that enable the spread of learning across an organisation. This approach should, however, take into account the evolving nature of the communities of practice theory and the shifting analytical focus of Wenger-Trayner's seminal works. Studies deploying the theory of communities of practice should aim to clearly position themselves in relation to the three main phases of its evolution and be internally consistent when operating with theoretical concepts originating from different seminal publications.

Second, the notions of knowledgeability, multimembership and accountability are relevant for our understanding of boundary spanners, both those who emerge organically in multiprofessional and multi-organisational environments and those who are assigned, or 'nominated', by organisations to perform knowledge brokering functions across divisions and units. This is particularly important in the analysis of post-industrial organisational forms, such as networks, joint ventures, strategic alliances and R&D consortia, which represent complex landscapes of practice characterised by the constant need to negotiate and reconfigure boundaries, identities and meanings. It can be assumed that in such organisations knowledgeability, i.e. awareness of the landscape, can become a valuable organisational capability as well as an additional source of legitimacy for actors involved in managing knowledge and driving change.

Third, focusing on the process, rather than the state, of identification and avoiding a clear-cut separation of individual, group and collective 'selves' often found in the organisation studies

literature (see, for instance, Richter, West, van Dick, & Dawson, 2006), Wenger-Trayner's notion of a complex, multifaceted, dynamic identity reflects a sense of belonging to multiple communities of practice. In addition to its importance for conceptualising learning in general, this aspect of the communities of practice approach can potentially illuminate our understanding of collaboration (such as multidisciplinary and multi-agency project work), non-participation (such as resistance to change and innovation) and hybridisation (such as hybrid professional roles bridging intra-personal boundaries).

This interview also highlights the fact that the theory of communities of practice is only partly derived from empirical evidence in the traditional sense of the term, much of its content relating to other social theories and experiential evidence accumulated by Wenger-Trayner through his participation in various academic and practitioner communities of practice. This has resulted in a high interpretative flexibility of the concept at the expense of rigorous empirical grounding. It could be argued that future empirical studies would need to provide further analytical refinement of the theory, whereby 'the particular' (*i.e.* empirical evidence) would clarify, specify and develop 'the general' (*i.e.* the theory of communities of practice) (Tsoukas, 2009). Aspects of the theory previously underappreciated by management scholars and practitioners (such as the concept of identity) and newly introduced notions (such as knowledgeability and social learning capability) may provide interesting starting points for future empirical inquiry. How do actors prioritise their memberships in different practices within a landscape? What are the mechanisms of negotiating knowledgeability and achieving legitimacy in complex landscapes of practice? How do actors reconcile different regimes of accountability across multiple practices and/or organisations in which they are involved? How do strategic decisions influence the learning capability of social systems? Utilising insights from different phases of Wenger-Trayner's theorising to address these questions may enhance our understanding of social learning capability, representing, according to Wenger-Trayner, the 'essence' of his approach.

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Table 1. Applications of the communities of practice approach in the management literature.

Strand	*Area of application*	*Examples*
Analytical perspective on communities of practice and its critique	Communities of practice as emergent, informal, self-organising groups solving routine problems	Brown & Duguid (1991, 2001); Wenger (2000)
	Communities of practice as loci of professional learning and identity development	Handley, Clark, Fincham, & Sturdy (2007); Harris, Simons, & Carden (2004)
	Boundaries between communities of practice as an important factor in the innovation process	Ferlie, Fitzgerald, Wood, & Hawkins (2005); Mørk, Hoholm, Maaninen-Olsson, & Aanestad (2012)
	Boundaries between communities of practice as loci of negotiating, transforming and modifying knowledge	Gherardi & Nicolini (2002); Oborn & Dawson (2010)
	Boundaries between communities of practice as a source of intra-organisational tension and conflict	Bechky (2003); Mørk, Aanestad, Hanseth, & Grisot (2008)
	Challenges arising when using communities of practice as an analytical tool	Amin & Roberts (2008); Contu & Willmott (2003); Roberts (2006)
Instrumental perspective on communities of practice and its critique	Deliberate cultivation of communities of practice by organisations to boost their competitive advantage	Probst & Borzillo (2008); Saint-Onge & Wallace (2004); Wenger & Snyder (2000)
	Virtual communities of practice as a way to organise project work and enhance learning	Ardichvili, Page, & Wentling (2003); Hildreth (2004)
	Communities of practice as a way to enhance inter-organisational and inter-professional collaboration	Bate & Robert (2002); Ranmuthugala et al. (2011)
	Challenges arising when trying to manage, control or cultivate communities of practice	Swan, Scarbrough, & Robertson (2002); Thompson (2005); Kislov, Walshe, & Harvey (2012)