

*The 2002 Victoria Cognition Conference on Information Processing and Entrepreneurial Cognition*



**Discussion Session Transcript and Report**

Friday, July 19, 2002

The Future of ENT Cognition Research

Discussion led by:

Ron Mitchell, University of Victoria

Discussion Chair

---

View of the Gulf Islands looking north from  
Dunsmuir Lodge, site of the 2002 Conference

**Introduction**

Ron Mitchell, January 2004

My making this transcription available has been too long delayed. A combination of factors conspired to render this project a bit more complex than initially anticipated. Thanks to all for your patience.

A technical factor that has most directly impacted transcription availability is the unfortunate failure of the recording process to capture the first 30 minutes of the discussion. (Thanks to Norris Krueger, who, in taking over the recording duties at our request about 30 minutes into the session, actually corrected the oversight, thus making the balance of the session available.)

The transcription of the actual words of conference participants in this session is a useful historical document, because, in our being able to read exactly what was said, individuals who attended can recapture the spirit of creativity and responsiveness that prevailed in the discussion; and interested individuals who were not present are able to get a sense for the flavor of the dialogue and interaction that was occurring among a group of enthusiastic entrepreneurial cognition scholars at one point in time in the development of our field. Thanks to all present for your contributions, and our apologies for our incapability to provide a complete transcription.

**Summary of the First 30 Minutes**

Fortunately, some of the work that was accomplished during the first 30 minutes of discussion was captured on the flip charts and overheads used to create the framework within which the discussion took place. In this section of the report I shall attempt to summarize this portion of the Session, and to provide somewhat of a segue into the discussion transcription proper.

According to my notes, we began the session by selecting from among a list of participant-generated questions, the three questions that we, as a group agreed would be the best use of our time. I first “primed the pump” with a list of 5 questions (questions 1 – 5 listed below), which were joined by eight additional questions, suggested by session participants as follows:

1. What are the boundaries of our domain?
2. Is the present literature a “small slice of a much larger pie”?
3. What should be the standards/ norms/ intentions for review of ENT cognition research?
4. How does it turn out that more of our work builds on each other’s?
5. How do we balance the building of a strong ID with openness and inclusiveness?
6. What must die?

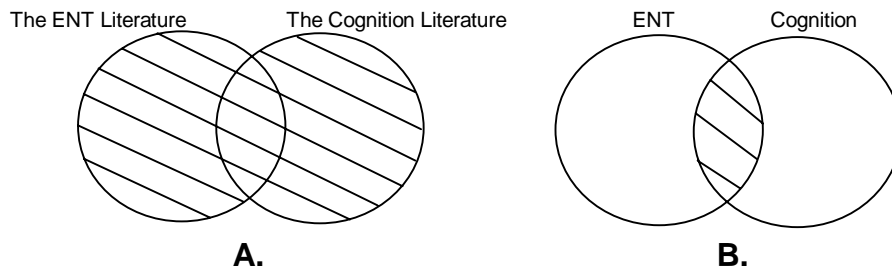
7. Emerging methodologies for measurement?
8. “Through the lens” v. “at the lens”?
9. Can cognition theory be applied later in the venturing process?
10. Malleability?
11. Direction: Theory applied?
12. Level of analysis:
  - a. Individual v. firm?
  - b. Where are social networks?

Each participant was asked to pick their top three, the list was read, votes tallied, and the top vote-getters became the basis for the discussion. The tally was as follows:

Choices:	Votes:	Questions:
#3	12	1. What are the boundaries of our domain?
	0	2. Is the present literature a “small slice of a much larger pie”?
#1	14	3. What should be the standards/ norms/ intentions for review of ENT cognition research?
	4	4. How does it turn out that more of our work builds on each other’s?
	6	5. How do we balance the building of a strong ID with openness and inclusiveness?
	3	6. What must die?
#2	13	7. Emerging methodologies for measurement?
	8	8. “Through the lens” v. “at the lens”?
	3	9. Can cognition theory be applied later in the venturing process?
	6	10. Malleability?
	1	11. Direction: Theory applied?
	9	12a. Level of analysis: Individual v. firm?
	0	12b. Level of analysis: Where are social networks?

Hence, we began our discussion by addressing Question 3, as the top vote-getter: What should be the standards/ norms/ intentions for review of ENT cognition research? The input received from session participants consists of the following suggested standards (as recorded on the flip charts until the dialogue picks up):

1. Research in ENT Cognition should evidence strength in both literatures: Entrepreneurship and Cognitions. Thus, as illustrated in the Venn diagrams below we recommend moving toward A. and away from B.



2. ENT cognition researchers should surface and continue dialogue about under-researched topics. (As will be seen later in the transcription some of these began to surface; and a beginning point list has been posted: please see <http://www.ronaldmitchell.org/ent-cog.htm> for one such compilation).
3. Editorial discretion should be well used. By this we seemed to mean that where possible, those who hold editorial responsibilities should be encouraged to call forth from ENT cognition researchers their best efforts. (Please see Presentation #2 Editor's Remarks: The development of entrepreneurial cognition research: An editor's perspective <http://www.ronaldmitchell.org/ent-cog.htm>, which was delivered earlier in the session, and to which this point refers.)
4. ENT cognition authors should be encouraged to state their definition of entrepreneurship, and the cognitive implications of that definition in their writings. This approach has two implications:
  - a. Fluidity: field-based parameters/ things to consider will evolve; and
  - b. Emergence: new ideas will have place.

Furthermore, authors should also be encouraged to articulate the above definition and implications in their transmittal letters.

(NOTE: IT IS AT THIS POINT THAT THE DIALOGUE TRANSCRIPTION PICKS UP.  
And thanks to Charmaine Stack for transcribing/ interpreting this discussion)

#### **TAPE 1 (SIDE B)**

RON MITCHELL: I've tried to do number three here, and FYI, I don't mind passing this type of information on to the reviewers. Dean?

DEAN SHEPHERD: I think if you put in your letter sent to reviewers saying that an author has satisfied those criteria in number four there, or something along those lines?

RON MITCHELL: Sure. So we have two directions we're talking about. One is, if I'm the editor of a special issue of ET&P I could have set these standards and required it. Right? So, this will be applicable maybe some day when we do the next special issue of ET&P or whatever; we can then do that. However, in the meantime, there's a bunch of us that have "stormed" in this conference, we're about to suggest "norms," and there's going to be a list. I'm suggesting that the second direction is for an author to send four copies of a paper plus four copies of the norms list and it's attached to/ included in the transmittal: and please send it out to the reviewers – the editors can ignore it if they want but likely they will not. Likely it will go. So I've got Saras next and then Kelly. Eric, you've had your hand up several times and I apologize. So we'll just...

SARAS SARASVATHY: He has a topical question that...

RON MITCHELL: Okay, Eric.

ERIC MORSE: Okay, I hesitated to bring this up because it's certainly not unique to this group or to entrepreneurship, but I'm going to bring it up because it's a pet peeve anyways. That is I think we have a unique opportunity in that if we're not creating a unique theory we're at least creating a really interesting line of research. And that opportunity has to do with the samples that we select. I think that I would just like to see (and I'm just as guilty of this as anybody) like to see us be a lot more careful with the samples that we use and what we say based on those samples. I think too often – and Susan, since you used a quilting analogy, can I use a sports analogy?

SUSAN HOUGHTON: Sure.

ERIC MORSE Okay. Too often it's like trying to say something about baseball players. And I'm always wondering are they talking about my Little League son or Alex Rodriguez? Okay? This is a sample of entrepreneurs. What

type of entrepreneurs? Serial entrepreneurs? Lemonade stands? The last article that we read I thought was great, not because I agreed or disagreed with their definition of entrepreneurs, but because I knew what their definition of entrepreneur was and then they sampled exactly that.

RON MITCHELL: So I'm going to call and I'm going to raise you one. Okay? Here's the deal: Ray (Bagby) has promised that we can publish any excellent work in entrepreneurial cognition. So, this is an extension of the call. We're going to have to have two issues anyway, because there's just more papers coming along that will be excellent that we can publish in the first one. So, volunteers for this paper. What does drawing careless samples mean in our field? It will go out to peer review, it will come back but it'll be included as part of our special issue, sort of statement. That way, we're just building the foundation and the thing moves forward. But it can't just be the results of a conference. The list that we talked about – I think that's legitimate enough for everybody to say, you know, people are kind of agreeing on this. But when we come to what kind of samples are we looking for and what are the standards of why, that is a scholarly work that has to be properly documented and I'm interested in the sign up sheet at the end of this session. Okay? I mean, who will write that paper and it's going in the next one (special issue) whenever the space comes available, and it will just be a part of this whole process. So thank you, Eric, we'll just take that and include it as a part of Agenda Setting: Norming, Intentions, etc. So Saras, back to you, thank you for being willing to...

SARAS SARASVATHY: In fact, it's perfect. What I wanted to say was just in addition to that, I was suggesting actually as a project for some doctoral student who might be interested, and that is to actually go and look at our entrepreneurship literature and look at all the different ways that people are using the word entrepreneurship and entrepreneurially. Just create a taxonomy and say, create some kind of number or something so then, in, thereafter in future people are using entrepreneur as entrepreneurship as a trait, entrepreneurship as a job description, entrepreneurship as characteristics of a group of people, and whatever your taxonomy is, so that people can always refer to that particular classification of what we mean by entrepreneur at the beginning of the definition. So we get a kind of taxonomy of definitions that people have already used and then we can build on it so we don't use – as Mark was pointing out – that new venture is not a new venture is not a new venture, right? And entrepreneur is not an entrepreneur is not an entrepreneur, also, right? So to some extent create some kind of taxonomy so that every time we use the word then we just say we are using it in that sense, or in some other sense. That would make it a lot easier.

RON MITCHELL: So the fabric... (referring to a "quilting" analogy used by Susan H. during the time that recording was not working) . . .

SARAS SARASVATHY: As part of that paper that you suggested somebody should write.

RON MITCHELL: So the fabric's coming out of the chest and we see that someone is saying "You know, we ought to do this standard setting, etc." Now, there was a conversation at lunch which basically said "So, what's next?" Well, the "so what's next" is that the group of, I mean, this, the idea of sort of a triennial kind of conference came up. So I talked to Eric. You know, he's going to be at Western, we've got an invitation sometime, with about two and a half years, two, three years from now to go there. Okay? We talked about the format of what that could do. If in fact, what we did with that next conference isn't, oh let's all get to know each other and find out that, 'Hi, my name is Ron, I'm an Entrepreneurship Cognition Expert and I've been clean for 20 minutes,' and so, okay, we now know each other. But the next version of this needs to be something related to that, right? We need to have specifications and data and whatever and we need to be engaged in the process. But then, we ought to invite the field-forming minds, the Susan Fisks or whoever to have a conference where they come in and look at this and go "Well, whew, this is what we think in this field," and then they write the papers in entrepreneurship, we write the papers for the larger field, and out of that conference comes the next step in this standards setting. So we're not just talking about the things that we do in the present. We're actually talking about something that can be envisioned as a research agenda in the collective as opposed to in the individual. Now we're all individual actors so nobody's constrained by it but in fact what we're trying to do, I think, is to create enough institutions that we have an enabling world in which we can work. So, Eric, we're back to you?

ERIC MORSE If I could just follow up on that, Ron, I'd like to have everybody sign up for that conference before you leave the room., so...

(LAUGHTER.)

ERIC MORSE Deposits would be great. Yeah, thanks.

UNIDENTIFIED: Perhaps the next one in Athens?

RON MITCHELL: We're going to give Eric the latitude to choose the location sometime in the future and by the way, I've already spoken to Ray, and he's willing to do a triennial edition of ET&P on ENT cognition, so there'll be another call for papers and we will go forward building stepping stone upon stepping stone, because the next 15 years is going by anyway. So we might as well get the work done. Uh, Kevin?

KEVIN HINDLE: (unclear – re: taking a break in the proceedings)

(LAUGHTER.)

RON MITCHELL: I'll just give you my perspective on that. My perspective is that in the balancing of what it takes to get momentum built, I'm not willing to yield that. So, I have to say, let's not. If you need to slip out for a minute, fine, but we've got a lot going here and I'm for continuing. Thank you, though. Kelly?

KELLY SHAVER: I want to go back to the notion about what sort of norms we might have for review of papers, and I have four specific suggestions. They go from the norming to the definitely storming. The first is, increase the reviewer list by simply volunteering to review. It's amazing how many people don't and they expect editors and journals... they expect people to find them, even though they don't volunteer. So, you know, I sent out 1100 requests. I got 190 reviewers.

RON MITCHELL: So in support of this, until you've crossed the other (editorial) side of having to pull all of this off, you don't really realize how valuable following Kelly's suggestion is. Next?

KELLY SHAVER: On the same topic, if you send in a paper, suggest reviewers. The editor doesn't have to take your suggestion, but at the very least, it increases the pool, because you're very likely to know about people that the editor doesn't know about and that's not true when it is a special issue, but it sure as hell is true when it is not a special issue and it is even more true in places like AMR and AMJ. Now they don't have to take it, but the farther away you get from the very narrow confines of the sub-discipline, the harder it is to find people to do stuff.

RON MITCHELL: the editor may not take that advice but maybe one of those reviewers will come in and authors will get a much more informed review. You won't know which one it is, or maybe you will by tone, but at least you'll have a broader pool that's coming. So, that's two.

KELLY SHAVER: That's two. The third is, when you write reviews, in the sense of kind of providing developmental assistance to each other, add references. Don't assume that the authors of the paper that you are reading know all of the references that you know. If somebody's missing something, help them out, don't just say you're missing Smith and Jones. Say, you're missing Smith and Jones and give the whole reference. Maybe they'll find it insulting; maybe they'll find it really helpful.

RON MITCHELL: I've actually had correspondence with a marvelous reviewer for this special issue and some people who really needed a reference and it just was obscure. And if you had the whole reference it would just save everybody piles of time. Okay, fourth?

KELLY SHAVER: Fourth. Now to the one that... that...

RON MITCHELL: Oh, go ahead, I've thrown a few firecrackers out.

KELLY SHAVER: Well...

RON MITCHELL: Too much? Okay...

KELLY SHAVER: Well, no, no.

UNIDENTIFIED: A real nuclear device...

(LAUGHTER.)

KELLY SHAVER: This is one that I am really glad that I did it when I was reviewing for social psych journals. Editors always hated it. Uh, I'm glad nobody did it when I was editor of ET&P. Sign your reviews.

RON MITCHELL: What?

KELLY SHAVER: That's the difference between being pointed and being obnoxious. We will say things that, if you listen to the conversations that we have had here, there've been plenty of pointed comments about people's research. But they've all been polite. And they've all been non-personal. What drives us crazy as authors is to get stuff on the order of "This is the worst crap I've ever seen, man!" Well, you wouldn't say that to somebody's face. You say it only under the cloak of anonymity. That's one of the few things that (unclear author names) ever did that I believe. And so, if you take away the reviewer's anonymity, then the review tone, no matter how trait-like you might be in terms of being critical, the tone is just different.

RON MITCHELL: Now I will weigh in on this as the beginning of that.

SARAS SARASVATHY: I do not understand the point.

RON MITCHELL: He's saying actually in the blind review process, sign your review anyway.

SARAS SARASVATHY: But he's only there because he's an available resource. I'm really confused.

KELLY SHAVER: No, if you've signed it, it goes to the author like that.

SARAS SARASVATHY: No, you're not supposed to do that.

KELLY SHAVER: But I'm suggesting you do it anyway.

RON MITCHELL: He's suggesting a new norm as a revolutionary idea. I'm going to make a suggestion about this. If you don't sign your review, write the review and mentally sign it.

KELLY SHAVER: Yes.

RON MITCHELL: Then you're in the civility zone. Okay? And that's Kelly's point, I think. Okay?

KELLY SHAVER: Yes.

RON MITCHELL: So, what we have to do now with 50 minutes left in this discussion is to parse our time between the two other top topics and if we don't do that you'll leave frustrated. So, any final comments? They've got to be 30 second sound bites. (Acknowledging Norris Krueger.) Really, 30 seconds?

NORRIS KRUEGER: Time me, man. The one thing that I enjoy about this field is the fact that people are a lot more supportive of each other, even when you're getting the vicious reviews. I got an unsigned review that was on University of Colorado stationery with Dale Meyer's – actually, Dale Meyer's personal stationery – that was unsigned, because he wanted to be upfront about the fact that he was ripping me to shreds. Worse, it was deserved. But I think we have an opportunity here with these standards...

RON MITCHELL: That's 30 (Chuckle).

NORRIS KRUEGER: ... to raise standards and yet be supportive and help each other and really distinguish ourselves.

RON MITCHELL: Thanks. Yes?

UNIDENTIFIED: I do have a 30 second bite. I think we fool ourselves if we think blind reviews are always blind, because a lot of times you can tell who's reviewing, and styles come through, anyhow, so you need to be careful... so if you don't sign it, you ought to be (unintelligible)

RON MITCHELL: I think the (unintelligible) how that's enacted, Kelly's point is civility. Okay? 30 seconds, Veronica?

VERONICA GUSTAVSSON: I'm going back to guidelines and norms. I think that whatever norms and guidelines we may approve, the author always retains the right to disregard them completely. If he or she believes that the form of his article calls for disregarding these norms, but in this case, the author should explain in his or her letter why he or she chooses to disregard our guidelines.

RON MITCHELL: Thank you. So this is often what I use as an editor. I say you don't have to do everything the reviewers are saying but you do have to take their concerns into account.

Okay, so at this point then we've got **closure on topic one** and it's not really closure it's just that we've agreed to stop talking about topic one and we're **going to go to topic two**, which is **emerging methodologies for measurement**. So the issue is one that is critical to getting really good research. Brock, do you mind just starting us out with framing the question one more time as to what it is you were seeing as the need and then we can take it forward from there.

BROCK SMITH: The research question that many of us in general are trying to get around is how do expert entrepreneurs think and behave. And I'm not sure I know all there is to know about how to measure those cognitions, and if anybody can enlighten me on new things that would help move our field forward from a cognition measurement perspective, I would love to know it.

RON MITCHELL: Okay, from a research genealogy standpoint, Brock comes from marketing, and part of the UVic research team, has to ... and we haven't presented anything here but essentially it's the idea that entrepreneurship is a kind of expertise, and there's a script that's acquired through particular processes and so when Brock's talking about measurement of expertise, we're talking about a particular cognitive phenomenon. Okay? But I think you'd be willing to say measurement of biases, heuristics, whatever it is that is the phenomenon of interest, how are we going to get at it? I just had this intensive interaction with an Associate Editor at AMJ about this issue. Like, it was just such a problem for a marvelous scholar in her own right to understand what it was that we were doing. We were using something that we call script cues and when someone responded to a cue it was like an eye movement or some of those other things that indicated that the cognition had occurred, or was present, or something. Well, you know, the whole discussion of, you measure a cognition... because it is inherently unobservable, you measure a cognition based upon what it produces that is observable. That's sort of a Posner mid-seventies sort of a comment. Okay? Where are we with that? Is that all we can do? Or what ought we to be doing? Connie Marie, I'm seeing your hand?

CONNIE MARIE GAGLIO: One of the things I'd like to see happen is perhaps next year we put together a track or a series of workshops where someone is willing to present on how to do cognitive maps (here's the strengths of cognitive maps, here's the limitations); here's how to do protocol analysis (here's the strengths, here's the limitations), here's how to get people to elaborate their schema, here's how to look at something indirectly. I still personally think that Kahneman and Tversky's fundamental paradigm where they carefully construct a number of things that rule out alternative cognitive conclusions is something that we should explore more and take a look at. So I think there's a whole set of things that indeed cognitive psychologists have been developing all along and I'd like to not reinvent the wheel so much as reinvent what it means for entrepreneurship. And that's I think the appropriate patterning kind of thing... I don't know...

RON MITCHELL: Thanks, Connie Marie. I think I got most of that down. Yes, Saras?

SARAS SARASVATHY: I think the simplest thing is to look at people who have been studying cognition and write to them and ask them to recommend to you methodology papers and things like that where you can actually ... or even sit down and read the experiments. Here is how I would think: if you're a marine biologist and you have to dive into the sea to study your creatures, I mean, you can hire some divers to go study your creatures or you have to learn scuba diving. So the question is, you have to go to the source of people who developed this or are good at this. You can write to them and they will send you... I mean, you can go to Ray Bradshaw or you can go to Kratowski ??) you know, depending on what type, what you think would be appropriate. You can write to somebody who has done work and ask them, at the very least, for the bibliography and then actually, you know, form a study group if... You know, I do study groups with my colleagues. I used to that at the University of Washington. Believe it or not, just because we are professors does not mean that we cannot form study groups and actually learn a method. And we have to put in that work. I mean, we can't read some vague paper – somebody used somebody else's method – and say now we are doing cognition. I mean, we really have to go to the source and understand the method otherwise you're going to drown in the water.

CONNIE MARIE GAGLIO: Well, the reason I was mentioning this is because of the number of papers I get where the technique is misapplied or, more importantly, the extrapolations from what the research technique can uncover is Fantasy Island, and I've read too many of them now to sit there and think that it's going to get rectified without some other kind of action. The conclusions and implications some people have drawn from cognitive maps would floor you.

RON MITCHELL: One of the things that Saras suggests requires just a little bit of courage on everybody's part, and that is, you can pretty much find out anybody's phone number or email address now on the web – I remember I was studying Nelson and Winter in doctoral school and I was going "What the heck is a replicable routine?" and one of my advisors said, "Well why don't you call Sid Winter? He's at the GSA" Called him. We traded calls for a bit, but eventually, I had a 45-minute discussion with him about what he thought. And on the basis of that, he sent me out references, we brought it back into the seminar, a la the study group, and everyone was illuminated by virtue of touching base with the people who know. Reinventing the wheel is something that has often been done in a variety of fields. Certainly we have seen it in entrepreneurship. What we're suggesting or hearing is "Let's not reinvent the wheels that can be fully understood, first of all, practiced, second of all, and then extended, third of all." Okay, so I'm seeing Theresa, if you don't mind Veronica, we'll go next to Theresa?

THERESA LANT: Just a practical suggestion, since you're listing some practical suggestions on the prior question. A collaboration between MOC and ENT Divisions. You know, propose a PDW or something. The MOC has had over the years PDWs on methodology; they tend to do that a lot. And perhaps entrepreneurship can propose the PDW Chairs get together and let's do something jointly and leverage each others' expertise. I mean, that's kind of a concrete learning study group and that will form relationships that can serve everyone.

RON MITCHELL: Exactly that. I can remember the day I first met Theresa. It was in one of these collaborations. And she was the session chair and Eric and I had a paper and we just, there it was, I think it was San Diego or somewhere and on the basis of that these increasingly useful interactions are able to take place. Veronica, thanks for waiting, please go ahead.

VERONICA GUSTAVSSON: Thank you. Well, I certainly agree with Saras that methodology is not something learned in an hour. You learn by doing, and of course you should start with the sources. I totally agree with you, go back to read Ericsson and Simon ??, but that is not enough, I'm afraid. And once I have read Ericsson and Simon I would love to talk to you who did it, and I know you did it, and I would really appreciate a workshop where you could come up front and say, I did it, that's how I did it, and probably just talk us all through your routine, explaining what exactly you did and why. Of course, it's impossible to replicate it absolutely but if we can learn from what you did, it would structure our own thinking and it's with every method, I would say.

SARAS SARASVATHY: If I may just add to that, so I am thinking that the Professional Development Workshop we can get, and we can pick the best people in there and I am sure they don't even have to be management scholars. I mean, I am sure we just need to do that with the PDW, whoever is organizing it and say that, every



year let's have one or two presenters we are interested in if we want, we just have to put in that leg work to get them to come talk to us if we want to do that. It is possible to do that, I'm sure.

RON MITCHELL: So if you'll permit an observation, at this point we've undertaken the emerging methodologies for measurement, and many suggestions are process oriented. We ought to this... we ought to that... but, what are some of these babies and which ones are working for what would be an interesting discussion, so, I'm going to spring forward to that but Kelly, first on the...

KELLY SHAVER: Following the PDW suggestion, the way you get stuff into the PDW program is to suggest it. The PDW Chair will not come looking for you, but on my experience, and also, I think, on Zach's, and probably on Tom's, as well, 90% of the stuff at least that gets suggested gets done. So, this group kind of collectively (except for the people who make poor suggestions) they don't get all four!

(LAUGHTER.)

UNIDENTIFIED: I got three!

KELLY SHAVER: So the thing is this group needs to, kind, of, every year put one in.

RON MITCHELL: And just so that we understand what that statement means, please translate that when it says, "this group," and insert "I," okay? Because unless you're really committing yourself to this, the group isn't committing itself so, you know, am I predisposing whether cognition is in our head or in the group? Well, we'll decide, but the idea here is we've got to have some actual action that comes out of it so just systematically as we talk about "we ought to" it doesn't mean that you have to say "I ought to do" everyone of these things but these are norms that we're talking about and those norms turn into "ought to's." Norris?

NORRIS KRUEGER: One of the sessions that Kelly so kindly permitted us to have was one on cognition, and Ron and Robert Baron and, well, Connie Marie stole the show, that was pretty, that was an SRO, I mean, we had to stand in the room.

RON MITCHELL: Absolutely.

KELLY SHAVER: Outstanding.

NORRIS KRUEGER: And somewhere I think I've got a list of all the people that were in there, so we could add that to our list.

RON MITCHELL: And Connie Marie, one of the best ?? ever...

NORRIS KRUEGER: But the PDW is such a great place because everybody says okay, that's the good stuff and you know, not the boring paper part of the conference. There were people ... everyone that was there (had) genuine interest and it's a great experience. And like to have people like Kelly and Zach who will listen, who will let me throw some ideas at the wall and they put it into play, the sky's the limit.

RON MITCHELL: We're back to Saras, then.

SARAS SARASVATHY: I just want to make an announcement. Tom Lee and I are doing a Professional Development Workshop where Tom Lee's going to come and talk about common editors ?? AMJ perspective, what he's going to do to try and have so-called non-traditional methodology into the thing and I'm going to talk about what I learned from Herb on doing thing and as far as I know nobody in this room has signed up for that PDW session. Just wanted to let you know if you're really keen on that, that is something, at least. Actually, kind of Zach suggested kind of doing it and so I just wanted to make that offer.

RON MITCHELL: Thank you. So, I'm bringing a question I posed just an iteration ago back on the table. We talked the process, and I think it's really good plain vanilla maybe even got a little bit of extra flavor to it but you

know what we're saying is what's the pick and shovel work? What kind of methodologies, measurements in particular, are working for us now in getting our data?

KELLY SHAVER: Well, to some degree, I think that whether it's an experimental design (my personal preference) or some other kind of design, one of the things we could always try to do is include some comparison. So, for example, in the business with the Baron work today, have them do a domain-specific self-efficacy and another self-efficacy that is entrepreneurially not domain specific. So always think about how you might be able to include some form of comparative question in whatever research it is that you're doing. As far as the leading edge of social cognition, it is, heaven help me for saying this, please, the IAT - and I'm not going to tell you what that is now because I can't stand to talk about it much - but..

RON MITCHELL: Why can't you stand to talk about it though? What is it that bothers you about it?

KELLY SHAVER: It's just ... (laughs)... well, uh, it is the Implicit Attitudes Test and it is a measure of the nature of cognitive processes that involves how quickly you push buttons on a computer to decide whether two things are similar or different, and clearly if you have a schema for the things, you will press faster than if you don't have that schema. So it's been used to test for racism, it's been used to test for all sorts of attitudes that people don't want to talk about. And honestly, it could be done with entrepreneurs, you know. Do these people really have some understanding of the world that the rest of us don't have - are they going to push the buttons faster? But you know, the thought of asking entrepreneurs to come in and push buttons...

RON MITCHELL: Yeah, yeah, okay... other comments on the content, then, of measurement methods? Yes, Dean.

DEAN SHEPHERD I just want to say one thing and that's about public samples, because I think samples are (unintelligible)... I thought Betsy's paper was great today, and they used student samples, and you know, I agree with that, depending on what the research question is. I just want to know what everyone else thinks, because if we agree that for certain questions students are okay, then we can feel more confident doing our research without getting it torn to shreds. And I suppose the discussion could then go, when is it not appropriate, for what questions is it inappropriate to use students. So I think that would be an interesting subject.

RON MITCHELL: So I wrote on the flip chart: "students versus question mark" because, as far as I can tell, students all have minds and there's just so much humanity that walks in the door as a student that what I am really interested in, Dean, is pursuing the, what is the alternative case? Someone who is not in a university? Well, like, why would that be relevant or not? Betsy?

BETSY GATEWOOD: Well, it's interesting, but I think students are more relevant as a group than ever because a lot of students are starting businesses. A lot of students are coming to school with businesses. It used to be that we didn't consider them as appropriate entrepreneurial samples but these days I'm not sure that's the case.

RON MITCHELL: So Saras, if we framed this question in the individual level of analysis way, so, whether they're just starting businesses or not may not be whether they have cognitions that are interesting for biases, heuristics, scripts, etc. What's your take on students versus non-students in the sample?

SARAS SARASVATHY: Well, my take is always two things. One is, what are you trying to do? What are you trying to understand, how relevant it is, right? And the other thing is, also think in terms of the reverse thing. I know we always think that we are to start with theory. We could also do the reverse. We could say, here we are with a bunch of students. They are available. What are the kinds of relevant projects we can do with them and then go do those projects, right? It doesn't matter... I mean, for what is it? Learning entrepreneurship. What changes in terms of what they learn in the class? It is definitely relevant, you'd have to use students for that I would think. So, I mean, we strive to ... I'm just talking creatively, right? You have this and you say what are the kinds of research projects we can imagine with them? I would actually try to think of really cool research projects that you can imagine and then worry about theory and generalization later, but that's the way I do everything so... and a lot of people disagree with me, so...

RON MITCHELL: Yes, Karen and then Maw Der.

KAREN BISHOP: I've just finished a study with Robert Nixon that was looking at how entrepreneurs, really, entrepreneurs before they even consider starting a business, evaluate opportunities. And one of the things we used, to establish why we used students rather than moved directly into the entrepreneurial population, is to avoid the tendency for the bias that Kahneman and Tversky talk about. We wanted base rate information. So I think that might be something we want to consider, is to get base rate information so that we know that, on the average, the general walking around business oriented population kind of like doing business. This is how they typically respond, so that we have some sense of, as they accumulate education and learning, as they go through the entrepreneurial training of some sort, as they found ventures, we have an idea of where they start from.

RON MITCHELL: Thank you. Maw Der?

MAW DER FOO: I agree that student samples can be very useful. Unfortunately, we are kind of preaching to the converted. I mean, the reality is when you tell other people who review your work that, in a conversation, you tell the person what work you're doing and then they ask you what's the sample. And you say, a student sample. I mean, you look at the faces, and you know, their reactions change totally. So the question here is, you know, we can agree, I agree totally, and it's probably because we do cognition research and we know students do think, but what can we do about it? I mean, given the reality out there.

RON MITCHELL: So, the sample sells the research. You know, I did a paper with a colleague where we got access to the Fortune 500 CEOs and we had half a trillion dollars worth of business represented in our study. You know, the thing is just so appealing that, reasonable work, people are interested in what that sample has to say. So, the question that comes out of your comment is "What are the highly appealing samples, and how do we get access to them?" because they sell our work. Connie Marie and then Saras.

MAW DER FOO: Actually, that's not what I said. I think I agree with you that we need to get interesting samples, too, but I also think that there is a bias against student samples when they are appropriate samples and what can we do about this?

RON MITCHELL: Oh, I missed that, you're right. So the bias against the student sample, are you going to speak to that?

CONNIE MARIE GAGLIO: Yes. I really want to. And it kind of goes back to the list of expectations that we might have about a paper or in reviewing it. And I think there's one little piece that we may need to do in our papers that perhaps later down the line if we feel there's more experience and more developed we don't have to do, but as we design our research, we think of alternative samples, and sometimes it is purely convenience driven but other times it is: this sample seems to represent that phenomenon better. I think that's one of the things that was great about the Baron paper today. If you really went after "this is what I'm interested in, here's who does it, I got 'em." So I think we ought to have a paragraph in our methodology sections that says, in looking at this phenomena, these three samples are viable. I chose this one because, and talk about the pros of that, and obviously, we always talk about the limitations of the sample in the discussion section, but I think to point out to someone that hey, you know, I looked at... For example, right now we are doing a study on cross cultural attitudes to entrepreneurship and adults in the samples don't give us as much information as younger students, because younger students give us the reasons they've heard their parents give, you know, they'll repeat all of that stuff because they don't know it's socially inappropriate not to. And it has provided tremendous insight into some attitudes. So, excuse me, but I think that's the most appropriate sample regardless of what anyone's going to say. So I think maybe we just need to add that paragraph in there for a while?

RON MITCHELL: Okay.

## TAPE 2 SIDE A

SARAS SARASVATHY: Now when they want to come back and contribute and if you write to them and ask them, that we're doing a research project, we're doing all this stuff and what we really need is data, we're not hitting you up for money, we want your time and we want your data. I think it's one of the ignored possibilities of

sampling, I think, alumni samples. And you can actually get them on the roster for several years, if you want to, and they'll come back, the ones who will cooperate will. And there are other people getting in touch with them all the time and there's emotional connection and stuff like that, so, I think it's... I've not seen any studies based on alumni and that has to be better than just students, right? People that are poised in the real world.

RON MITCHELL: Okay, thank you. Theresa?

THERESA LANT: One more practical suggestion. Be mindful of the outlet where you intend to submit your work. Some outlets will absolutely near-zero probability publish anything with a student sample, others will. And so just be mindful of your choice set, you know, just explicitly think about that beforehand.

RON MITCHELL: Thank you also. And Eric?

ERIC MORSE: Just, since I brought this up earlier, I just want to say that I completely agree. There are a lot of journals that will just turn it away completely because it is a student sample. I don't think there's anything wrong, per se, with student samples I think some research questions, what you're trying to say, what all of you have been saying, absolutely. But unfortunately, there's a bias there, because in the past, people have used student samples but by the time they got to the end of the paper, they forgot. And they thought that they had used, really, some entrepreneurs in their sample. And that's why there is a bias. So I think we just have to be extra careful because of that, make sure we use consistency.

RON MITCHELL: Okay. So, we've generated... Brock, how did we do? Are we reasonably, possibly close to answering the question? A little process, a little...

BROCK SMITH: Well, what I've learned from this is that I need to learn a lot about cognitive maps, protocol analysis, script cue recognition, experimental designs, skills and indices and implicit attitude tests.

(LAUGHTER.)

BROCK SMITH: Anything else?

RON MITCHELL: So you just wanted a checklist!

(LAUGHTER.)

UNIDENTIFIED: So we'll get back to you in a week or so and find out what you've done with it.

(LAUGHTER.)

RON MITCHELL: Okay, so the **third top vote-getter** was also up there, that's **what are the boundaries** of our domain. Now, first of all, in the last 20 minutes of the conference, we're not going to stake the four corners and have some kind of a claim ready to file. Okay? That's not what we're going to do. However, the how we might approach and what we ought to do about that and what the disabilities of the process are and what the questions are is really important. Now, I'd like to return us to a slide that occurred in Theresa's presentation yesterday, and it had to do with mapping entrepreneur phenomena, onto cognitive perspectives. And I raised this in a question earlier on in Dean and Norris' paper, but the whole idea is you have this information processing crowd and then you have the enactment and meaning creation crowd and the "in the head" and "in the interaction." Now, I'm not suggesting that this is necessarily a belief system in terms of research or approach, but generally speaking, it is an artifact of training. Am I right about that, Theresa? It's just an artifact of training, it's kind of a school of thought. And if we're going to bound our domain, to begin to sort of bound it with boundless assumptions, I just don't think that that's a sensible approach. So, what I'm suggesting is that Theresa has given us at least a couple of dimensions along which we ought to be looking at what we're talking about and maybe we can go from here. Reg had some comments earlier, Reg, that were kind of domain related so I'd invite those now, as well. So, the floor is now open for the third topic.

REG LITZ: What I was getting at before was maybe the way we think about domain boundaries, maybe it's a bit different for entrepreneurship. Boundaries to me implicitly suggest land, just to push the analogy. Maybe we're talking about something that's more fluid and maybe the idea of continental drift, if a discipline's a continent, that might have relevance in terms of drifting into the territory. When I go to Gartner's piece on elephants, he talked about all the different phenomena that have gotten into the alleged entrepreneurship domain. Maybe those are different craft that are sailing through it, so maybe we need to ask a different question about how we even think about the essence of a boundary and as you were talking now, Ron, I was thinking about another idea. Maybe boundary as staking out at a distance is an irrelevant concept as much as identifying the peak we're trying to climb that's in the middle of it all. That is the end of the analogies.

RON MITCHELL: If we could continue bounding, however, peaks or corners, I don't think we're talking about the boundary of the entrepreneurship domain, I think we're talking about the boundary of the entrepreneurial cognition domain and if you all think differently, just correct me and bounce me right out on that. But like, the what's entrepreneurship? domain is well studied in lots of places. So...

CONNIE MARIE GAGLIO: When I saw this yesterday, I really liked that there was one piece or one aspect or dimension that I felt was missing that I think we all teach, and that is that entrepreneurship is a process and that, for example, in opportunity identification, it might be in the head, it might be in the interaction, definitely though, when we get to, if you're raising money or convincing a supplier to extend credit, that's in the interaction. So you're doing different things at different phases of the venturing process, and I guess I wanted to take this thing and add the multi dimensions to it based on the fact that there are different requirements needed at different points. Consequently, your cognitive behavior is going to be bounded differently.

RON MITCHELL: So are we talking about ... Hang in there, you only got a few more minutes... Are we talking about the phenomenon itself or the way that we study the phenomenon, that we theorize about it? Jeff?

JEFF McMULLEN: I just wanted to bring philosophy to the center of this and I think that we haven't talked about this much, but in entrepreneurship it cannot be denied that epistemology and ontology and these assumptions that we're making need to come to the surface. We talk about opportunity, whether it's objective or subjective and we do it without realizing we're really talking about philosophical assumptions and that sometimes you chop people's work not because they didn't do it right, but because you don't agree with their philosophical assumptions. And that overhead up there has philosophical assumptions. "In the head" versus "In the interaction" deals with different epistemological issues, different ontological issues and, you know, not that it's too late for us but, I think, if we have the chances to build Ph.D. programs in the future, more training in philosophy would be very, very important to our field. We study how does knowledge come into being, how does the unknown become known. These are epistemological questions or if you're not into that, there are phenomenological questions, there are hermeneutic questions, but they still... we need to understand the underlying assumptions before we start to build things on those foundations.

RON MITCHELL: I'm seeing Kelly nodding here. A comment?

KELLY SHAVER: Well, I'm nodding with the comment because I believe it completely but these are philosophical issues and to some degree meta-theoretical issues, but that wasn't... I was about to make a suggestion but it wasn't on this line. It was a process issue kind of taking this diagram seriously. What we are attempting to do is legitimize a new product and service...

(LAUGHTER.)

KELLY SHAVER: And we are attempting to do it by the formation of entrepreneurial clusters so let me suggest that one of the ways we might do that is a model that has worked very well in social psychology, attached to the Society of Experimental Social Psych Meeting there is always a set of pre-conferences and it turns out the first people who organized a pre-conference with SESP were the people who studied person memory, and they just got together the day before the conference started and all those people came the day before and they just self-defined as a group and because it is connected to the major social psych invitation, you know, membership by invitation only and only increased ten percent a year conference, you get instant credibility even by having a pre-conference associated with a meeting like that. And so, go to the next Academy (of Management) meeting

a day early. Have your own conference in a hotel and after two or three years of doing this, anybody who wants to know something about entrepreneurial cognition will think, gee, I ought to be going to the pre-conference.

RON MITCHELL: Well said. Thank you. So these are the ideas that make enacting what we're talking about... I've been thinking about, we go from this concrete world of the journal review to the less concrete world of the measurement and now we're out in this domain thing just trying to throw landlines because we're, you know, a new field is going to be at sea in some sense. Brock?

BROCK SMITH: Just coming from a marketing background, had this group asked me, and I realize you didn't, but I'm going to offer you my opinion anyway. Had you asked me to write a positioning statement for this group I would have written "We study what goes on inside or between the heads of entrepreneurs of all kinds and how that relates to their behavior and outcomes."

RON MITCHELL: How about "intentions, behaviors and outcomes?" Maw Der?

MAW DER FOO: I think going back to Baron's '98 article where he tries to kind of define bringing cognition into entrepreneurship I think kind of we've done a good job doing a lot about cognitive, what goes on inside a head, we've done a good job of behaviors and intentions, but a third piece that I think Baron talks about is affect, or more generally, emotions. And I think that is kind of one of the missing pieces. I mean, in some sense you look at heuristic and biases, right, you know, some of the arguments we hear today is because of the level of passion and emotions, the passion that entrepreneurs have. They may be more susceptible to some of the heuristics. So I am wondering whether emotions could be part of that missing construct?

BROCK SMITH: I think so, and I purposely said "what goes on inside the head" in order to capture both cognition and affect.

SARAS SARASVATHY: (unintelligible)

RON MITCHELL: Turn your (microphone) button on.

SARAS SARASVATHY: ...the area of neural activity in the stomach (??) that actually powers(??) the brain so we know that the brain exists in the stomach, too...

(LAUGHTER.)

SARAS SARASVATHY: Seriously, that's why people have food problems associated with...

THERESA LANT: There's an important intersection and Tony Dimazzio ?? talks about how decision making cannot be decoupled from affect and those two, this is enormously artificial decoupling and I think we have been remiss in some sense that decision makers with the lack of affect make very weak decisions.

RON MITCHELL: So, what is not in our domain? I mean, there's lots of ways of looking at this. Reg says maybe there's a pinnacle that we're trying to scale. Maybe there's a whole lot of territory that's outside. Maybe it's an ocean, not a continent. You know. All of those kinds of metaphors that are used to help us, not to break our frame but to actually make our frame, and so, what are we not going to study and what - I'm not saying you should answer that question but I'd like to just be sure that we're looking at it from the vantage point kind of rhetoric.

NORRIS KRUEGER: Let me throw out the - we also have to consider the issue of who and a lot of people, the anthropologists studied researchers you really focus in: what are the key questions and who are the key people in pursuing those questions? You do co-citation analysis, you can actually map out the tribes of a field. You know, there are sub-tribes. At Babson last year Mike Meeks was talking of the metaphoric conversations. There are lots of different conversations; that we're all sort of in the same nightclub but we're all at different tables talking about different things. Sometimes we slide over and get involved in somebody else's conversation but the issue of who has got to come in here somewhere, especially given that we have a

reputation for being friendly and inclusive, probably to a fault. Whereas other parts of the Academy are, you know, downright hostile to newcomers, it seems.

RON MITCHELL: Theresa?

THERESA LANT: I think Norris is right on there, but I also want to add not just who, but where. Where is entrepreneurship research being accepted, into what clubs, and this gets back into the power issue and the pecking order of journals and what have you... it's a fairly complex issue but as a semi-outsider to this group, I'm very curious as to whether the group sees themselves as a group that wants to primarily publish in your specialty journals or a group that wants to have more of a presence in the quote-unquote mainstream "A" journals. And I don't say that because I agree with that, but it's a reality that has emerged, so I guess this is more of a question in terms of the goals and intentions of this group and you know, if there's a flavor of "We don't get no respect!" what gets you respect is positioning in, and citations, by the way, what gets attention and respect just empirically are those quote-unquote "A" journals.

RON MITCHELL: A, and citations. Connie Marie?

CONNIE MARIE GAGLIO: Wondering now, the last time I heard Susan Fisk talk, rather vociferous in saying that social cognition was a perspective, an approach, and absolutely everything in the universe was appropriate to be looked at through that perspective. I'm just wondering, do we have a domain or do we have a perspective?

RON MITCHELL: Thoughts? Jeff, you're nodding.

JEFF MCMULLEN Yeah, I think we do. I mean...

CONNIE MARIE GAGLIO: Which?

(LAUGHTER.)

JEFF MCMULLEN No, I just want ... Saras and I kind of had this battle yesterday, but my argument was that you start, and I know you have a different position but I'll go ahead and say my position, is that in essence you need to think of the word entrepreneurial and then you think of substitutes or synonyms, like creative, innovative, and if you can't find a meaning for entrepreneurial over and above these things then there is no field. If all entrepreneurial behavior is creative behavior then we're just bringing creativity into a new context and it might doom us to small niche journals because all you're doing is transplanting knowledge from somewhere else and applying it in a specific context. But, if entrepreneurial has meaning over and above creative, opportunity seeking, innovative, any other synonym that we use all the time, then entrepreneurship can contribute back to management or even the mother disciplines like psychology or economics, or something. And make a contribution beyond niche journals and it's that, I mean personally, that's the kind of work I want to do and I would think a lot of people in this room want to do that kind of work and you just need to kind of challenge yourself and ask the question – I think Venkat put it best when he mentioned this with insurance. The specific application of insurance re-informs economics and it changed the way people thought about economics and changed it more to a probabilistic argument and the discipline of economics grew because of that. If we in entrepreneurship can figure a way that our domain or our context can re-inform psychology or economics or one of these areas, then it's going to be easy to publish in A-journals if it's well done because it's an interesting question and it provides insight that wasn't there before. So I guess that's the goal. I don't know if any of us, or myself, can fulfill that but ...

RON MITCHELL: Yes, please, Kelly.

KELLY SHAVER: I think we have a perspective on a domain and my personal goal is publication in the journal, Social Cognition.

CONNIE MARIE GAGLIO: I'm sorry, then I misunderstood you because I thought at the beginning when you said "the boundaries of our domain" you were referring to the boundaries on entrepreneurial cognition.

RON MITCHELL: That's right. That's what I defined.

CONNIE MARIE GAGLIO: Right, because I was thinking yours is a broader...

JEFF MCMULLEN (unintelligible) ... otherwise it's just cognition. Why is it entrepreneurial cognition?

RON MITCHELL: As opposed to innovative cognition, creative cognition...

JEFF MCMULLEN Right, you're assuming... somebody's assuming that there's a difference and that difference seems to be implicitly assumed that it's firm creation, but not necessarily. And if it's not necessarily, then what is it that's different than creativity or innovative cognition?

RON MITCHELL: I'll tell you what I'm looking for, I'm looking to work within the community that has institutions that start me off at the high bar and that within that community I have teachers. Because I've done my time in a Ph.D. program and who are now my teachers? They're the reviewers. And when I'm out there investigating they're the ones that push me farther or shut down the error, as Veronica was saying. So I'm interested in working within a community that has a high bar set and that pushes me higher. So I would like to, I mean, the journals that I'm familiar with just because of my training, I would like to have the reviewers and the articles I'm reading from the people in this room, push me to the point that I produce ASQ, SMJ, AMJ, you know, kind of work. Now, I can't really off the top of my head roll off all the cognition journals, or all the economic journals or all the finance journals that are sort of outside management, but if we are to truly bridge, one of the things that would be a hope for me, kind of a dream, would be that on the basis of the work that we do together, that I would have the possibility of crossing that boundary and having my work accepted at the "A" level in those fields, as well. It gets back to Jeff's point. If what we're doing here can't inform those other fields, then they're not going to say "Gee, that's interesting" sort of, in the "That's interesting" sort of a "what everybody thought was A was really B when you look at it through this new way."

So, any concluding comments on the domain discussion?

KELLY SHAVER: I think Ron we've done well, and Ron deserves a round of applause.

RON MITCHELL: Oh, okay, thanks.

NORRIS KRUEGER: Hallelujah!

(CLAPPING.)

RON MITCHELL: Thanks again everyone.

(END DISCUSSION)