Dervin's Sense-Making Methodology

Applications to Interviews and Experiments

CarrieLynn D. Reinhard, PhD

Roskilde University

carrie@ruc.dk

What I will be briefly discussing is how I have used SMM to study media reception. I am not trying to teach you how to do SMM, and in doing the reading I hope you have a basic understanding of what SMM is. We will touch upon any questions you have about the what, but as for the how I shall discuss it in illustration through examples. Dervin teaches a semester long course on how to do an SMM interview, and this is not a semester long seminar. My hope is by the end of this lecture you will have a sense about what SMM is and how it can be used to study media reception, particularly as applied to engaging with virtual worlds. But I am not here to offer you a recipe you could then apply to your own studies. I hope in leaving this you will understand the utility of a situated, interpretive approach to studying people's engaging with virtual worlds.

SMM Research

- Why I use SMM in media reception studies
- Quantitative and Qualitative are not necessarily two warring camps
- Consider where methods can be in empirical work
  - Data collecting framework methods
  - Data collection methods
  - Data analysis methods
- Any of these can be quan or qual within the same study – mixed bag approach
- I see SMM useful to bridge because in its nature
- Today talk about SMM interviews, then how I used these interviews within a (quasi-)experiment

What I am hoping to do today is offer insight into why I use Dervin's Sense-Making Methodology in media reception studies.

I do so because I am looking for a way to bridge this divide between quantitative and qualitative approaches to such studies. And not just by creating a series of studies that each use different methods, or even creating one study that triangulates a phenomenon of interest with a series of methods. These are all very necessary and informative practices; but I would argue there is still another.

When I think about the empirical work of any study – whether it comes before or after the substantive theorizing, and because any study is always already anchored in a metatheory – I think of at least three mean types of methods that are employed.

1. First there are the methods for framing how you collect data, such as ethnography or experiment.

2. Then there are the methods for actually collecting data of some type that can then be analyzed, such as surveys or interviews.

3. Then there are the methods for analyzing that data for the results that will be used for discussing findings, such as statistics or grounded theoretical coding.

When you break down empirical work into those three parts, we can then start to see how qualitative and quantitative can become interchangeable. At the end off this lecture I will discuss a study I recently conducted that goes back and forth in bridging this quan/qual divide.
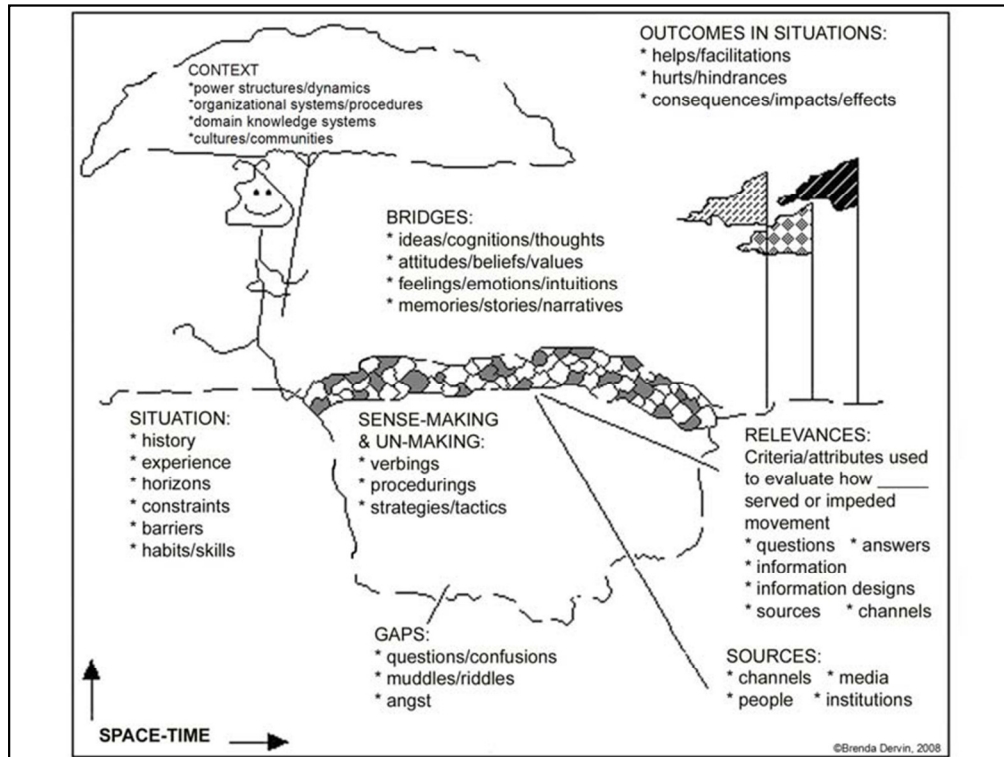
Before I talk about this study, or even SMM interviews, a brief summary of what is Sense-Making Methodology.

SMM uses the idea of gap as a central concept in its methodological foundation. The gap is assumed to be a universal of the human condition -- this time-space moment is not identical to the last, nor the next. Time-space keeps moving and hence the sense-maker is always conceptualized in SMM as moving, as never complete, nor ever fully pre-determined. SMM does allow for repetitious, habitual, constrained interpretations and behavior. What is important is that SMM does not assume these in advance.

The focus on the gap in SMM studies as a methodological and philosophically derived move is not some kind of picture of reality that assumes people are constantly stopped by ontologically real gaps. SMM does not presume that every time-space moment is filled with riddles, questions, and confusions. Rather, it assumes that methodologically the idea of gap allows us to attend to how audience members make sense as they move through the before, during, and after of their media engagements.

In some of these movements, there will be no questions asked only repetitions of thoughts and answers and practices from the past. These repetitions are seen as bridges over the gap. In some, there will be abrupt stops and many accompanying questions. These question-askings and searches for answers are seen as potential bridges. In some there will be confusions that never get resolved and time passes on with a bridge that never got built. Even if the person does not experience a moment as gappy, the methodological tools of SMM uses the gap idea as a way of discerning even that. Gap is, thus, an ever-present as a methodological tool. SMM assumes that there will be a bridge of some kind over every gappy moment -- a repetition, a moment of robotic unreasoned action, a moment of question asking, thought concluding, a moment of feeling and emotion, a moment of unanswered confusion, and so on.

3

What are SMM Interviews?

- Understanding the theoretical and methodological stance of SMM, SMM interviews study human activity by being:
  - Situated/Contextual
  - Empowering the Subjective
  - Understanding of the Struggle between Agency/Structure
  - Triangulating, Circling, Redundant, Repetitive, Digging
- Fundamental SMM mandates to interviews:
  - Minimal researcher intrusion, esp. with nouns
  - Empowering informant to speak their "real" by allowing time/space and their own words and recognizing their ability to self-theorize and be different across time/space
  - Seeking to build trust in repertoire thru empowering informants, redundancy of question-askings

An SMM interview is a structured interview – there is a repertoire of queries, that I will show, used in certain ways to reflect the philosophical stance of SMM. It is an interview that is a space structured in a certain way to reflect SMM's understanding of humans and human activity. The interview is structured to study human activity as being situated, as empowering the informant's subjective experience, as understanding the informant's struggle between agency and structure, and as always moving around and around and deeper and deeper into the informant's subjective experience of the situation under scrutiny.

Further, SMM interviewing protocols are designed to train interviewers in a new kind of listening. It is an interview structured with minimal intrusion into the informant's subjective experience with the researcher's jargon, or nouns, to explain things. It is structured to empower the informant's own subjectivity and modes of sense-making. It is an interview structured to build trust through empowering the informant and repetitively circling their experience and digging deeper.

Sense-Making, Sense-Unmaking Moment: How see elements of situation, bridge, gap and outcome

© Brenda Dervin, 20(

Interviews can be designed:
  * To look at one sense-making/unmaking moment
  * To look at a series of seemingly related or unrelated moments

Interviews use roster of queries designed to tap into the 4 intersecting parts of the sense-making/unmaking moment.
  * Queries circle moment with same questions repeated, creating redundancy to give time/space for answering

CIRCLING "REALITY"

TRIANGULATING WITH THE SENSE-MAKING METAPHOR

WITH REPEATED APPLICATIONS OF S-M TRIANGLE

© Brenda Dervin, 2008

An SMM interview is structured to understand the sense-making, or sense-unmaking, that occurs in relation to a phenomenon of interest, such as, for my purposes, engaging with virtual worlds.

An SMM interview is structured to focus on situations, events, moments of such sense-making/sense-unmaking. A study could be interested in looking at just one situation, or at a series of situations that may or may not seem logically, or theoretically, related to one another.

If we think about this in terms of studying virtual worlds, then there are several ways of constructing an interview.
1. You could ask an informant about a specific thing s/he did while in a virtual world, such as attend a concert or go to a sex sim.
2. You could ask an informant about a series of activities s/he did while in a virtual world, such as in an MMO from designing a character to joining a guild to killing a boss.
3. You could ask an informant about a times when they did something online that they have also done offline, such as asking to talk about online and offline times of making a new friend or buying clothes.

And, as I will discuss later, even these ways can be further modified depending on how you want to bracket time/space, thus impacting what type of SMM interview you construct.

Whatever type of interview ends up being constructed, it will be based on a repertoire of queries that form the SMM repertoire, having been designed and tested over the years to reflect the SMM concept of gappiness and bridging.

5

Core of SMM Interviewing

TO TAP SITUATIONS
What happened?
What stood in the way?
What were you trying to deal with?
How did that connect with past events?
How did it connect to forces of power in family, community, society?

TO TAP GAPS
What were your big questions?
What were you trying to unconfuse, figure out, learn about?
What did you struggle with?

TO TAP BRIDGES:
What conclusions/ideas/ did you come to?
What emotions/feelings did you come to? .
What led you to that conclusion/idea/emotion/feeling?

TO TAP OUTCOMES SOUGHT AND/OR OBTAINED
How did that [name that] help? facilitate? [And, how did that help? And, how did that help?]
How did that [name that] hinder? [And, how did that hinder? And, how did that hinder?]
If you could wave a magic wand, what would have helped?

TO DIG DEEPER INTO GAPS AND STRUGGLES
What was missing?
How did that stand in the way?
And, how did that prevent you getting more help?

TO DIG DEEPER INTO WHAT LED TO AN EVALUATION
What led you to that assessment?
How did that evaluation connect with your situation?
What was limited or incomplete about that?

TO DIG DEEPER INTO HOW THINGS HELP
And, how did that help?
*What did that allow you to do/achieve/think?*

© Brenda Dervin, 2008

SMM interviews – regardless of the phenomenon studied or the situation studied – use this repertoire of queries as the template for constructing an interview to triangulate around the informant's sense-making or sense-unmaking.

As you can see, these queries are broken down for what part of the SMM triangle metaphor they are meant to tap. These queries essentially become:

*What was going on at that time?

*What questions, confusions, muddles were you facing?

*What ideas, conclusions, thoughts did you have?

*What emotions, feelings, did you have?

*What helped, facilitated you at that time, and how so?

*What hindered, hurt you at that time, and how so?

*How did what was happening relate to your sense of self?

*How did what was happening relate to your sense of power?

*If you could wave a magic wand and change any aspect of this situation, what would you change?

Other questions have been used, as long as they are constructed from the SMM mandate of no nouns and relationship to some aspect of the triangle. I have also used questions that tapped into how they saw other horizons – past, present and future – as well as structures such as gender.

Level 1, Level 2 Triangulation

© Brenda Dervin, 2008
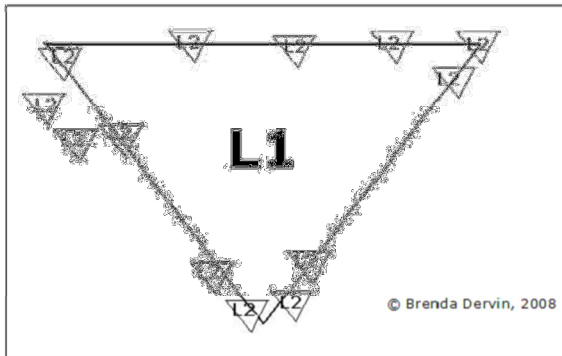
Level 1 Triangulation
 * Using roster of queries for initial surround of sense-making/unmaking moment
 * Asking about: How see situation; How see gap; How see bridge; How see outcome(s)
 * Question-asking needs to be anchored to description of the moment

Level 2 Triangulation
 * Deeper, conscientizing dig – gives more time/space to uncover the unarticulated, buried, unconscious, hesitant, embarrassed, unaware, etc.
 * Answer to each Level 1 query becomes site for redundancy circling
 * Question-asking needs to be anchored to answer to Level 1 query
 * Can be structured ahead of time into template, or when embodied the roster can be done "on the fly"

That repertoire of queries can be used in two related ways: the Level 1 Triangulation, and the Level 2 Triangulation.

A Level 1 Triangulation is the initial surround of a person's subjective experience of a situation. The queries are structured to focus on situation being discussed. For example, in a study I had people engage with Second Life. Thus my questions were tailored to that situation: When you went into Second Life, did you face any questions, confusions?

A Level 2 Triangulation uses that same repertoire of queries to dig deeper into a person's answers to the Level 1 queries. The same queries, or specifically chosen ones, are anchored to what was said in Level 1. For example, in my study, in answer to the query about questions, confusions, say an informant said "I couldn't figure out how to make my avatar move." A Level 2 follow-up could be: "How did having this question about figuring out how to make your avatar move hinder you?" and "What would have helped you to answer this question?"

Entry Point, Critical Entry

- Entry point
  - Can be at any of the 4 parts of the sense-making/unmaking moment
  - Full Level 1 Triangulation needed to complete the surround of the moment
- Critical Entry
  - Identified ahead of time as trigger to elicit the informant's recollection of an entry point
  - Must be phrased so as not to impose interviewer's nouns (jargon, definitions) on informants

© Brenda Dervin, 2008
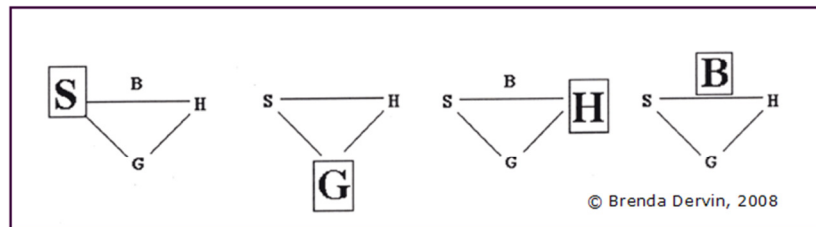
In constructing an SMM interview, along with the repertoire of queries and how to do Level 1 and Level 2 triangulation, I also think about the entry point into the SMM Triangle Metaphor I want to use to structure an interview.

An interview can be constructed so that the discussion begins at any point in the triangle – the nature of the situation, the gap, the bridge or the outcome. The entry point is worded to trigger the informant's recollection of the sense-making/unmaking moment.

For instance, compare two of my studies.

1. In my one about virtual worlds, which I will talk about more in a moment, I had exposed them to a virtual world, creating a situation in which they were engaging with it. Thus, for the critical entry, I asked them to recall what occurred during the time they played the MMO or went into Second Life. This Critical Entry used Situation as the Entry Point.
2. For another study, conducted for my dissertation, about how people saw gender in their engaging with a variety of media over their lives, I asked people to recall specific types of media products. That Critical Entry used The Bridge – with the media product seen as a potential source of bridge-making – as the Entry Point.
3. Other possibilities would be to ask a person to recall a time when they had a problem, question, confusion with a virtual world.
4. Or to ask a person to recall times when they had positive versus negative reactions to a virtual world.

A critical entry depends on the research question and the type of interview being conducted. The article you read mentioned a number of different types of SMM interviews, that all bracket time/space in different ways in how they seek to understand human activity. What I will do next is talk about four types and how I have used them.

Micro-Moment Time-Line Interview
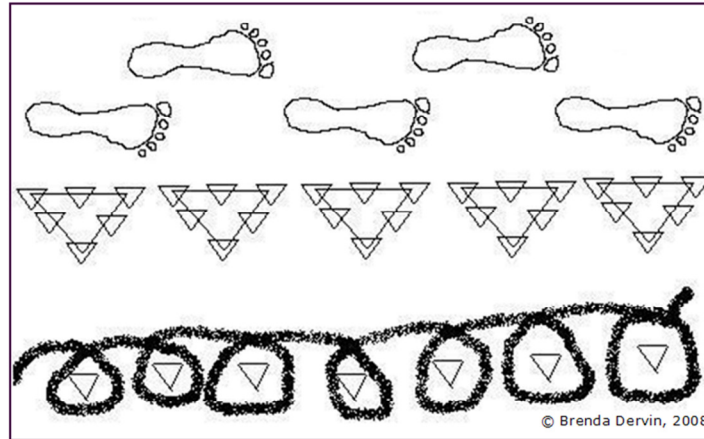
Given a particular critical entry, informants are asked to recall all the steps that occurred during that particular time/space event – to list the time-line moments as if reciting what happened first, second, third, forth, etc.

Each time-line step is then treated as unique sense-making/unmaking moment, and at least Level 1 Triangulation occurs for each moment

© Brenda Dervin, 2008

The first I'll discuss is the Micro-Moment Time-Line interview. Here a span of time/space is broken down into the steps the informant saw it unraveling into – that is, the informant is asked to recall a time when something happened, and to recount that something as if telling step-by-step how it happened. Then, at every step, the triangulation of queries is done to surround that sense-making/unmaking moment. If a Level 2 triangulation is done, this can become a very long interview!

I have not yet done one of these interviews in relation to media reception, but I have thought about doing it to understand the moment-by-moment reception of the minutia of a media product like a film or a virtual world. In such an interview, I would ask the person to recall the time they watched this movie or went into that virtual world, and to recount this experience to me as if they were telling me a story about what happened. Then I would have them answer the queries for each of those main parts of the experience they can recall.

In my study on virtual worlds, when I asked them the situation question, often what happened was that I would get informants' telling me step-by-step what they did in the virtual world or what happened in the movie. If we had done this type of interview then, it could have generated a long discussion that would have gone into depth on how they made sense of every significant action or point in their engaging with that media product.

Some day, I want to find someone who'll put up with an interview that would be that long!

Life-Line Interview

LIFE EVENTS ELICTED ON A CHRONOLOGICAL CONTINUUM
(YEAR, AGE, GRADE IN SCHOOL, MAJOR EXTERNAL EVENTS)
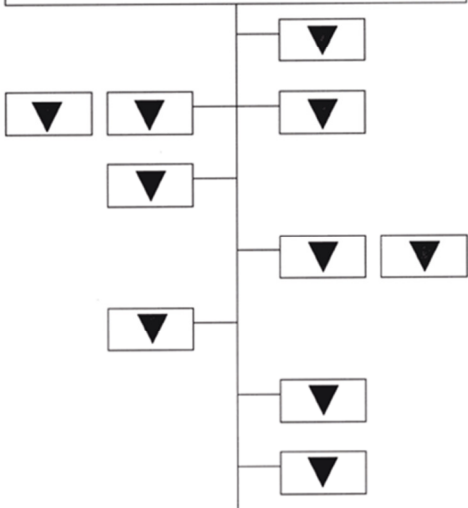
© Brenda Dervin, 2008

Given a critical entry, informants are asked to recall all the time/space events that could fit the critical entry's criteria.

These events are listed along a dimension of the informant's life – some determination for chronological order -- for which happened first, second, third, etc

Interview then asks the informant to choose a series of events to discuss – with at least Level 1 Triangulation
* Criteria for selection could be most important (however defined by informant), some numerical ordering (1st, 3rd, 5th), first/last, etc.

Another type of interview is the Life-Line. In this interview the discussion begins by having a person recall all the events that fit the criteria of a critical entry – time/space is drawn out over the length of the informant's entire life. After all the events have been listed, the informant is asked to recall certain ones on which the repertoire of queries will be triangulated.

My dissertation was a study using a version of this. In that study I was interested in how people engaged with gendered media products – media they saw as being meant more for men than women, and vice versa. I was also interested in a time dimension, in how often did the people engage with these products, just once or repeatedly. So I had people fill in a table that had four columns: media meant for men, used once, and used repeatedly; and media meant for women, used once, and used repeatedly. Each row was to be a specific media product and the age when they engaged with it. Tables were then filled in for their entire lifespan. I then asked the informant to pick one media product from each column, whichever one they most wanted to talk about, and used that experience as the one I did Level 1, and modified Level 2, triangulations on.

In the end, for each informant I analyzed for my dissertation, I had four situations to code and analyze. With 22 women and 21 men, with 4 situations each, this meant I was analyzing 172 situations as my unit of analysis.

Micro-Element Interview

A TIME-LINED SITUATED NARRATIVE

L1

© Brenda Dervin, 2008
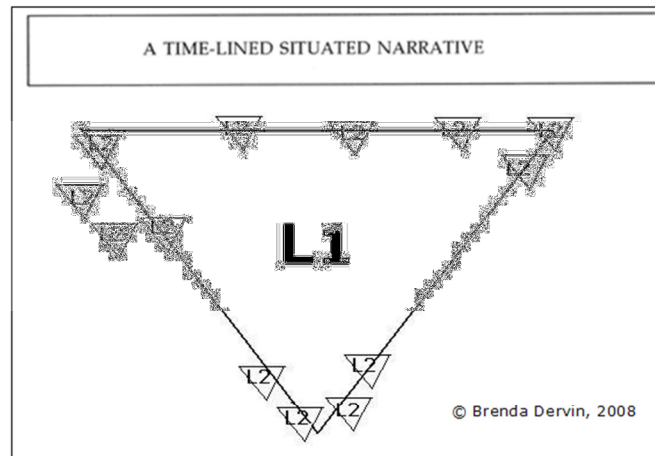
Focuses on specific time/space as elicited by critical entry.
 * Study could consist of several such critical entries if desire to study different
    yet similar time/space events.

Because interview focuses on narrowed bracketing of time/space, Level 2
Triangulation often suggested for adding depth to informant's Level 1 answers.

A third type of interview is the Micro-Element. Here a single event, or a series of different events, are not broken down into their steps or listed chronologically by some means. Instead they are treated as holistic moments of sense-making/unmaking, and the triangulations proceed based on that bracketing of time/space.

This type of interview I have done several times – looking at guilty pleasures, at video game addiction, at media that have mattered to people. For my study about virtual worlds, I also used a modified version of this interview. In that study, informants were exposed to four types of media products: a film, a console game, an MMO, and an MUVE. After they completed all these experiences, we sat down in an interview where I asked them to discuss each of these experiences, using the Level 1 triangulation, with an on-the-fly Level 2, to dig into these experiences. Thus the critical entry for each was to recall the time when they did such and such, and the questions were based on that experience with that specific media product.

Thus for each informant I had four different but related events – the experiences with the media products – that I can use for my units of analysis. With 14 informants, this means 56 events to be coded and analyzed for how people made sense of their experiences engaging with media products.

Structured Focus Group Interview

- As discussed, SMM conceptualizes communication as requiring discipline to promote equality among the informants
  - Structuring as way to guarantee all voices heard
- Applied to focus groups, requires structuring of discussion
  - Allowing one person at a time to answer SMM roster of queries
  - Any reaction from other informants to what is said is recorded via self-journaling during discussion
  - Depending on structure of focus group, self-journalings may be shared as another round of discussion

The final type of interview I'll discuss here is a Structured Focus Group. This type takes the basic model of the focus group and applies more discipline to how the informants converse with one another. Instead of allowing informants to respond to what others have said immediately after, even interrupting, any responses are recorded, as journalings, on a worksheet that asks for various types of common responses, such as agree/disagree. Thus, for the first round of the discussion, people can answer the repertoire of queries without interruption. The journalings can then be used as another round of discussion.

An example of such an interview I have conducted focused on how a specific organization defines innovation in relation to virtual worlds. Two discussions were constructed to have informants recall times when they experienced innovation in a virtual world as a producer/designer versus a consumer/user. The standard SMM queries were used for round one, where each informant answered the queries without interruption while everyone else recorded their journalings on a prepared worksheet. Then their responses to this worksheet were read off as a round 2. The discussions were transcribed and sent out to all informants, with a new series of questions, and these final queries became round 3.

Using Interviews in an Experiment

- SMM is a methodology, interviews and experiments are both methods – defined means by which data can be collected
- Experiment does not necessarily mean only data collection through surveys, observation, physiological measures, etc.
- Interviews can be used to gather data – ex. talk aloud in usability studies
- Experiment could serve as framework, as boundary identifying conditions, within which interviews used to collect the data
- Where interviews, can be SMM interviews, and thus qualitative or quantitative data analysis

As I have discussed so far, it would appear SMM is only useful for conducting studies that are only interviews. But we have to remember that interviews are a way of collecting data – which means whenever data is needed to be collected, they can be used. We often think of an experiment as a way to collect data; however, it can also be thought of as a way to organize the collection of data and not a true data collection method by itself. In this sense, an experiment is a particular way to frame the way in which data will be collected for specific purposes of analysis.

This perspective on an experiment means that interviews can be seen as the means by which data is collected and used for analysis purposes. And indeed, SMM interviews may be very applicable in this understanding due to their requirement of understanding the situatedness of subjective experience, and the ability to analyze the data collected qualitatively or quantitatively.

As I have mentioned, my study looked at virtual worlds along with other media products. I was interested in how people made sense of virtual worlds as potential sources of entertainment. The methodological goal was to attempt an experiment that had qualitative data collection and analysis utilizing SMM as the foundational methodology.

To that end, informants were exposed to four types of media products that all had the superhero genre as their content. This structure creates a within-subjects experimental design, in that the experiences were artificial and imposed upon informants who had little or no experience with the media products to which they were exposed. A movie was used as a primary quasi-control, as it did not require any physical interactivity, and a video game was used as a secondary quasi-control because it did require physical interactivity but is not classifiable as a virtual world.

My Virtual Worlds Experiment

- Before sessions, answered survey on experience
- During each session, respond in real time
  - When in lab, engagings were recorded video, audio
  - When in lab, at 30 minute mark, asked to pause, answer SMM questions, decide if wish to continue
- After each session, completed Post-Session Questionnaire – open & close ended items
  - Entertaining / Unique / Interesting
  - Confusing / Easy
  - Again / Similar
  - Impact of Presence of Researcher
- After all sessions, interviewed using Dervin's Sense-Making Methodology

The qualitative data collection came in three parts, during and after each exposure or experimental session.

During each session, the informants were asked to discuss their reactions to the media product during the engagement. For the movie, this meant recording their reactions on a worksheet. For the console game and two virtual worlds, this meant following talk aloud procedures, which were recorded in audio and video. For these sessions, at thirty minutes, the engaging was paused and specific SMM queries were used to elicit sense-making/unmaking to that point. They then had the option to continue the engaging if they so wished.

After each session, they filled out a paper survey that consisted of scale questions to gauge several reactions to the media product, as well as space to explain their scale answers.

After the entire experiment, a Micro-Element interview, as already discussed, was conducted to explore in more depth their experience with the various media products.

Using Interviews in an Experiment

- Pros
  - Large data corpus
  - Collection of subjective & objective data simultaneously
  - Using SMM allowed for comparing time/space events (each session) as well as probing in-depth into informants' experiences – both during and after sessions
- Cons
  - LARGE DATA CORPUS: audio, video, text
  - Carryover effect, problem from experimental perspective, opportunity from interpretive perspective
  - Artificiality of experiences to everyday media experiences, but from SMM perspective still unique sense-making/unmaking moments to be analyzed

As with any approach to data collection, there are pros and cons with mixing interviews and experiments.

A pro, or con depending on your perspective, is the size of the data corpus – which can be daunting to sort through. But this data corpus I have gathered is a collection of objective and subjective data, some of which is simultaneous, so that the subjective could perhaps help us understand the objective, and vice versa.

To me, the most important pro is the application of SMM to probe the interpretive viewpoint of the informant on the experiment experience. Too often experiments are conducted assuming a behaviorist approach – that some stimuli will elicit a response without much cognitive or affective processing – or sense-making – from the informants. For a long time there has been little appreciation for the sense-making capabilities of informants as mediators or moderators of the stimulus-response model used to inform experimental data collection. Using SMM interviews allowed me to account for this middle factor, while still permitting a structure to compare situations with each other.

Other drawbacks are common to experimental procedures. For any within-subjects design, where each person experiences each experimental condition, there is the potential for carryover effect, such that in this study the experience with one media product may have influenced their experiences with subsequent ones. This, of course, is something I can look for in the analysis, especially as I asked informants to discuss how they saw the four experiences compared to each other.

Another drawback is the artificiality of the experiences, as they are not actual experiences from the informant's everyday lives and are thus not able to be easily contextualized within their media ecologies. However, from an SMM perspective, each experience is still a unique moment in which sense-making/unmaking occurs, and at that point the experience can be seen for how it relates to other experiences in their past, present and future.

Overall, I think the incorporation of interviews as data collection methods in an experimental framework has provided very interesting information about how people make sense of virtual worlds compared to other media products as potential sources of entertainment. I am currently in the process of data analysis, so if you are interested in learning more, please contact me, or stay tuned to our research project's website.

To Learn More

- Dervin's Sense-Making Methodology website: http://communication.sbs.ohio-state.edu/sense-making/default.html
- By 2011 latest there will be an SMM Institute and online training available, plus certification.
- Stay tuned to website, stay in contact with me, for furture developments, information and opportunities

Finally, to wrap up my talk here, I would like to say that I find Dervin's Sense-Making Methodology as a potential breakthrough in how we gather data about people's experiences with media products – any media products, from old-fashioned films to new-fangled virtual worlds. I make this statement because SMM is focused on the situated media experience versus the average, aggregate; is interested in empowering the interpretive stance of the individual rather than not trusting it; and understands the complex nature of agency/structure in terms of sense-making.

If this brief introduction to SMM has interested you, I would suggest going to this website to learn more, including finding articles about what it is and how it has been used. Additionally, I can report that we hope by 2011 to have an SMM institute to facilitate training of SMM interviewing online.

So, if you are interested, stay tuned to that website and/or stay in contact with me for future information and opportunities.