

## **COMMUNITY NOTE**

# Dialogue of the four musketeers

Peer review of 'Knowledge management for development communities: balancing in the thin divide between tacit and codified knowledge' by Alfonso Acuna

Sarah Cummings\*

Context, International Cooperation

This community note provides a summarised version of a peer review of a thesis written by Alfonso Acuna in 2007 as part of his Master's study at the University of Amsterdam. The peer review took the form of an online roundtable discussion between Valerie Brown, Nancy White, Patrick Lambe and Alfonso Acuna. Alfonso Acuna's paper was published in the May 2010 issue of this journal.

Guard: Do you intend to resist?

Portos: Oh don't be so stupid, of course we intend to resist! Just give us a minute! [To his comrades:] Five of them, three of us. Hardly seems fair.

Aramis: Maybe we should give them a chance to surrender?

D'Artagnan: Excuse me, there's four of us.

Aramis: It isn't your fight. You're not a Musketeer.

D'Artagnan: I may not wear the tunic, but I believe I have the heart of a Musketeer.

Aramis: You got a name, boy? D'Artagnan: D'Artagnan.

Portos: Athos, Portos, Aramis. Everyone acquainted? [The four whirl around and unsheath their swords.] NOW, we are ready to resist you!

(adapted from The Three Musketeers film, 1973)

### Introduction

In 2007 while a Master's student of Science and Technology Studies at the University of Amsterdam, Alfonso Acuna wrote a thesis on 'KM for development: balancing in the thin divide between tacit and codified knowledge' supervised by Loet Leydesdorff. In this paper, Alfonso Acuna argued that the approach that knowledge sharing communities are following for sharing their knowledge is ultimately backfiring their own intentions to share knowledge and actually increasing the existing gap between scientific and practitioners' knowledge. The reason for this, he argued, is that knowledge sharing communities share contacts instead of contents and do not codify their knowledge. He claimed that only if knowledge is codified, one can enter and have impact on a domain of knowledge.

At the beginning of 2010, Alfonso Acuna was asked to adapt this thesis as an article for the *KM4D Journal*, subject to peer review. This peer review took the form of a dialogue from 24 January to 4 February 2010 between a small group of volunteers from the KM4Dev community. In this community note, the dialogue between the reviewers and the author,

<sup>\*</sup>Email: sc@developmenttraining.org

which took place by email, is summarised. The final version of the article was published in the May 2010 issue of the journal.

# Dramatis personae (in order of appearance)

Valerie Brown A musketeer who rides out to block any attempt to silence different voices.

She works in collective action research at the Australian National University

and is a member of IKM Emergent www.ikmemergent.net

Nancy White A musketeer and swashbuckling gramma, learner, community/network

person and chocoholic, practicing in Seattle, Washington, USA, and around

the world, under the guise of consultant at Full Circle Associates

http://www.fullcirc.com

Patrick Lambe A musketeer and sabre-rattling KM teacher, researcher and consultant. He is

the author of *Organising Knowledge* (Chandos 2007), an adjunct professor at the Hong Kong Polytechnic University and founder of KM consulting

firm Straits Knowledge. He blogs at www.greenchameleon.com

Alfonso Acuna D'Artagnan, also a musketeer (previously Master's student, now working at

the International Institute for Communication and Development)

Sarah Cummings Editor of the Knowledge Management for Development Journal

Do not appear but are mentioned:

Mike Powell Director of IKM Emergent Research Programme

Lucie Lamouruex Facilitator of the KM4Dev community

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# From: Nancy White

Very interesting! I wonder about the relationship between codified knowledge and the concept of stocks and flows. Is there any understanding about where and when codified knowledge is (a) more useful (b) more consistently applied and the same question about fluid and emergent knowledge. I'm intrigued . . . but confess to a gut reaction of assuming that we know HOW to codify and mature knowledge in this domain!!

My responses are and will be as a practitioner. They will also be biased as a member of KM4Dev – as much as I try to remain neutral. But I'm not superwoman so I'm not totally neutral, so I'll make sure that this is very clear. I have not read it closely, but on first glance I think there is something *very* important in what Alfonso is saying and it asks us, as a community, to reflect upon our practices. That is fabulous. But I sense that he, like so many others, is creating a false dichotomy between practitioner and scientist, between codified and tacit and/or knowledge applied in context. In fact to compare a practitioner to tacit and scientist to codified is really odd. Practitioners use codified knowledge all the time. KM4Dev is, by nature, interested in contextual work, but no where do I remember a rejection of nor no practice of using codified knowledge. That conclusion baffles me as a member.

## Strengths of the approach

Data analysis is a really terrific way to re-look at ourselves, our work, our assumptions about what we care about. Interpretation of those visualisations, however, feels problematic from where I sit – and I recognise I'm obviously biased as a member. So this would be a very good area for looking deeper/conversation.

It also asks us, as a community, to look self critically at what we do and its impact. And wow, as a network that ranges across orgs, individuals, etc., we simply have no idea of our impact, not because it is all tacit or contextual, but we simply don't have the time/attention/resources to do it beyond our voluntary and anecdotal manner. So I wonder about expectations here by the author? What would the analysis look like of communities that are fully funded, mandated and supported as knowledge generating/sharing vehicles?

## My concerns

Overall, the thesis creates a false dichotomy between practitioner and science, between tacit and codified that is not justifiable. However, it is a *really* important question.

- (1) Given that the article covers the journal 2005–2007, it is out of date, particularly in observations about Web 2.0. It would also be useful to address the tension between codified knowledge, control and the concept of global public goods in international development which I think could be a really important issue that Alfonso's approach might contribute to.
- (2) The article does not always back up claims. My read is that the author ascribes the beliefs of the authors he quotes as beliefs of the KM4Dev community and contrasts single line statements out of their work that again, loses context. I don't see the 'backfire' theory as defensible because I don't think the journal articles, nor even text analysis of the community conversations fully reveals the depth and breadth of the community and that what we discuss is a tiny subset of our practice. However, the data reveal signals which may be really important. I also see no evidence of the 'backfire' as there is no analysis of how members use the knowledge circulated both formally and informally in the community nor the relationship to the journal as evidence of practice. It is merely a voluntary representation by those who wish and have the time to contribute to it.
- (3) Ironically the article uses some journal data out of context leading to some interesting interpretations, particularly by ascribing intent to the community in a very interesting way where I think there is in fact no intent or different intent, would be curious to know what other research he did about and with the community to test his interpretation of the data.
- (4) The article misses the fact that community of practice (CoP) theory has a strong supporting notion of reification and codification as part of the learning and knowledge sharing process, etc. Just because CoPs are a social construct does not mean they abandon science, codification, etc. Nope! (It would be fun if we could have Etienne Wenger in on the conversation!)
- (5) I can't understand the conclusions about technology as they don't make sense to me. Technology can be used as a barrier or enabler for any part of the range of knowledge at play here. The cautions are well taken, however. I agree strongly.
- (6) From my understanding (which may be wrong!), his conclusions lack an understanding of the journal, its origins and subsequent trajectory . . . all of which have evolved over time. Particularly the initial context as a journal by practitioners, for practitioners, a place where authors who have never authored a journal article could get peer support, etc. All factors which influence style, content, citation practices. Also all voluntary so reach and thus external citations would be low. This raises the question about knowledge backfiring because we don't sufficiently resource it, eh? Not about codifying or not.

Overall, I really enjoyed reading how the author used data to raise issues and questions. I find it interestingly ironic that my read is that the data was sometimes used out of context to prove a point. I don't think he succeeded with this reader! But the data, the questions raised are really important questions. The reframing is a great thing. That is the opportunity in his work. *Really* important but don't lose them in the rhetoric of a false dichotomy.

Thanks for the opportunity. Now back to the work. Oh, and it is work that involves codifying. (Evil grin.)

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### From: Valerie Brown

Congratulations Alfonso on your fascinating paper. I am new to the KM4Dev community and am dependent on the experiences of others for practitioner comments. I find myself in the odd position of agreeing with almost of all of Nancy's comments and with Alfonso's observations at the same time. I am working from a position of research into the multiple knowledge cultures into which the Western knowledge tradition has been divided, and as an advocate and practitioner of collective learning. I respond to Nancy's comments so as to continue the dialogue begun by Alfonso.

I agree with Nancy that the polarisation in the paper is unjustified. However, in practice there is indeed a difference between practitioner and researcher. Each have their own goals, use of language, and types of acceptable evidence. Lack of recognition of their different ways of constructing knowledge does inhibit or even prevent knowledge sharing. Alfonso correctly points out the nature of these differences. I would regard the differences as capable of being synergistic, that is, able to enrich each other, rather than an inevitable opposition.

On the second point, *all* knowledge has both tacit and explicit components, clearly described by Michael Polanyi in his seminal *Personal Knowledge*. One construction of knowledge may emphasise one more than the other, as undoubtedly does happen with practice and research. Again I think Alfonso's observations of those differences are correct, as is Nancy's rejection of the polarisation.

As a separate point, I have a difficulty with the use here of 'tacit' and 'codified'. In Polyani's original identification of explicit and tacit knowledge, he describes the way we draw on both knowledge that we know we have, and knowledge that we hold that we don't know we have. Both forms of knowledge have been validated by personal checks for truth before being stored as valid knowledge; but we only reflect explicitly on the second. I find the reduction of 'tacit' to 'anything not written down' and explicit to 'codified', that is, 'what is written down' leads to not only a false, but an unhelpful dichotomy. I would be interested in comments on this point.

As regards concern 1 in Nancy's mail, she is far more knowledgeable on this than I am, and I am sure she is correct. At the least the social media offer a neutral space where languages can be shared and translated.

Nancy's concern 2, again I agree with both the critique and the author. Within the community development, there is a tendency to rest on 'public good' intentions and an absence of critical reflection of the overall process. Equally, researchers have a tendency to rest on the benefit of adding to existing research without appreciating the qualitative influences of the context. From time to time KM4Dev has addressed this very issue, for example, the intensive session of sharing mistakes as well as successes.

CoP theory is a perfect fit here. My take is that we have two communities of practice that are attempting to become one – and that one would benefit from Wenger's criteria for a CoP, that they are always both codifying the principles of their shared knowledge space, and at the same time extending then in a creative tension.

Nancy's concern 5, I agree and add that any technology will have an underlying presupposition of its use – compare library catalogues and Google for instance.

Concern 6: I can't really comment on the Journal as a whole, but it certainly supports one of the two communities of practice rather than the other. It is therefore necessary to acknowledge this before critiquing the Journal from the perspective of research.

I have an interest in small group mathematics and this use of social network analysis is endlessly fascinating. I think the hubs and patterns identified from the sociometrics are invaluable; but need a much broader range of interpretation. Perhaps we, the commentators, could have a go?

Looking forward to the next round – and hoping Alfonso chimes in.

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### From: Patrick Lambe

## Hi Alfonso

I like the approach and the hypothesis is an interesting and important one to investigate. However, the evidence you have presented is not sufficient to justify the 'back firing' hypothesis as a conclusion.

The early focus on 'codification' vs 'tacit' is a distraction and reflects a primitive and largely outdated (except in scholarly citations!) view of knowledge work. I second Nancy's suggestion to focus on Wenger's treatment of reification vs participation, and frame your question into one of whether the participation/reification balance as it exists in KM4Dev actually assists the flow of knowledge (both ways) between (a) North/South (b) between KM community and KM4Dev and (c) between KM4Dev and Development community. All knowledge communities reify. The question for whether knowledge flows across communities is whether the reification approaches of these respective communities are commensurate. (Valerie Brown's book *Leonardo's Vision* is a good place to start in looking at the problem of incommensurate knowledge worlds).

You have privileged in your analysis the mode of reification adopted by institutional scholarly publishing, without justifying that choice. This has narrowed the scope of your measurement activity (excluding the work on shared knowledge resources created via blogs, wikis, learning materials) and therefore weakened your ability to make the claims you do make. Your weakest evidence is the citation analysis. First, because you have not factored in the lack of maturity of the *KM4D Journal* (and its producing community) compared to the two other journals you examine. Second, because citation analysis is now increasingly under challenge as providing only a partial and sometimes biased picture of the real knowledge influences at work, even in mature academic communities.

Traditional bibliometrics are themselves having to adapt as scientists and researchers change their own collaboration and reification models. The academic publishing industry is now at the point where the music industry was 10-12 years ago – it has been slow to adapt, but increasingly collaboration and knowledge building happens outside the measurable scope of traditional bibliometric techniques. Applications like Mendeley have the potential to be – in a softer, gentler form – what Napster was for the music industry; sites like myexperiment.org will significantly change the publishing paradigm

for scientists, and others will follow. A recent science mapping experiment at Los Alamos, USA, also demonstrated what we've suspected for a very long time, that citation analysis in journals is partly conditioned by institutional politics, and does not reflect the real picture about the knowledge that scientists actually consume. The journals and articles that scientists read go far beyond the ones they cite and differ substantially in their profiles. See, for example, http://www.plosone.org/article/info:doi/10.1371/journal.pone.0004803

So I think to strengthen your case you would need to map activity across a wider range of reification activity. I think there is a counter-argument you would have to address, that the reification model of traditional academic publishing (and its measurement) is itself a 'backfiring' mechanism because it privileges the institutions of research against other forms of knowledge exchange, and 'locks up' knowledge against wider access, examination and use, through commercial and intellectual property mechanisms. (The KM4Dev model, along with others, represents a deliberate break from those mechanisms.)

I do think your observations about North–South references/flows are more accessible and defensible, and I think they should be investigated further.

To summarise, my suggestions, to prepare this for wider publication would be: (a) frame the question as one of knowledge flows between the three communities [Note: In the original thesis, Alfonso Acuna compared the KM4D Journal with two other journals, thus they were seen to represent three communities. In the final version, these comparisons were dropped because the reviewers did not find them helpful.] and between North/South; (b) frame it as a question of whether the KM4Dev community has a productive balance between participation/reification to facilitate those flows; (c) investigate the North–South flows perhaps by doing a trend analysis, and looking for other evidence of any latitudinal bias; (d) scope a broader reification activity analysis covering the use of the listserve, blogs, wikis, learning resources; (e) if you do a topic analysis, look for commensurality/incommensurality between the three communities.

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#### From: Valerie Brown

## Dear 4 musketeers

(Alfonso is clearly D'Artagnon for anyone still reading Dumas Three Musketeers).

## Hi Patrick

I think this dialogue was pre-ordained. I am stuck now until we hear from Alfonso. Meanwhile I will build on Patrick's helpful summary.

Patrick commented (a) frame the question as one of knowledge flows between the three communities and between North/South. Yes although perhaps 'knowledge sharing and flows': to keep the original intent and to acknowledge barriers to be overcome.

Patrick commented: (b) frame it as a question of whether the KM4Dev community has a productive balance between participation/reification to facilitate those flows. I'd like to suggest expand to productive balance along a suite of dimensions: practitioner–expert; N–S; informal–formal and tacit–explicit (I find reification needs translating for general use).

Patrick commented: (c) investigate the North–South flows perhaps by doing a trend analysis, and looking for other evidence of any latitudinal bias. I have a paper by Van Kerkhof showing this bias in the research dimension.

Patrick: (d) scope a broader reification activity analysis covering the use of the listserver, blogs, wikis, learning resources. Yes in principle – How is this to be done?

Patrick commented: (e) if you do a topic analysis, look for commensurality/incommensurality between the three communities Valerie commented: Yes, great – commensurality and value of diversity.

# From: Nancy White

I just got off the phone with a client where they are struggling with this duality of what is made concrete, what isn't, and the path between the two in the service of doing their work in development. The classic example is great work by smart people using rigorous methods put into reports which are never read and the knowledge is never applied. We are thinking about what alterations in existing work patterns to consider.

The big rub keeps coming back to the place between the codified and the application. This is where I think technology may be lending us a big hand – the idea of semantic web, federation of knowledge and the interchange across the social networks. That of course presupposes tech access so Alfonso's starting example of the newsletter, in print, is so important. Weaving across modalities as well as across silos, domains, etc. That is at least one of the tech traps to avoid which is raised in the paper.

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#### From: Alfonso Acuna

### Dear all

Thank you very much for your comments; I really appreciate your efforts in suggesting how to go further. Herby some impressions from my part:

My colleagues warned me that placing codification in the central stage was tricky and could deviate from the real point. And I see it has happened. Explicit and tacit knowledge, indeed, occurs in different stages and forms, and we all do both, thanks Nancy and Valerie. I oversimplified for the sake of the frame I was trying to build. And this has to be explained better and certainly the title has to be changed.

In my paper, codification is similar to finding a common denominator, a currency for exchanging knowledge. Following this analogy to currency we can say that local currencies are transformed into a more accepted currency. The same like the US dollar might not be the best currency, it is widely accepted and that is the reason I use the journal, as a scholarly publication. And the transactions are measured by citations, it is an imperfect model but I chose it because it is a recognised method (papers are often listed by title, summary and citations) for knowledge exchange. For sure it is not the only one but it a justifiable choice.

The paper doesn't pretend to evaluate the impact of the KM4Dev community. If that had been the case, I would have done as Patrick suggested, taken in consideration the different outputs of the community, and particularly the mailing, blogs, etc. Instead, the paper is looking at a single output of the community: the journal and is looking to it with very 'square' glasses. What words appear often? What are the affiliations of the authors?, etc. This journal is very young (I only sampled the first 3 years) but published. And therefore it is accessible to be used. I think it is justified to raise the question, how it was used? I can't recall who said that once a piece is published, disregarding of their intention, it becomes ownership of the users. And, by extension, their use determines their impact.

Now I think that the comparison between these three journals was a mistake. It was made for illustration purposes only. In general, the amount of citations varies accordingly to their field, for example, in natural sciences; citations are extremely high while in social sciences, they are lower. I think this deviates the discussion; it is not about the other journals/communities.

If you read between the lines, you will find that I was not comfortable with the results at all. But it is what I got as result. I would like to ask you, to think with me, with this data sample, with these glasses, to come out with suggestions to a better formulation.

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# From: Sarah Cummings

I realise that I am not one of the musketeers but can't resist adding my halfpenny worth to the discussion, responding in particular to Alfonso's remarks. I think that the narrow focus on the journal and on the bibliographic information is justifiable and provides an interesting perspective on the journal, the KM4Dev community and on our emerging field. It is not the whole story but I think it can give us useful pointers for the future.

And also, although I agree that the comparison with other journals in other fields is not perfect – because there are very many differences, of course – I think that the low number of citations is interesting: Is that because it was an informal journal and not in traditional Web of Science type databases? Is it because it is a new field? Is it because it is a new journal? It is probably not possible to reach any firm conclusions from this but it does make one think about the journal's ambition of linking practice and research. Looking at the citations, I would reach the conclusion that the ambition to link to research has failed. Does that matter? Well, it's still early days and the ambition is rather ambitious.

One of the things the approach does is analyse the references in the papers themselves, and this is very low when compared to other journals. Part of this is because in the analysis no distinction is made between the articles – which do have more references – and the community notes and the case studies – in which practitioners have presented their experiences – which are often not referenced at all. One conclusion that I have drawn from this, personally, is to also request references for case studies so that practitioners are also encouraged to base their reflections on published material.

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### From: Nancy White

Our individual and collective perceptions are clearly influenced by the role or position we are in. Sarah, as I read your comments, it reminds me that you have a very unique view of the journal and I wonder how many KM4Dev people perceive it the way you do. I realised my perception of it was (a) a place for more formalised reification of what we and others learn in the field of KM4Dev – academic and practitioner, and a specific place for slightly less formal reification of community knowledge (the notes – more a mirror into the community per se than extensive reification). Thus you read the paper in a different way. I clearly internalised that for people like you, Sarah, there is that desire to bridge academia and practice, but I don't see or use the journal that way. I found that an 'aha' moment in my perception and thus influencing my reaction to the article. Is it useful to reconcile or surface our own perspectives as readers?

I continue to find it fascinating that the KM4Dev community sees the journal as 'theirs' with less people understanding it is a separate entity, managed and controlled not by the community, but by the Editorial Board which has cross membership with the community. But they are not the same. The community in many ways supports the journal as the initial contributions, I believe, came largely from within the community. Is that still true? (Probably difficult to measure because we have no hard and fast indicator of what belonging to KM4Dev means. Subscribed to the Dgroup? Ning? Come to a meeting? Write a message?)

Looking back on MY frame of reference, I really took it as an outright criticism of the community model, and thus to some extent, KM4Dev, and so I was troubled by using the journal as proxy. (Backfiring, the separation of participation and reification or 'tacit and codified'.) So I see that either I read wrong, or perhaps there is a significant reframing of the introduction. And core would be framing the intent of the journal and the understanding of that intent by the community and thus shed some more light on how they do/don't contribute, the nature of that contribution and then the comparison with other journals has some interesting insights as we can see more context.

Waving!

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### From: Valerie Brown

Nancy, waving not drowning! I can easily recognise your take on the journal as perceived by community practitioners as theirs. The rapid dialogue and trusting in sharing I have only once seen elsewhere on line. It is a miracle when it happens, to be treasured and protected. That dialogue doesn't negate Sarah's (and I think Mike's [Mike Powell] and Lucie's [Lucie Lamoureux]) desire to introduce that community to the language (= modes of codification, avenues of reification) of the researchers. This is but another way of learning. It seems to me ambitious, in the positive sense, to try to do three things at once:

- (1) Find a safe place for practitioner dialogue (in the Bohmian sense of dialogue)
- (2) Provide a window for codified research methods that is sensitive to dialogue (post-normal science, beyond the reductionist tradition)
- (3) Put both together and stir into a community of practice.

KM4Dev seems to me to have advanced in all three to an amazing degree. Further, all this is shaping a different development 'paradigm' and so a new community of practice. This must be emergent – maybe will always be emergent.

### Notes on contributor

Sarah Cummings is senior consultant, knowledge management at Context, international cooperation in the Netherlands. She is undertaking research with IKM Emergent.