Considering Confidentiality in Research Design: 
Developing Heuristics to Chart the Un-chartable

Christa B. Teston
Kent State University

Abstract: This chapter details one researcher’s design narrative in order to demonstrate how, by making certain methodological choices, researchers can do justice to the complexity of in situ workplace practices while also remaining sensitive to a workplace’s need for confidentiality. In particular, the author explores the ways in which she manages the collection and analysis of data about how medical professionals collaboratively deliberate when, because of the exchange of highly confidential information about specific patient cases, no formal texts are produced and verbal deliberations may not be recorded. The author argues that by engaging in a methodologically recursive process that includes an observational “free-handing” phase and the use of inductively-developed heuristics, researchers in rhetoric and writing studies may more responsibly and rigorously collect data at sites that are, due to legal liability, private or confidential.

Keywords: heuristics, research design, observational free-handing, methodological transparency, deliberation

[Introduction]
The ways in which workplace professionals from various disciplines deliberate and make decisions about the future has been a problem many in the field of rhetoric and writing studies have wrestled with (Haas & Witte, 2001; Bracewell & Witte, 2003; Bazerman, 1994; Bazmeran & Prior 2004; Barton, 2004; Sauer, 1996; Medway, 1996; Winsor, 2001). Researchers in rhetoric and writing studies who focus on the production of workplace texts have theorized about the ways in which collaborative composing processes shape the production of knowledge. Much of this scholarship examines how work gets done and decisions are made in and through the production of workplace texts. Prior to, and even during the production of workplace texts, however, are hours’ worth of oral deliberations and debates. An investigation into the role of these more informal knowledge-building and decision-making processes in workplace practices—processes that may or may not yield formal, textual documentation—has not yet been exhausted. In this chapter, therefore, I report on a study of a series of collaborative deliberations engaged in by a group of medical professionals during weekly, private workplace meetings at a state of the art cancer care facility in the Midwest.

Researching medical workplace decision-making in one of its rawest forms—oral deliberation—is a complicated undertaking, however. In shifting the focus off of textual production and onto a kind of knowledge pre-construction phase where medical professionals orally deliberate about patient care decisions, one obvious data point must be oral exchanges between medical professionals. But what if those oral exchanges may not be collected because they are considered confidential and private? How can researchers in rhetoric and writing studies come to understand how knowledge is constructed and work gets done in a site where, for various reasons, there is not, and cannot be a textual or oral trace? If researchers cannot use tape-recorders and video cameras to capture collaborative deliberations, does that mean these particular workplace sites are unavailable for study? Or does it simply mean that the kinds of conclusions the researcher ultimately makes will be speculative at best? How can we, therefore, as researchers in writing and
rhetoric interested in the role of language—both textual and oral—gain access to, collect data from, and make defensible conclusions about workplace practices at sites that do not facilitate the collection of textual or oral data?

These are a few of the questions I have asked while attempting to observe and document how a group of medical professionals deliberate about decisions pertaining to their patients’ care during a private, weekly meeting called a Tumor Board Conference. In this chapter I will demonstrate how I managed the collection of data during Tumor Board deliberations while also remaining sensitive to the confidential nature of their content. What follows is not meant to be a how-to or a step-by-step protocol for the collection and analysis of data from particularly confidential workplace sites. Instead, I argue that collecting confidential data in private sites can be done rigorously and responsibly by creating and relying upon inductively-derived observational heuristics that, over time, act as a textual trace where there was or could not be one before. I hope by telling my own research design narrative we as a field might continue to have our own deliberations about how to study writing and rhetoric not only as a tangible, final product, but also as a complex, dynamic, multidimensional process sometimes involving untraceable, un-documentable practices.

What is so un-chartable about the Tumor Board?

This project is a long-range case study of a state-of-the-art, Midwestern cancer care facility’s Tumor Board meeting. Tumor Board meetings provide a forum in which medical professionals from various specialties collaboratively deliberate about particularly difficult patient cases. Those in attendance may include primary care physicians, oncologists, surgeons, radiologists, pathologists, case managers, nurses, and even medical students. At this particular cancer care facility’s Tumor Board meeting, two specific patients’ cases are discussed during each weekly meeting. The healthcare professional responsible for bringing their patient’s case to the attention of the board asks for interdisciplinary medical opinion regarding many care-related issues. Typically the surgeon or oncologist involved with a patient faces a particularly difficult patient care scenario and will make the move toward collaboration with colleagues from in and outside their specialty during these Tumor Board meetings. Every participant at the Tumor Board recognizes that those in attendance have varying educational and experiential backgrounds. So, for example, the surgeon or oncologist presenting their patient’s case wants to know what the more experienced surgeon trained at a different school or hospital might do. Or perhaps the surgical oncologist collaborates with the Tumor Board chairperson and his colleagues about recently published studies about the increase in life expectancy for patients who receive both chemotherapy for and surgical removal of their tumor. Typically, the Tumor Board chairperson contributes knowledge about what the particular “standard” or “protocol” is for managing patients’ care (referred to as the “Standard of Care”). In cases like these, then, Tumor Board participants share with one another, and sometimes argue about, what the best course of action is before the presenting physician meets with the patient and their families to discuss options.

Treatment options, prognostic estimations and staging estimations are what lie at the heart of Tumor Board deliberations in almost every meeting. So, for example, dilemmas that frequently initiate the move toward collaboration are moments of uncertainty spawned by questions like: “what is the best option for treatment for this patient in this particular situation?” or “if we embark on this particular treatment plan, what is this patient’s prognosis?” or “now that we have performed surgery on the patient to remove their tumor, how might we approximate the stage their cancer is in at this time?” Since the patient is not present for these meetings, there is not a final, official decree about what will be done. Rather, what ensues is 60 minutes’ worth of debate about past action and deliberation about future action among medical professions who bring with them varying levels of expertise, experience and education.
The Tumor Board is a unique site for investigation in that while, at least at this particular Tumor Board location, there are no formally written decisions made by the end of the meetings, these private conferences are one of the few slices in patient-care time when a group of experts sit down and candidly debate about what should be done to and for their patients. Since the doctors, nurses and other medical professionals present for Tumor Board meetings are not actually involved in producing written text, the focus of this study is not the production of text but the ways in which medical professionals deliberate about the future in this particular workplace setting. To that end, the question motivating my research is: what are the kinds and forms of knowledge Tumor Board participants rely on and, more specifically, how are these kinds and forms of knowledge made material to others during Tumor Board deliberations?

While other scholarship that explores the ways in which medical practice is rhetorical often times relies upon the textual production and/or analysis of workplace documents (see McCarthy 1991; Dautermann 1997; Segal 2005), or a discourse analysis of patient-doctor and/or doctor-doctor communications (see Barton 1999, 2000, 2004; Ellingson 2003), this particular research site does not lend itself to either one of these methodological approaches. Not only are Tumor Board participants not engaged in the production of text during Tumor Board meetings, but their verbal exchanges may not be tape recorded or video taped due to the sensitive and confidential nature of their discussions. According to one of the oncologists at the Tumor Board, nothing discussed during Tumor Board deliberations can be used as discoverable evidence in a court of law should a lawsuit ensue. The private nature of these deliberations poses quite a methodological dilemma for a researcher interested in the ways in which language shapes meaning-making in the workplace. These very stipulations, however, are what facilitate the kind of candid, genuine deliberations medical professionals need in order to do their jobs and further knowledge in their field. The medical professionals involved in Tumor Board deliberations are making their way through a labyrinth of guidelines, expectations and standards while at the same time having to consider the unique, personal lives of their patients as well as their own individual, professional experience. Documenting how Tumor Board participants negotiate all of these varying and often times competing factors in patient care, however, has proven to be a difficult endeavor.

What follows, therefore, is my own research design narrative of Tumor Board conferences as it has unfolded over the past three years. In order to make some sense of the multiple directions this study has taken over time this chapter is structured around a series of design questions I have had to attend to due to the many methodological constraints posed by the research site and its context.

What kinds of data are “collectable” at this site?

As a doctoral candidate from a rhetoric and composition program trained to inquire about how language—verbal and oral—and the composing process shapes knowledge, my immediate impulse when visiting the Tumor Board for the first time was to gather as much data as I could about the kinds of texts medical professionals used and produced during their meetings. I was delighted, therefore, that upon entering the room where Tumor Board meetings were held that the very first thing participants were greeted with was a colorful stack of papers stapled together at each seat on top of the placemat and next to a silverware and napkin roll (see Figure 1.0), or the “Tumor Board participant packet.”
Figure 1.0 Placement of Tumor Board participant packets

The contents of the Tumor Board participant packet includes a cover sheet that lists the two patient cases to be presented that day, the physician associated with each case, their diagnosis, and the “learning objective” for each case presentation\(^1\). Beneath the colored Tumor Board participant packet cover sheet is a blue “Category 1 Oncology Conference Evaluation Form” that medical professionals are asked to fill out and submit at the end of the conference so that they can receive CME credit (see footnote 1). This form also allows the Quality Assurance manager to assess the efficacy of the conference as the participant is asked to rate the “quality of instruction,” the “acquisition of new knowledge,” and the “quality of audiovisuals” on a scale from 1-4 and also to circle “yes” or “no” in response to whether or not the conference was “free of commercial bias\(^2\).” Beneath the CME form is a page dedicated to a brief description of the first patient case to be presented that day. In addition to the doctor’s name are descriptions of the patient’s “chief complaint,” “medical history,” “surgical findings,” “family history,” “social history” (e.g. tobacco and alcohol use), “lab findings,” “x-ray findings,” “surgery procedures,” and “pathology.” Beneath that descriptive page are photocopied pages of Staging Protocols from the American Joint Committee on Cancer (2002). Staging Protocols allow oncologists and surgeons to describe how far a patient’s cancer has spread anatomically. Depending on how far the patient’s cancer has spread, the patient is put in a particular “staging” category that ultimately determines what kinds and forms of treatment

\(^1\) It should be noted that Tumor Board conferences at this particular hospital serves not only to “render multi-disciplinary opinion and benefit our patients with cancer” (as noted on the Tumor Board participant packet cover sheet), but that by attending Tumor Board conferences medical professionals can receive CME, or “Continued Medical Education” credit.

\(^2\) This question points to the fact that typically a representative from a pharmaceutical company provides lunch for Tumor Board participants and is permitted to set up an educational table about their latest drug products outside the room.
will have the most impact. The “stage” of a particular patient’s cancer effects what their prognosis is as well. There are Staging Protocols for every type of cancer, and included with these protocols are very graphic illustrations of specific bodily sites and possible areas for cancer (see Figure 2.0 for an example). Lastly, in the Tumor Board participant packet there may be a bibliography that includes citations of current medical literature pertaining to the case at hand. This page allows participants to request a copy of the articles listed from the Hospital Library. The same patient case description page and staging sheets are included for the second case as well.

Figure 2.0 Staging Sheet for Lip & Oral Cavity Cancer, American Joint Committee on Cancer (2002)

Much to my disappointment as a writing researcher, however, the Tumor Board participant packet is rarely ever used in any kind of detail during the conferences. In my observations, Tumor Board participants enter the room, get their lunch, choose a seat and glance at the cover sheet before the conference begins. Outside of this and filling out the CME credit form at the end of the conference, in my 45 hours of observations, I have neither observed nor heard any reference made to the contents of the Tumor Board participant packet. Not only is there no reference made to the few textual documents present during Tumor Board deliberations, but there is also very little actual writing going on during these meetings. Tumor Board participants are never seen holding a writing utensil, nor do they bring in laptops or other tools for composing during these meetings. The only time during Tumor Board conferences that all medical professionals are asked to collectively or individually view and “read” something is when the radiologist or pathologist projects images from their patients’ scans or tests. Outside of the projection of radiological or pathological findings, the exchange of information and ideas during Tumor Board Conferences is strictly verbal in nature.
Initial disappointment that I could not explore how the patient’s chart or other medical workplace documents were referenced during Tumor Boards was drowned out by how fascinating these Tumor Board meetings actually turned out to be. Medical professionals are engaged in serious, real-time debates about what to do about their patients’ treatment. Surgeons, oncologists, radiologists, pathologists, and retired physicians who still attend Tumor Board meetings for continued medical educational credit juggle the latest evidence and medical research, their own practical experiences, standards of care protocols, and issues of liability while deliberating. Indeed, while texts are not being composed, knowledge about the patient, their cancer, and oncological practice, itself, is being built. Rather than abandoning the Tumor Board for its seeming lack of relevant content, I continued to attend meetings, be patient and open to other questions that might develop that, for a researcher in writing and rhetoric, would be interesting.

Initially, I tried to document every word or article referenced, every gesture, and every image used during those 60 minutes (see figure 3.0). For the first few visits, then, I transcribed my handwritten notes on the computer, attempting to engage in what Geertz (1973) refers to as “thick description.” Soon, however, I found myself filling in numerous gaps—gaps that are inevitable when trying to hand write conversations as they unfold in real time. Filling in the gaps while transcribing my notes involved not only having to double check with one of the Tumor Board participants what one particular drug mentioned was and what it could do, but also who said what and what their particular role in that setting was. Often while transcribing I found that I had more of an “impression” of what went on that day in the Tumor Board than I did actual, verbal or textual evidence. In other words, due to the fast-paced nature of their discipline-specific exchanges, trying to recall the specifics of Tumor Board deliberations, even with hand written notes, was akin to trying to recall the specifics of a phone conversation I had with a good friend earlier that day—while I could not document actual, verbal expressions, I had a kind of experiential impression of what went on in that hour. After several months of drowning in pages and pages of inadequate field notes and unreliable transcriptions, it was clear that this particular approach would prove problematic later on when it would come time to write up results and conclusions. There were very few textual or oral traces available as a “check” for the events and discussions transcribed and described in my observational notes.
Figure 3.0 An early example of field notes from Tumor Board research

Because of how challenging it was to document not only the fast-paced debates among medical professionals at the Tumor Board, but also their discipline-specific dialogue, I asked one of the oncologists who regularly attended Tumor Board conferences if it would be possible for me to bring in a laptop to type my observational notes as they happened or a tape recorder so that I could perform a discourse analysis on what was discussed. The oncologist was opposed to my bringing in a tape recorder or a computer and felt that doing so would be unacceptable to the rest of the Tumor Board participants as well. She described that not only might the presence of documenting technologies challenge the confidential environment Tumor Board participants assume exists upon entering the boardroom, but she believed that formally documenting each and every expression might actually impede participants from genuine expression and honest deliberation typical of Tumor Board conferences. Perhaps I could have been more pointed about why I felt such tools were necessary, but at the time it was more important to me that I maintain as good of a working relationship with the medical professionals who attended the Tumor Board as possible, and not risk losing access to this particular site.

Before I could decide what to do about how to actually collect data from a site where the content was confidential in nature, it was clear that I needed to better identify the research problem I was trying to explore at the Tumor Board, and whether or not the kinds of data I could collect would be able to speak to this problem. What kinds of data, specifically, did I have access to during weekly Tumor Board meetings? I could not access patient charts. I could not capture a copy of the slides and images projected onto the screen of patients’ radiological and pathological findings. Trying to actually get into the examination room to observe the ways medical professionals spoke with their patients about their cancer after their case was discussed at the Tumor Board was impossible due to issues of legality and patient confidentiality. No text production took place during these meetings,
and no workplace documents other than the Tumor Board participant packets were present. To complicate matters, the Research Compliance Administrator at my University with whom I was in correspondence about gaining IRB approval had just sent me an email asking: “Are you planning to use any of the medical information discussed during the Tumor Board meetings in your research? If so, please address how confidentiality of the information will be maintained.” Implicit pressure from the medical professionals at the Tumor Board combined with explicit pressures from my own Institutional Review Board to maintain confidentiality now seemed overwhelming. After taking an inventory of what kinds of data I could or could not collect based on several months of sketchy field notes and “impressionistic” transcriptions, it became clear that what was collectable at the Tumor Board could be: an accounting of the various deliberative moves or references made, the rank and title of those in attendance as well as those who spoke, the sequential and temporal flow of deliberations, and the various modalities employed during deliberations (i.e. gesture, screen, pointer, speech). Each of these elements were, according to research conducted thus far, components of the Tumor Board. Taken together, they are the building blocks for constructing how deliberations unfold in this particular workplace environment.

**What methodology will facilitate the collection of confidential data?**

Given that the Tumor Board is a medical workplace site that, more than anything else, facilitates candid discussion and debate between medical professionals, and given that I was unable to record these deliberations in any other way than handwritten notes devoid of a co-investigator's review, it was clear that there was no methodological formula, prescription or approach already in existence that would facilitate the systematic collection of data at this particular site. I could not, if I expected to be able to do anything more than tell a story about what goes on at the Tumor Board, impose one particular methodological approach or another on the Tumor Board. My methodology, therefore, developed out of the site, itself. The only investigative approach that speaks to this kind of inductively-derived method for data collection and subsequent analysis is Glaser and Strauss' (1967) Grounded Theory approach. Glaser and Strauss argue that “grounded theory is derived from data and then illustrated by characteristic examples of data” (5). In their preference for “grounded” over “grand” theory and the “generation” of theory over its “verification,” Glaser and Strauss create a space for the rigorous and systematic collection of data for researchers in sites like mine where some kinds of data simply are not as collectable as others (see Haas & Farkas in this volume for more discussion in greater detail about Grounded Theory).

Embracing Glaser and Strauss' notion of how theory is built as a result of collecting a vast amount of data, coding it, constantly comparing it and categorizing it meant that I needed to let go of trying to prove or disprove pre-existing theories of knowledge construction, deliberation, or medical rhetoric in this particular medical workplace setting. Any theories built are the result, therefore, of months’ worth of data collection, coding, and comparisons and not a result of my having cherry-picked specific data points in order to prove a hypothesis about x, y or z. In their germinal volume *Writing Ethnographic Fieldnotes*, Emerson, Fretz, and Shaw (1995) extend Steedman’s (1991) “knowledge cannot be separated from knower” (53) in their argument that “what is observed and ultimately treated as “data” or “findings” is inseparable from the observational process” (11). The very methodological lens through which I look during Tumor Board observations, therefore, both affords and constrains my ability to access and make substantive claims about Tumor Board data. A methodological lens devoid of the ability to collect data pertaining to the production or use of workplace texts certainly shapes the kinds of questions I am able to attend to as a researcher at the Tumor Board.

After recognizing that there are certain questions I cannot explore because of the methodological constraints with which I had to negotiate, and after embracing the fact that what I find out is invariably connected with how I find it, new possibilities for investigation at the Tumor
Board began to open up. I felt somewhat emancipated by the constant, self-imposed pressure to make the data fit. Without having to fret about how I would make the data say something relevant and revealing I revisited Tumor Board conferences with a new approach for systematically collecting confidential data.

**What data collection techniques will allow the charting of that which is un-chartable?**

Upon visiting the doctor's office one of the first things asked of a new patient is the completion of some type of standardized, templated, photocopied medical form or questionnaire. Typically the questions on it involve some kind of self-reporting of symptoms, risk factors, family history, and other pertinent medical information. From there, a nurse or medical assistant will bring the patient back to an examination room and collect other kinds of data—pulse, blood pressure, temperature, height, weight, and similar types of information. All of this is documented in a rather systematic, usually “templated” form, and passed along to the doctor. Depending on why the patient visited the doctor's office, more laboratory or radiological tests might be ordered and run, inevitably involving a whole other set of systematic and templated data-collection protocols.

While scholars in medical rhetoric and medical anthropology have made strong arguments and critiques against this very systematized, “if this, then that” approach to medical practice, it may be useful to consider this approach to understanding the human body and what ails it as a model for understanding the very process of medical deliberative decision-making, itself. In other words, when faced with an abundance of unknowns, one course of action when attempting to carve out some type of descriptive explanation may be to take what is known, observable, or reportable and place them in relationship to one another in a way that constructs even just a fragment of what might be going on at a much deeper (anatomical, cellular) level. In the same way that medical professionals rely upon templated checklists of symptoms, experiences, and risk factors as starting-points for investigating illness, researchers walking into vastly unknown territory might also begin by constructing their own set of templated checklists as starting points.

I designed, therefore, a series of observational tools, or heuristics, in order to gather as much “starting point” data as I could. Inevitably, as mentioned in the previous section, my heuristics, or tools for understanding, facilitate the collection of certain kinds of data while limiting the collection of other kinds. The medical form that a new patient fills out upon entering the doctor's office only affords medical professionals access to particular kinds of information. And taken together with other charted information, all of those various data points begin to construct a story about the patient. In the same vein, I have developed a series of observational heuristics that have allowed me to systematically collect and analyze data in a setting where, due to methodological constraints and discipline-specific dialogue, any data collection at all appeared impossible.

All of the observational heuristics I designed to investigate the deliberative practices of medical professionals at the Tumor Board are developed from data collected from a more informal phase of data collection, however. Each time I design and use an observational heuristic, I rely upon a large corpus of field notes in which I “free-hand” my observations. As a result of this kind of recursive research process (see Miles and Huberman, 1994)—free-handing my observations, designing observational heuristics, free-handing, revising and designing new heuristics, and so on—I am able to systematize my research and do justice to the complex, yet confidential nature of the Tumor Board conference. What follows are more details about how observational heuristics were designed and what is meant by observational “free-handing.”

**Observational Heuristics**

Many people define and use heuristics in different ways. Scholars in information technology, cybernetics and systems, for instance, frequently rely on heuristics as a form of incremental investigation over time based on a set of pre-determined criterion. Frequently, heuristic evaluations
are used to assess the usability of a particular online website or some type of interface (see Paddison, 2004; Merz, 2002; Haller, 2000). Some designers of anti-virus software, in fact, rely upon heuristics when designing software that will learn over time and through past experiences what sites or files to avoid opening because of potential risk.

Scholars in rhetoric and writing studies, however, tend to use “heuristic” differently. While the etymology for “heuristic” is *heuriskein*, meaning “to discover” in Greek, many scholars in writing studies frequently cite their use of a heuristic when assessing some type of text (see Ball, 2006). In those cases, “heuristic” is used interchangeably with “rubric.” The way I am using “heuristic,” however, is as more of a rhetorical tool for invention or discovery than a method for assigning value to particular aspects of, or whole texts.

The decision to use heuristics in my own research is motivated by the methodological challenges I experienced while visiting Tumor Board Conferences. Using heuristics for data collection and its analysis is inspired in part by Sauer’s development of what she refers to not as a heuristic, but a “rhetorical framework” for understanding the varying ways in which risk is represented and rhetorically transformed for different audiences over time. Sauer (2003) designed her “Cycle of Technical Documentation” as a result of five years’ worth of observations of and interviews with miners, engineers, writers, and safety trainers from various mines in the United States, Great Britain, and South Africa, as well as an examination of various workplace documents (agency reports, training manuals, accident investigation reports, etc.). Sauer’s Cycle of Technical Documentation was developed inductively out of her research and used as a tool to both describe and analyze the spatial and temporal dimensions associated with the “full range of rhetorical strategies that individuals employ when they observe, analyze, and assess risk” (Sauer, 7). In the same sense that Sauer’s Cycle of Technical Documentation acts as a kind of framework for understanding how workplace professionals in “large regulatory industries” (72) reconstruct and re-represent information for different audiences, my heuristics provide an inductively-derived framework for understanding how medical professionals collaboratively deliberate about patient care. In fact, I would argue that a researcher could take Sauer’s six “critical moments of transformation” (75) identified in her Cycle of Technical Documentation and walk into other large regulatory industries and use them as categories for the collection and ultimate analysis of data. Sauer’s Cycle, therefore, could be used as a tool for both inquiry and analysis.

Since I was not permitted to tape record or videotape Tumor Board Conferences, and could only document by hand and later transcribe my field notes, having some kind of categorized or systematic method for collecting data became essential. Inspired by Sauer’s six critical moments of transformation inductively derived from her data and the resulting Cycle of Technical Documentation, I revisited my own corpus of “thick description” field notes I had collected and transcribed from the past 12 Tumor Board visits I had made. I spent several weeks reading, re-reading, highlighting, and composing memos about some of the recurring events in each of my transcriptions. Over time I started to see a pattern of recurring, standard features at the Tumor Board. I began, therefore, to map out the general flow of Tumor Board deliberations as they unfolded over each 60 minute meeting.

Because Tumor Board conferences are a relatively bounded-off workplace environment, in that they are never longer than 60 minutes, always have a Tumor Board chairperson present, always have two case presenters (though different in each Tumor Board), and are always initiated by some felt need to collaborate with other experts about treatment options, prognostic estimations and/or staging estimations, there is a kind of standard, reliable framework to Tumor Board deliberations.

---

3 I chose the past 12 Tumor Board visits because that was the exact number of Tumor Boards I had attended in the previous twelve months. Any earlier additional visits I made to the Tumor Board took place prior to truly learning how to collect qualitative data or writing ethnographic field notes.
from week to week. These standard features are very general in nature, however. Every week, for instance, the Tumor Board chairperson gives the standard opening introduction, the presenting physician details relevant patient and tumor information, pathology and/or radiology displays images from scans and biopsies, and discussion about what the “Standard of Care” is in this case ultimately ensues. I constructed a list of recurring deliberative moves made during Tumor Board conferences, and one data point I always knew I had access to was the passage of time. I proceeded with my investigation, therefore, by mapping the temporal dimension of deliberations onto actual deliberative references made. What resulted was my first Tumor Board Observational Heuristic (see Heuristic 1.0).

Heuristic 1.0 The first Tumor Board Observational Heuristic

My first Observational Heuristic was an attempt to map the temporal and sequential component of Tumor Board deliberations onto the various references made during the 60 minute meetings. Along the x-axis I documented the temporal passage of time, measured in one minute increments, while the y-axis listed the kinds and types of references made during Tumor Board deliberations. I used different symbols to indicate the role or rank of each speaker. In general, I also knew from my observations thus far that there were three “types” of references during Tumor Board deliberations: oral references, visual references, and gestural references. The bottom half of, or what lies below the x-axis along the y-axis in Heuristic 1.0 was one of my first attempts at accounting for those kinds of deliberative modes.

I soon found myself unable to adequately account for the gestural references made, however (i.e. a pathologist describing with his hands how one patient’s tumor cells had lined up in a row in what’s referred to as “Indian filing”). Since I could not manage documenting the passage of time in
minutes (while having to keep one eye on a stop watch) and watch Tumor Board participants’
gestures, I designed a second heuristic (see Heuristic 2.0) that sliced gestural references from its
focus, leaving the collection of gestural data for visits when I could focus mostly on gestures. I also
condensed the 10 references from Heuristic 1.0 to 5 references in Heuristic 2.0. Heuristic 2.0,
therefore, assisted me as I tried to capture the ways in which Tumor Board deliberations unfolded
temporally and sequentially while also documenting when and in what order references to the
patient’s chart, the tumor’s specifications, outside literature, or the speaker’s own “experiential’
knowledge about the dilemma at hand took place during deliberations. Heuristic 3.0 provides an
example of how I modified this data collection tool over time while also leaving enough “empty
space” to record meaningful occurrences during my observations--occurrences that my Heuristics
did not, at that point, account for. After several visits with Heuristic 3.0 I started to recognize the
importance of this “empty space” and began to make good use of it as an additional data collection
technique.

Heuristic 2.0  A more condensed, earlier Observational Heuristic used in a templated,
checklist-like manner
Heuristic 3.0  Earlier Observational Heuristic used in a templated, checklist-like manner with an option to free-hand some notes on the side

Observational “free-handing”

Observational heuristics are informed by and grounded in a less formal, “thick description” phase of research, however. While what I am calling observational free-handing is akin to what our field usually refers to as descriptive or ethnographic field notes, paired with the development and use of observational heuristics, the free-handing phase has the power to move us beyond mere description. In fact, much of existing scholarship on composing field notes treats the documentation of observations as descriptions that tell a story or narrate a series of events, complete with scenes, characters, events and emotions. Clifford (1990) speaks to the difficulty inherent in this notion of “description” (Geertz’s notion of thick description, in specific): “… description inevitably suggests a specular, representational relation to culture. I have argued that such a relation is always rhetorically (also historically and politically) mediated” (68). If what Clifford says is true—that the relationship between description and culture (or in my case, medical workplace deliberations) is rhetorically mediated—observational heuristics are one mediating tool within a larger research process that includes an observational free-handing phase.

Observational free-handing is a result of returning from a Tumor Board meeting and feeling as though I had missed out on a lot of what was deliberated about that day because the templated, checklist-like heuristics I had been using no longer accounted for the kinds of deliberative events that took place during Tumor Boards. I later decided to return to the Tumor Board without a
heuristic, and only a pencil and paper (see figure 4.0). Initially, I had only hoped that by free-
handing my Tumor Board observations for a visit or two I might develop a newer, more inclusive 
observational tool. Interestingly, however, and probably due to months and months of using 
various observational heuristics, even when free-handing my observations I found myself relying 
upon some of the core categories or key concepts I had already identified when using previous 
heuristics (i.e. the letters A, B, C in figure 4.0 are remnants of codes I used for speakers in previous 
heuristics). In other words, even in the free-handing phase of data collection, after a period of 
relying upon heuristics, my ear and hand were “trained” in a sense to hear and note recurring 
references and connect them with their relevant temporal and sequential dimensions. Perhaps it 
could be said that the heuristics trained me, the researcher, to be my own data collection tool. While, 
admittedly, there are moments during observational free-handing that I am tempted to document 
everything interesting I hear, I focus my attention on the passage of time, the speaker, and what 
kinds of references are made over the course of the 60 minute meeting and am able to come away 
with a better understanding of how deliberations unfold in that particular setting. As a result of 
several observational free-handing phases, I was able to go back and revise future observational 
heuristics which inevitably became more specific and conceptually dense (see Heuristic 4.0).
Heuristic 4.0  More specific heuristic used as an outline for observational notes

Engaging in the simultaneous use of observational heuristics and observational free-handing has added yet another level of complexity to my documentation habits. In a more recent Tumor Board visit, for instance, I relied upon Heuristic 5.0 as a guide for engaging in observational free-handing. I brought with me not only a stopwatch, heuristic, and pencil, but also a blank sketchpad in which I documented the passage of time and the deliberative moves made using referential codes outlined by the Heuristic.
Heuristic 5.0  Specific codes within a heuristic that can be used as either an outline or as a templated checklist

In this sense, the heuristic acted as a kind of background image with dark outlines upon which my more transparent free-handed sketches could be laid and subsequently “traced.” This kind of back and forth use of the heuristic—as both a “templated” checklist and a “traceable” outline—facilitated a fuller, more complex rendering of Tumor Board deliberations as they unfolded in real time, and revealed where the observational heuristic failed to account for particular references and would need to be revised for future use. Over time, my observational free-handing began to meld with the Heuristics I had continually revised (see Figure 5.0). This melding of the free-handing and Heuristic approach to data collection acted as a cue to me that it was time to move out of data collection and into data analysis.
Figure 5.0  Composing observational notes using Heuristic 5.0 as an outline

How might heuristics facilitate more than data collection?

Upon filling out heuristic after heuristic and revising them over and over again to better collect data, what is next? In this section I argue that heuristics can be used for more than mere data collection in at least two ways. First, the data documented on Tumor Board observational heuristics, by nature of their comparative design (with the x and y axes), reveal what kinds of deliberative moves or references act as background information or starting points for deeper debates. Upon review of each heuristic, I am able to generally quantify how many times certain kinds of references are made and in what sequence certain deliberative moves are consistently made. In this sense, observational heuristics act as analytic tools in that the data documented therein are the dots I, as the researcher, can begin to connect in order to better understand how medical professionals collaboratively deliberate about patient care.

Secondly, by designing and using observational heuristics at the Tumor Board I have created a kind of oral or textual “trace” for medical professionals’ deliberation—a trace that did not necessarily exist prior to the heuristic’s design. Observational heuristics, therefore, lend my research a bit more rigor and systematic support than if I had continued to try and document by hand each and every word, reference, image, gesture and speaker during every visit. Furthermore, by making a
kind of meta-analytic move in reviewing how my heuristics evolved over time, I have laid the groundwork for reflective practice in my research at the Tumor Board.

Using a heuristic as an analytic tool

Sauer’s Cycle for Technical Documentation acts as a rhetorical framework for understanding how workers in large regulatory industries represent and communicate risk during various workplace interactions. Similarly, the heuristics I used over time while researching the Tumor Board—the material tools, themselves, and the specific temporal, sequential, and referential data they encapsulate—facilitate a better understanding of how medical professionals collaboratively deliberate about how to care for their patients in moments of uncertainty.

The more conceptually rich my heuristics became, the more I was able to dimensionalize and compare the various kinds and forms of data I collected. As it stands now, I have been able code Tumor Board deliberations as always involving and sometimes resting upon some kind of discussion about the following questions:

- 1. Who is the patient, what are their demographics?
- 2. What are the patient’s risk factors for disease?
- 3. Where and how big is their tumor?
- 4. What has already been done and why?
- 5. What stage is the patient’s cancer currently in?
- 6. What is the standard of care for treating this cancer?
- 7. What do available studies, statistics, or trials recommend?
- 8. What have other hospitals or medical professionals done?
- 9. What have I done in the past?
- 10. If we do x, what will be the patient’s quality of life?
- 11. If we do x, what is the patient’s prognosis?

Figure 6.0 11 data-generated questions enabling analysis

Each of the 11 questions in Figure 6.0 have been inductively derived from my data. They are also now the framework for my most recent observational heuristic—one that I have used for the past five Tumor Board visits. Beyond being 11 questions that facilitate the generation of data, they have also helped me to frame what I now understand about the nature of Tumor Board deliberations. By comparing and dimensionalizing each of those 11 questions or categories, I have begun to see that perhaps these same, recurring 11 questions are one of four “first principles” in Stasis theory—fact, definition, quality, and procedure/jurisdiction. More details about some of the theory my research at the Tumor Board has built are best saved for future discussions and publications, but by using various observational heuristics and engaging in the back and forth process of using heuristics and observational free-handing has facilitated what Glaser and Strauss (1967) refer to as “theoretical sensitivity,” or the opportunity to better perceive variables and their relationships.

Using a heuristic as a tool for reflective practice and methodological transparency

More and more, scholars in rhetoric and writing studies understand that in order to build theory about the role of language in the workplace—textual and oral—we must engage in empirical
research of people and in places that exist outside the boundaries of the classroom. Often times these people and places are very complex and do not lend themselves to simple study. I wonder how many times researchers of those sites, after several months and when it comes time to write up some kind of conclusion or build upon or create new theories, sit at their computers typing away wondering: how did I even get to this conclusion? Am I able to legitimate, justify or defend it? Certainly, no research design can be shielded from critique. But after investing the time and energy it takes to conduct this kind of long term study, and having also to contend with the complex and confidential nature of sites like the Tumor Board, we might be inspired to employ methods for data collection and analysis that can be revealed to others, reflected upon, and methodologically transparent.

Maintaining methodological transparency would mean ensuring not necessarily that the details of these kinds of studies could be replicated, but that they could be reviewed. Using observational heuristics derived from observational free-handing phases creates a series of methodological artifacts that can later be reflected upon and reviewed either individually or in sequence. Åvenson and Skoldberg (2000) quote Geertz (1973) in their argument that “reflection can, in the context of empirical research, be defined as interpretation of interpretation, and the launching of critical self-exploration of one’s own interpretations of empirical material (including its construction)” (6). By keeping and maintaining a visual representation, or textual trace, of the very tool we use to collect and analyze data, we can engage in this kind of “interpretation of interpretation.” The design and use of observational heuristics in sites where confidentiality is an issue facilitates methodological transparency. And since the burden of summoning evidence for how it is we arrive at the kinds of conclusions we make is placed on researchers, ourselves, maintaining methodological transparency is of the utmost importance. Designing a study that, as a result of the inductively-designed tools used to collect and analyze data, facilitates the rigorous review of the ways in which the study evolved and theory was built not only lends ethos to researchers’ efforts, but such practices would lay the groundwork for a respectable research tradition in the field of rhetoric and writing studies.

Conclusion: Moving beyond description and into “capturing complexity”

In Qualitative Analysis for Social Scientists Strauss makes the claim that “The basic question facing us is how to capture the complexity of reality (phenomena) we study, and how to make convincing sense of it” (10). In this chapter I have demonstrated one approach for capturing the complexity of a research site that is rich with data about collaborative deliberations, but a site that does not and cannot facilitate the collection of textual or oral data. I have argued that researchers of writing and rhetoric can maintain methodological rigor while being respectful of their participants’ need for privacy when faced with research sites where the collection and subsequent analysis of data is complicated by issues of confidentiality and privacy. Research design in these particular situations could involve several cycles of each of the following phases: observational free-handing → developing observational heuristics based on the data collected from the free-handing phase → employing the heuristic → revising the heuristic, and so on. While the arrows may convey a sense of linearity to research design, it is important to emphasize that each phase is dependent on one another, but there may not be an end to how often phase one, the observational free-handing phase, is returned to or engaged in simultaneously with the other phases.

“Description,” as Clifford (1990) suggests, is a complicated, if not impossible activity. But by being more aware of the ways in which our data-collection tools afford or constrain certain types of descriptions, particularly at sites where privacy and confidentiality are at stake, researchers in writing and rhetoric studies may work toward developing rhetorically mediating tools and processes that aim to capture even just a fraction of the complexity in workplace settings. Observational heuristics developed after a series of observational free-handing phases are one way to develop a
material trace—a trace that can be reflected upon, revised, analyzed, and reviewed—where there was not or could not be one before. Maintaining methodological transparency through the use of inductively-developed observational heuristics moves researchers in writing and rhetoric beyond “description” and into “capturing the complexity” inherent in workplace settings.
References


