Wicked Problems – What's the big deal?
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[This is an unedited thread on wicked problems from the vims@yahoogroups.com email list this week.]

Dear Dialogue Mappers,

As you know I've been writing and giving talks (and occasionally sermons!) about wicked problems for a long time now. This week I'm giving an interactive presentation to a couple of dozen people at the International Association of Facilitators (IAF) conference in Baltimore.

This is a pretty sophisticated audience. Many of them will be professional facilitators who work with groups on big hairy unsolvable and ill-structured problems every day. I want to make sure that I speak to their issues and concerns. So I'm asking you:

What (if any) value is the notion of "wicked problems" in your work and life?

If you could learn something new about wicked problems, what would it be?

I'd love to hear your thoughts, here or direct email. Oh ... and there's a deadline: the talk is this Saturday.

-- Jeff Conklin

Wicked problems are the norm for telecommunication systems. It seems that
just about every project has unusual and, seemingly, insurmountable
problems.

-- J. David Blaine

For me, the biggest deal about "wicked problems" and your work is the fundamental premise that there is NO right answer. Rather, a workable answer emerges from effective group interactions. There are no "wicked problems" as much as there are "wicked group interactions" or (more accurately) insufficient attention to building a shared group understanding.

If I were in your audience, I would like to hear more about this.

-- Jeff Bonar

> >...There are no "wicked problems" as much as there are "wicked
>group interactions"
> >or (more accurately) insufficient attention to building a shared
>group understanding.

Um.... maybe.

I have seen some problems that could possibly be constructed as problems
of shared group understanding... but only if there had been an expectation
that the different stakeholders in the solution were actually a single group.

In at least one case I'm thinking of, the wickedness occurred because no one
realized, for some time, that different stakeholders had an interest in the
same "problem" -- because no one realized that their particular problems
(actually parts of the real problem) were connected, until fixing one part
of the problem set repeatedly broke the solution to some other part or
parts of the problem set.

So I might say that one piece of the puzzle is actually identifying all
of the members of the 'group' that must share an understanding of
the problem... and that process can be at best a difficult -- if not wicked --
problem. You may not know, until quite late in the effort of solving
the problem, who is in the actual set of stakeholders.

Not sure if that's what you meant by "wicked group interaction"...

-- KC Burgess Yakemovic

This is probably old hat but for the issue is this: When you face a wicked problem in a large organization, it was generally caused by the organization in the first place. There are those who don't want the problem to be recognized for the beast that it is, because they had a hand in creating it. There are others who don't recognize it because they are in a different paradigm and just don't see it. There are others who just have different priorities.

A second issue is that wicked problems generally were not created in a day and will not be solved in a day. The person who is the "champion" trying to resolve this problem must do so before the organization's attention span expires and the people needed to resolve the problem move on to other things. In its extreme cases, I'd call this organizational attention deficit disorder.

For those who understand what a wicked problem is, if I can get them to agree that the problem is wicked, I have better buy in to using approaches designed for this type of problem. It seems to me that large organizations are trying to frequently to only deal with problems that can be described on a power point slide. Getting people to understand that many important problems can not be described so easily is very helpful when trying to solve the problem. (A great novel is difficult to express in a comic book.)

As a facilitator what I'd be hoping to learn is:

1. How to get the initial recognition that this is in fact a Wicked Problem to a wide enough audience to deal with it.
2. How to get the commitment of people to deal with problems that take more than a 1 hour meeting to solve.
3. Better techniques for dealing with virtual meetings since large organizations are highly distributed.
4. If an individual or group created the problem, how to better engage them to ID it and solve it.

-- David Wilkie

The notion of "wicked problems" was a revelation to me when I first heard if from you ten or fifteen years ago. I was working with an organization which was desperately trying to solve wicked problems using rigid project management techniques. Conflict and hard feelings were everywhere, and after I understood "wicked problems" I could see what was wrong very clearly. I began trying to use more appropriate techniques but we couldn't do away with project management entirely. So I learned to work within it and provide as much broad ownership and ability to alternate between requirements and solutions as possible within the framework of control gates..

I have been out of touch with developments lately, though I have recently heard folks talking about wicked problems again, but I think we are still short on techniques that work with wicked problems besides dialog mapping. Possibly some of the agent-based modelling techniques and collaboration sites are based in this new paradigm, but are there more?

Good luck with the talk. I'm sure it will be wonderful.

-- Nancy Searls

I think its more than lack of shared group understanding, though that is almost always a challenge. Some problems arise, not because the segments dont understand each other, but because they have different values. See the Global warming, for example, or Iran vs. the US on the subjects of nuclear power and weapons. Nuclear weapons probably ARE to Irans benefit, if not to ours, and they are not irrational in fearing us and Israel, nor is Israel irrational to fear Iran. That is, its more than lack of understanding.

I would put the emphasis differently: There are no *right* answers, only better or worse answers.

-- Bill Pardee

For me, there is a phrase that rings true in all my work with people
(in my case computer scientists and knowledge engineers -- but you
could substitute those...) who want to tackle problems with a
methodology that assumes you already know what the problem is in a fair
amount of depth:

"First generation methods seem to start once all the truly difficult
questions have been dealt with." (Rittel, 1972)

Yes! The "preliminary" work you have to do to present something as
fitting into a particular box is in fact the "primary" work... so many
assumptions made, and rough edges ignored or shaved off in order to
classify it as a Type X problem, which needs a Type X solution.

Rittel then goes on:

"[Argumentative design] means that the statements are systematically
challenged in order to expose them to the viewpoints of the different
sides, and the structure of the process becomes one of alternating
steps on the micro-level; that means the generation of solution
specifications towards end statements, and subjecting them to
discussion of their pros and cons."

Rittel, H.W.J., Second Generation Design Methods. Interview in: Design
Methods Group 5th Anniversary Report: DMG Occasional Paper, 1972. 1: p.
5-10. Reprinted in: Developments in Design Methodology, N. Cross (Ed.),
1984, pp. 317-327, J. Wiley & Sons: Chichester

-- Simon Buckingham Shum

Just seconding what J. David Blaine says here. I have worked in telecom for 15+ years, and this is almost always the case. The problems can get glossed as engineering problems, operations problems, marketing problems, etc etc -- but the reality is that they are always a combination of these and other dimensions (and sub-shades of each of the above), the knowledge of the people participating is always incomplete, the time is always too short, the issues are extremely complex from even any one of those perspectives, people speak different languages and have different interests that are not all explicit (for all sorts of reasons), and

so on.

Paraphrasing what Simon said in his post, a big feature of wicked problems at least in this environment is also that many people come to the table believing that the problem actually isn't wicked at all -- they think they know what kind of problem it is and what kinds of solutions are valid. The problem is the mismatch of those assumptions with each other.

-- Al Selvin

Jeff, as you describe so well in your book, we humans tend to not deal with 'wicked problems' but attempt to 'tame' them instead... mostly due to not knowing how to address them effectively. [I think it's important validate this attempt to avoid or tame, as something that makes sense, a valid attempt to somehow contain conflict, in the absence of better alternatives...]

I'd say most facilitators are already familiar with the human tendency to avoid or tame wicked problems... and we tend to see ourselves as, _already_ helping people in organizations to deal with 'wicked problems'. At the same time, we are usually looking for better and more effective ways of doing so...

On page 141, you point to something quite crucial: how many of us, when in the role of 'facilitator', have a tendency to focus prematurely on 'agreement' (Does everybody agree with this idea?) rather than, delving into the areas of divergence in the group, and listening deeply to each particular perspective. I see this as a way in which we as facilitators, ALSO have a tendency to try to 'tame' wicked problems... [again, as a valid attempt to manage conflict, in the absence of better alternatives...]

The rationale you offer for this, is the need we've had to "compensate for working with an impoverished display and an underpowered notation." In other words, we haven't had the necessary tools before, to allow us to take a different and more effective approach, to wicked problems...

While I agree with you, I feel strongly that, in addition to emphasizing the role the display and the notation, it's also crucial to emphasize the importance of a different vision of our role as facilitators... I see this as especially crucial with regard to what it means to 'build shared understanding'....

As facilitators, most of us feel that we are ALREADY helping people 'build shared understanding'... even when (or especially when!) we are trying to 'help people agree' (as in, asking people, "What do _we_ think?" or, "Does everybody agree with this idea?"...)

On the most basic and unsophisticated level, 'building shared understanding' is often used as just another way of talking about 'helping people reach agreements'...

Yet even among facilitators who DO use the term in a more specific way, making a distinction between 'building shared understanding' and 'negotiating agreement', it seems to me that the term is often used to mean something different than what you are pointing to...

I've seen the term 'building shared understanding' used to refer to 'getting agreement on the preliminaries' (as in, "let's agree on some definitions of the terms we are using here... let's agree on a definition of the problem... let's agree on a definition of our criteria for a good solution...) all of which are conventionally seen as the necessary step-by-step prelude to the 'final stage' of 'getting agreement on the solution'...

From this perspective, it's the 'last step' ('getting agreement on the solution') that is seen as 'negotiating agreement', while 'building shared understanding' is used to refer to the process of getting agreement on all of the 'preliminary steps'...

Yet a third way of using the term, can include things like ice-breaker activities, sharing personal stories, etc... stuff that is mostly in the affective realm. Nothing wrong with that; but it's also not what you mean, I think, when you use the term 'building shared understanding'....

I think it's crucial for facilitators to get that 'building shared understanding' in the way that _you_ are using it, is very closely related to, 'facilitating opportunity-driven problem solving'. It's about the facilitator really taking in each particular perspective, for the purpose of creating the shared map, but WITHOUT the trying to 'average' or 'broker' or 'negotiate' these particular perspectives into something more bland and palatable and 'agreeable'...

and, I'm concerned that this point can be too easily missed, especially by facilitators who see themselves as ALREADY 'building shared understanding' yet mean something different by the term...

From my perspective, what makes the shared display and notation so powerful, is that it allows us to take a facilitative approach that supports ODPS [Opportunity Driven Problem Solving], and _that's_ what creates the kind of 'shared understanding' and the creative atmosphere that help us to address wicked problems in a significantly more effective manner...

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(now that I've written all that, I think I can give you my summary version!)

As humans, we have a natural desire to manage and contain conflict, so that it does not overwhelm us and disrupt our relationships with one another. Given this, we do the best we can with wicked problems... often attempting to 'tame' them, when we don't have any recourse to more effective approaches.

Conventional facilitation helps people deal with wicked problems better than they might otherwise... and, still, as facilitators we too often find ourselves attempting to 'contain' the potential conflict by focusing on areas of potential agreement, rather than divergence.

This is understandable: our ability to manage conflict safely is limited by the tools that we have. However, the undesirable side-effect of emphasizing agreement and minimizing divergence is that it tends to keep the various perspectives that are present from surfacing, thus downplaying creative tensions and dampening the creative potential inherent in the group.

Similarly, we often attempt to create safety when dealing with 'wicked problems' by using linear, step-by-step processes. While the rationale for this is understandable, it also tends to dampen the creative process.

What is needed in order to deal more effectively with wicked problems, is

a) a safe way to contain the possibility of conflict, that does NOT depend upon minimizing the divergence that is present; and

b) a way to flexibly 'follow' the group process and track individual contributions and perspectives to create a 'shared map' of the various perspectives and possibilities, WITHOUT needing to impose a lock-step process. This will allow us to encourage creative engagement on the part of all participants.

(...the good news is, we have approaches that allow us to do all this!... :-)

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I do want to note that i very much agree with the issues and concerns that others have raised, about the challenges of 'getting people to the table': getting them to recognize that it is a wicked problem, getting them to allocate sufficient time for addressing it, etc.

I see those as crucial questions to consider, from the perspective of a consultant or change agent (internal or external). I also feel strongly that, in order to be effective in our role as facilitators, we need to ALSO be effective consultants. So while i've not spoken to any of those concerns here, i do think they are of vital interest to most facilitators...

however, i've chosen to focus here on the 'facilitation' end of things... what i think that we as facilitators

need to hear, about facilitating wicked problems once we do have everyone 'around the table'....as well as, what we as facilitators are likely to misapprehend as something that 'we already know and do'...

one last thing... i woke up this morning with the following:

[[all of this, including what i wrote last night, is stuff that you
say all the time, and i'm just 'saying it back'....]]

the first level of 'dealing with wicked problems' seems to be to
not deal with them... to try avoid them or tame them...

and this is in part, because whenever people DO try to 'deal with
them', the inherent complexity tends to pull people toward a)
becoming strongly passionate about advocating for their own point of
view, and/or b) becoming intensely critical about the shortcomings
they see in others' points of view; and/or, c) reframing the
'original question'...

we need to be able to WORK WITH all of this, rather than viewing it
as a 'problem', as something we need to 'prevent' or 'keep from
happening'... :-)

in my experience many facilitators spend 80% of their energy in
'crowd control'... so i think it's key to get that 'there is another
way', to actually 'tap into' the energy that people naturally bring
to 'wicked problems' (once we get past the initial level of avoidance
of them) and utilize that energy as a resource...

-- Rosa Zubizarreta

Jeff and all - I very much agree with Rosa's inspired words. And i want to try to answer more directly your question: "If you could learn something new about wicked problems, what would it be?" The new thing(s) for me would be:

1. Facilitation is often about negotiation, negotiation is about problem-solving, and some problems are really, really hard. Northern Ireland, the Middle East, abortion in the USA, etc. Sometimes we do not have a solution, not yet, after a long time with many very smart people. No matter which/what techniques we use. As you observe, the very act of searching for a solution changes the problem. So, it's important to capture how we got where we are, what we considered, how we weighed it, where the leverage might be. YOUR kind of shared display does that and few others, if any, do.

2. As we drive for agreement, as Rosa mentioned, we often avoid -- possibly subconsciously -- questions and possible solutions that would do violence to the path we are on or currently explicating. Sometimes the methods/techniques we use to record our ideas makes us invest too much -- get too committed -- in them so that there is too high a cost to abandon them, even if only to explore where they might lead us. That is, we need a lightweight method of recording where we are in the conversation so that we can easily explore "tangents" and potentially orthogonal ideas; it needs to be lightweight so that it does not cost too much to leave an elaborated solution. (As a personal experience, i find that walls covered with Post-It Notes, for example, are too difficult to abandon when we have discovered that the method of organizing those notes did not really work, or that the question we asked ourselves that the notes were trying to answer might be the wrong one and we need to make a left shift.)

-- Stan Rifkin