8 Open Coding

 DEFINITIONS OF TERMS

Open coding: The analytic process through which concepts are identified and their properties and dimensions are discovered in data

Phenomena: Central ideas in the data represented as concepts

Concepts: The building blocks of theory

Categories: Concepts that stand for phenomena

Properties: Characteristics of a category, the delineation of which defines and gives it meaning

Dimensions: The range along which general properties of a category vary, giving specification to a category and variation to the theory

Subcategories: Concepts that pertain to a category, giving it further clarification and specification

In the chapter on microanalysis (Chapter 5), we demonstrated that coding is a dynamic and fluid process. In this chapter, we want readers to keep that image in mind as we break the coding process down into a series of activities. Breaking the analytic process down is an artificial but necessary task because analysts must understand the logic that lies behind analysis. That is what analysts are trying to
accomplish through the use of techniques and procedures. Without this comprehension, procedures and techniques are likely to be used in a rote manner, with no real sense of when, where, and how they are to be used; when they can be omitted; or how they may be modified. This chapter begins with a discussion of concepts and the act of conceptualizing. It goes on to explain how categories are discovered in data and developed in terms of their properties and dimensions (also derived from data). It ends with an overview of the different approaches to open coding.

**SCIENCE AND CONCEPTS**

Science could not exist without concepts. Why are they so essential? By the very act of naming phenomena, we fix continuing attention on them. Once our attention is fixed, we can begin to examine them comparatively and to ask questions about them. Such questions not only enable us to systematically specify what we see, but when they take the form of hypotheses or propositions, they suggest how phenomena might possibly be related to each other. In the end, communication among investigators, including the vital interplay of discussion and argument necessary to enhance the development of science, is made possible by the specification of concepts and their relationships. These points are discussed in greater detail in Blumer (1969, pp. 153-182).

The discovery of concepts is the focus of this chapter. Why, then, is this chapter titled “Open Coding”? Because to uncover, name, and develop concepts, we must open up the text and expose the thoughts, ideas, and meanings contained therein. Without this first analytic step, the rest of the analysis and the communication that follows could not occur. Broadly speaking, during open coding, data are broken down into discrete parts, closely examined, and compared for similarities and differences. Events, happenings, objects, and actions/interactions that are found to be conceptually similar in nature or related in meaning are grouped under more abstract concepts termed “categories.” Closely examining data for both differences and similarities allows for fine discrimination and differentiation among categories. In later analytic steps, such as axial and selective coding, data are reassembled through statements about the nature of relationships among the various categories and their subcategories. These statements of relationship are commonly referred to as “hypotheses.” The theoretical structure that ensues enables us to form new explanations about the nature of phenomena.

This chapter builds on the previous chapters, especially Chapters 5 to 7. However, it focuses more on the discrete analytic tasks rather than on procedures and techniques as such. The analytic tasks include naming concepts, defining categories, and developing categories in terms of their properties and dimensions.

**CONCEPTUALIZING**

The first step in theory building is conceptualizing. A concept is a labeled phenomenon. It is an abstract representation of an event, object, or action/interaction that a researcher identifies as being significant in the data. The purpose behind naming phenomena is to enable researchers to group similar events, happenings, and objects under a common heading or classification. Although events or happenings might be discrete elements, the fact that they share common characteristics or related meanings enables them to be grouped.

**Conceptualizing Leading to Classifying**

Examples of concepts include a tornado, a flight, and a government agency. Each of these stands for a given phenomenon. When concepts are used in interaction, they often provoke a common cultural imagery. This is because concepts share certain properties. For example, the word “flight” has the same connotation whether we are speaking about a bird, a kite, or a plane. Although the objects might differ in form and size, each has the specific property of being able to fly. When we think about any of these objects, we imagine something soaring in the air. Therefore, a labeled thing is something that can be located, placed in a class of similar objects, or classified. Anything under a given classification has one or more “recognizable” (actually defined) properties (characteristics) such as size, shape, contour, mass, or (in this case) the ability to soar through the air. What is less apparent
when we classify objects is that a classification implies, either explicitly or implicitly, *action* that is taken with regard to the classified object. A flight consists of taking off and landing as well as moving through the air, either through self-propulsion (as with birds) or through assistance of persons and/or wind (as with planes and kites).

*Objects Classified in Multiple Ways*

Let us now look at a more extended example of classifying. Once we placed on the seminar table a small plastic box containing paper clips. We asked, “What is this object and what is it used for?” Naturally, everyone answered correctly. Then, we asked further, “What else is it?” There were blank stares from the students. So, we continued, “What else could it be? What else could it be used for?” The students quickly warmed to this imaginary game—a paperweight, a weapon, an element in a design, a toy, or an example of an efficient industrial product. They added that it also was an example of *multiple possible classifications*. Thus,

Any particular object can be named and thus located in countless ways. The naming sets it within a context of quite differently related classes. The nature or essence of an object does not reside mysteriously within the object itself but is dependent upon how it is defined. (Strauss, 1969, p. 20)

But also,

The direction of activity depends upon the particular ways that objects are classified. . . . It is the definition of what the object “is” that allows action to occur with reference to what it is taken to be. Mark Twain tells how, as an apprentice pilot, he mistook a wind reef (not dangerous) for a bluff reef (deadly dangerous) and, to the hilarity of his boss, who “properly” read the signs, performed miraculous feats of foolishness to avoid the murderous pseudo-bluff. (pp. 21-22)

For our analytic purposes, it also is important to understand that classified objects, events, acts, and actions/interactions have attributes and that how one defines and interprets those attributes (or the meanings given to them) determines the various ways in which concepts are classified. For example, the paper clip box has sufficient weight for it to be used as a paperweight. It also has sharp edges, so it might function as a weapon. A ripe orange has some degree of juice as well as size, color, shape, weight, and perhaps cost when sold in the market.

*Conceptualizing or Abstracting*

Let us now look at the act of *conceptualizing*. In conceptualizing, we are abstracting. Data are broken down into discrete incidents, ideas, events, and acts and are then given a name that represents or stands for these. The name may be one placed on the objects by the analyst because of the imagery or meaning they evoke when examined comparatively and in context, or the name may be taken from the words of respondents themselves. The latter often are referred to as “in vivo codes” (Glaser & Strauss, 1967). As we continue with our data analysis, if we come across another object, event, act, or happening that we identify through *comparative analysis* as sharing some common characteristics with an object or a happening, then we give it the same name, that is, place it into the same code. (Another way of saying this is that particular properties of an object or event evoke a similar imagery in our minds, and because of that, we group them together. For instance, when we see a bird, a plane, or a kite, we might be struck by their common ability to remain in, and move through, the air; therefore, we classify these as examples of flight.) Thus, when we classify like with like and separate out that which we perceive as dissimilar, we are responding to characteristics, or properties inherent in the objects that strike us as relevant. The images that are provoked in our minds may or may not be different from common cultural perspectives or notions about things. If our imagery differs from the usual or standard ways of thinking about things and we are able to see objects, events, or happenings in new ways, then we can create novel theoretical explanations. That is why we, as theorists, are called on to do such detailed analyses of data. We want to see new possibilities in phenomena and classify them in ways that others might not have thought of before (or, if considered previously, were not systematically developed in terms of their properties and dimensions).
Illustration of Conceptualizing

In this second edition of *Basics of Qualitative Research*, we have chosen to use actual field notes to illustrate the analytic process. We do so because we believe that unaltered field notes more closely resemble the materials with which researchers are working. Excerpts from the same interview are used both in this chapter and in Chapter 9. This particular interview was done with a woman in her early 20s and is about drug use by teens. Notice that the respondent needed prodding in the form of direct questioning to verbalize her thoughts. With some respondents, one might be able to say “Tell me about teens and drugs,” and the respondents would talk for hours. This was not the situation here. However, it is important to point out that the interviewer did not have a list of preset questions to ask. Rather, she asked the questions based on responses given to the previous queries. These field notes were obtained as part of a larger study by us looking at biographically relevant incidents in individuals’ lives.

What we would like to illustrate in this first section of this chapter is the technique of naming or labeling. Contrary to what many persons think, conceptualizing is an art and involves some creativity, but it is an art that can be learned. Because our purpose is to illustrate the act of naming and not how we actually analyze data, only the first few pages of the interview are used. Not every possible phrase or idea is conceptualized. Also, the names that we use are arbitrary; other researchers might use other labels, depending on their foci, training, and interpretations. Also note—and this is very important—that the conceptual name or label should be suggested by the context in which an event is located. By “context,” we mean the conditional background or situation in which the event is embedded. For example, we are talking about teen, rather than adult, drug use, and part of being a teen often is having an exploratory nature, a need or desire to challenge adult values and sometimes rebel against them; we get quite a different situation from that of adult hard-core drug use.

(Note: Conceptual names are in bold print.)

**Interviewer:** Tell me about teens and drug use.

**Respondent:** I think teens use drugs as a release from their parents [“rebellious act”]. Well, I don’t know. I can only talk for myself. For me, it was an experience [“experience”] [in vivo code]. You hear a lot about drugs [“drug talk”]. You hear they are bad for you [“negative connotation”] to the “drug talk.” There is a lot of them around [“available supply”]. You just get into them because they’re accessible [“easy access”] and because it’s kind of a new thing [“novel experience”]. It’s cool! You know, it’s something that is bad for you, taboo, a “no” [“negative connotation”]. Everyone is against it [“adult negative stance”]. If you are a teenager, the first thing you are going to do is try them [“challenge the adult negative stance”].

**Interviewer:** Do teens experiment a lot with drugs?

**Respondent:** Most just try a few [“limited experimenting”]. It depends on where you are and how accessible they are [“degree of accessibility”]. Most don’t really get into it hard-core [good in vivo concept] [“hard-core use” vs. “limited experimenting”]. A lot of teens are into pot, hash, a little organic stuff [“soft core drug types”]. It depends on what phase of life you’re at [“personal developmental stage”]. It’s kind of progressive [“progressive using”]. You start off with the basics drugs like pot [“basic drugs”] [in vivo code]. Then you go on to try more intense drugs like hallucinogens [“intense drugs”] [in vivo code].

**Interviewer:** Are drugs easily accessible?

**Respondent:** You can get them anywhere [“easy access”]. You just talk to people [“networking”]. You go to parties, and they are passed around. You can get them at school. You ask people, and they direct you as to who might be able to supply you [“obliging supply network”].

**Interviewer:** Is there any stigma attached to using drugs?

**Respondent:** Not among your peers [“peer acceptance”]. If you’re in a group of teenagers and everyone is doing it, if you don’t use, you are frowned upon [“peer pressure”]. You want to be able to say you’ve experienced it like the other people around you [“shared peer experience”]. It’s not a stigma among your own group [“being an insider”]. Obviously, outsiders like older people will look down upon you [“outsider intolerance”]. But within your own group of friends, it definitely is not a stigma [“peer acceptance”].

**Interviewer:** You say you did drugs for the experience. Do kids talk about the experience?

**Respondent:** It’s a more of sharing the experience rather than talking about the experience [“taking part in” vs. “dialoguing about”]. You talk about doing drugs more than what it’s like
when you take drugs ["drug talk"]. It depends upon what level you are into it ["hard core" vs. "limited experimenting"], I guess. Most kids are doing it because it is a trend in high school ["part of social scene"]. They are not doing it because of the experience in some higher sense ["not self-discovery"]. They are doing it because they are following the crowd ["peer mimicry" vs. "self-discovery"].

**Interviewer:** Did I hear you say teens were attracted to drugs because there was some element of risk, daring, [and] testing associated with them?

**Respondent:** It's like living in the fast lane ["tempting fate"]. You see all the people in Hollywood. Most teens idolize those people who have fame and are living a fast-paced life ["idol mimicry"]. Often, these people are on drugs.

**Interviewer:** Were you attracted to drugs because of the Hollywood scene?

**Respondent:** To some degree, I was. I thought it was pretty cool ["in thing"]. It was part of a dangerous fast-paced life ["tempting fate"]. To some degree, I too was following the crowd ["peer mimicry"]. I wanted to be like everyone else. But I also did it because I was sick of hearing people talk about the evils of drugs and not knowing anything about what they really did to you ["challenging the adult stance"]. I saw people all around me taking them with no long-lasting effects. They weren't evil or addicted ["fact discrepancy"]. I got sick of the adults lecturing about drugs when they had never tried them so that they could present them fairly ["presenting a one-sided view"]. All they talked about were the negative effects ["negative connotations"]. Yet, most of the people around you were not having those negative effects ["fact discrepancy"].

**Interviewer:** What did doing drugs do for you?

**Respondent:** It gave me a different perspective on drug taking ["experiential knowing"]. It opened my mind ["broadening experience"]. I think the preaching that they do totally blows the issue out of proportion ["addiction overblown"]. Not everyone who tries drugs will become addicted ["refuting the argument"]. I learned, yes, you can take them, and it is just like anything else; you can walk away from them ["self-control"]. There is more to addiction than just trying a drug ["addiction as a complex process"]. Not everyone that drinks is an alcoholic ["critical defining"]. If you were to drink all the time, it is just as bad as doing drugs all the time ["comparative analysis"]. A lot of drugs are not as devastating to your body as alcohol. Pots, for example—yes, it affects you, but you are in a lot more control of yourself than if you are drunk or even have a couple of drinks ["control as a criterion"].

**Interviewer:** Getting back to your experience . . .

**Respondent:** I started with pot ["initiating experience"]. Pot, you don't get stoned the first time you try it ["delayed experiencing"]. Most people have to take it two to three times before they feel remotely high ["body adaptation"]. I did it five to six times ["repeated tries"] before I felt high ["being stoned"]. I tried it at a party ["social act"]. Kids break it out, [and] no one even questions it ["peer acceptance"]. It is just understood that it will be passed around and everyone will try it ["peer pressure"]. I was pretty young, 13 I guess. I turned out I was pretty allergic to pot ["negative reaction"]. It was never anything I took to ["negative reinforcement"].

**Digging Deeper Into Analysis**

At this point, we would like to stop the act of labeling. We have some concepts now, but as a result of our putting names on events, objects, and happenings, did we discover anything new or do we have any greater understanding of what the concepts stand for or mean? The answer to this question is not really. To discover anything new in data and to gain greater understanding, we must do more of the detailed and discriminate type of analysis that we call "microanalysis." This form of analysis uses the procedures of comparative analysis, the asking of questions, and makes use of the analytic tools to break the data apart and dig beneath the surface. We want to discern the range of potential meanings contained within the words used by respondents and develop them more fully in terms of their properties and dimensions. The act of labeling may do some of this. Any time one classifies, selects, or places a conceptual name on something, there is some degree of interpretation of meaning as derived from context; that is, there is some identification of property (or properties) that, in turn, stimulates the analyst to name an event and, in so doing, to classify it and define its use. (For example, if we see an object that has four legs, a flat surface, a back, and some padding, then we might label
it a “chair” and try sitting on it to see what happens. Other persons seeing the same object might call it a “piece of art” or a “stand,” depending on their interpretations.) However, just naming objects does not always explain what is going on in any deeper or complete sense. It is important to note that we do not go through an entire document, put labels on events, and then go back and do a deeper analysis. The labels that we come up with are, in fact, the result of our in-depth detailed analysis of data. Therefore, we would like to take these same data and use them to demonstrate how we might open up the text. In this short analytic section, we do a microanalysis of data, which is much more reflective of how we do our early coding. We introduce the readers to some new terms such as “memos.” This should not cause concern. What is important is for the readers to get the sense of what is going on. Memos are explained later in Chapter 14. Also take note of how we use the procedures and techniques introduced in previous chapters to open up the text. We present only a short example here.

**DEFINITION OF TERM**

**Memos**: The researcher’s record of analysis, thoughts, interpretations, questions, and directions for further data collection.

We begin our analysis with the first paragraph by doing a line-by-line analysis.

1. **Interviewer**: Tell me about teens and drug use.
2. **Respondent**: I think teens use drugs as a release from their parents.

**Memo**. The first thing that strikes me in this sentence is the word “use.” This is a strange term because, when taken out of the context of drug taking, the word means that an object or a person is being employed for some purpose. It implies a willful and directed act. In making a comparison, when I think about a computer, I think about employing it to accomplish a task. I think of it as being at my disposal. I am in control of when, where, and how it is used. I employ it because it makes writing easier for me. It is a help, an object outside of me that I use under certain conditions. Now, when I go back and think about “using” drugs, the word might mean simply to “take” or “ingest.” But it also might imply some of these other ideas too, for example, being used for some reason, having control over what one does, making things easier, or being used under certain conditions but not others. This opens up a broader interpretation of the term “drug use” because the connotation now is that it might mean more than just ingestion; it also might encompass issues such as self-control over use, a purposeful and directed act that serves an end and that has a desired effect, plus there are times and places when it is used or not used. Although none of this is evident yet in the data, I have something to keep in mind while I continue my analysis.

**Memo**. I think it would help me to think more about the word “use” if I make another comparison closer in, this time with alcohol. If one were to say “I use alcohol,” then what could that mean? It could mean sometimes, such as on special occasions, or all of the time, such as every day. I could use a little or a lot. I could use different types of alcohol, such as beer and vodka. It could mean that I ingest it or that I use it to cook with, to keep around to offer to company, or to bring as gifts when I am invited out to dinner. Then, there is how long I have been using it—a long time or a short time. I might use it at home, at parties, or at bars. Perhaps it gives me confidence, helps me to relax after a hard day’s work, or helps me to fall asleep when I am tense. Maybe I use it to forget or escape my daily worries. What this tells me is that alcohol use has certain properties such as frequency, duration, degree, type, purpose, way of using, and place of use. I could locate myself dimensionally along each of these properties. These properties also might have applicability to drug use. Therefore, when I go on with analysis of this interview and in subsequent interviews, I look for how often, how long, how much, for what purposes, when, where, and what types of drugs are used and by whom. In this way, I can begin to get some idea of how drug use varies across teens and to see whether any patterns of drug use emerge.

**Memo**. The next interesting word in this sentence is “release.” The first thing that comes to mind is “rebellion.” But the word could mean other things too, such as get away from, escape, let go of, be
different from, or not be under parental control. But in this case, it
does not appear that it is the parent who is releasing the teen; rather,
it appears that the teen is letting go of the parent. This is an interest-
ing thought. When I think about “release” from jail, I think about
being free, able to go and do what I want, when I want, and how I
want. I served my time, paid a debt, gained or even earned my
independence. I am in control of my destiny now; I no longer have
to live by the jail’s schedule. But what if I said I escaped from jail
rather than being released. I still would be free, but now there is the
fear of getting caught and having to go back. So, what are the
similarities of and differences between being released from jail and
our teen being “released” from her parent. One similarity is the ideas
of freedom and control, the ability to make one’s own life choices
and do something on one’s own initiative. One difference is that with
jail, the higher authority is doing the releasing, whereas here it
appears that the teen is taking the initiative or engaging in an act
that distances her from the parent. This raises all sorts of questions
such as the following. To teens, what does the term “parent” stand
for? Is it authority, a lack of independence, or the inability to make
one’s own choices? Does release, then, imply a sort of gaining of
independence, stepping out on one’s own and making one’s own
choices? In a more profound sense, what implications does drug use
have for identity issues in teens? Is the use of drugs or a comparable
activity a stepping stone toward greater independence of thought
and choice? What other activities besides drug taking might have
the same outcome (after all, not all teens use drugs)? Also, why use
drugs and not one of these other activities? Is it because drugs are
accessible, or are there other connotations to their use that make
them attractive to teens? These are questions that I might want to
keep in mind to see whether they come up in further interviews and
data analysis.

Memo. Now, as an analyst, I must go back and look at my original
conceptualization of “release.” It initially was labeled as a “rebel-
lious act.” After thinking through many different possible meanings
of the word, there is the question: Would I still label it the same way?
When I think about “rebellious act,” I translate that into defiance.
Perhaps there is some defiance implied, and to defy their parents
might be one reason why some teens take drugs. But after thinking
through the “release” more thoroughly, I think that rebellion is just
one part of what is going on. There is something much deeper going
on, at least in this teen. Release also can mean letting go, going

forward, moving from dependence to independence both of thought
and of action. It is one step on the path to growing up, although
perhaps not the best choice or path. I think that through these
analytic exercises, I now have a much more comprehensive insight
into what the word “release” might mean. Even if one chooses to call
this a “rebellious act,” one has to ask the following questions. What
does rebellion mean here? What are its properties? Against whom
and what are teens rebelling? As I continue with my analysis, I will
look for situations, events, and examples that will help me to better
understand the meaning of the term “release.”

DISCOVERING CATEGORIES

Once we have opened up text and have some concepts, where do we
go next? In the course of doing analysis, an analyst might derive
dozens of concepts. (It is not unusual for a beginning student to arrive
at a teaching session with three to four pages of concepts.) Eventually,
the analyst realizes that certain concepts can be grouped under a
more abstract higher order concept, based on its ability to explain
what is going on. For example, if a person observes 10 objects in the
sky and labels them as “birds,” then observes 5 different objects and
defines them as “planes,” and then observes 7 more objects and calls
them “kites,” sooner or later, he or she might ask what these objects
share in common and come up with the concept of “flight.” This term
not only allows the objects to be classified but also explains what they
are doing (in terms of action). Grouping concepts into categories is
important because it enables the analyst to reduce the number of
units with which he or she is working. In addition, categories have
analytic power because they have the potential to explain and pre-
dict. For example, when we talk about the concept of flight, we can
ask the following. What makes birds, kites, and planes fly? What
attributes do they have that enable them to lift off the ground, remain
in the air, and come down without crashing? How long, how high,
and how far can they fly? With this information, we can begin to
explain what properties birds, planes, and kites have in common that
enable them to fly and what might happen to that ability, say, if one
of those properties were to change, such as a bird developing a
broken wing.
Categories and Phenomena

Categories are concepts, derived from data, that stand for phenomena. One example is our category of “flight.” Phenomena are important analytic ideas that emerge from our data. They answer the question “What is going on here?” They depict the problems, issues, concerns, and matters that are important to those being studied. The name chosen for a category usually is the one that seems the most logical descriptor for what is going on. The name should be graphic enough to quickly remind the researcher of its referent. Because categories represent phenomena, they might be named differently, depending on the perspective of the analyst, focus of the research, and (most important) the research context. For example, whereas one analyst might label birds, planes, and kites as “flight,” another might label them as “instruments of war” because the context is entirely different. In the latter case, the birds might be used as carrier pigeons delivering messages to troops behind enemy lines, the kites as signals of an impending attack, and the planes as troop and supply carriers bringing in much needed relief. Also, to return to our example of teens and drug use, if we look at the first paragraph that we analyzed, there are several different concepts (e.g., easy access, novel experience, rebellious act). However, if we stand back and ask what is going on, then we might say that teens are “experimenting” with drugs and the interviewee is providing us with some of the reasons why. In other words, all of the other concepts become properties or explanatory descriptors of the “experimenting” category.

The important thing to remember is that once concepts begin to accumulate, the analyst should begin the process of grouping them or categorizing them under more abstract explanatory terms, that is, categories. Once a category is identified, it becomes easier to remember it, to think about it, and (most important) to develop it in terms of its properties and dimensions and further differentiate it by breaking it down into its subcategories, that is, by explaining the when, where, why, how, and so on of a category that are likely to exist.

Naming Categories and Subcategories

Students often ask where names of categories come from. Some names come from the pool of concepts already discovered in data. As the analyst examines the lists of concepts, one might stand out as broader and more abstract than the others. For example, the concept of “flight” is more comprehensive than “plane,” “bird,” or “kite” in the earlier example. Thus, broader or more comprehensive and more abstract labels can serve as headings for classes of objects that share some similar characteristics. Or, an analyst might be working with data when suddenly he or she has an insight that seems to explain what is going on. For instance, suppose that a researcher was studying children at play and noticed acts that he or she labeled as “grabbing,” “hiding,” “avoiding,” and “discounting.” Then, on observing the subsequent incident, it suddenly dawns on the researcher that what the children are doing is trying to avoid something through those actions. Thus, grabbing, hiding, avoiding, and discounting are grouped under the more abstract heading of “strategies.” But strategies for what? The most probable answer is to avoid “toy sharing.” In this manner, it emerges that one of the important phenomena to study in relation to groups of children at play is “toy sharing,” with “strategies” for either sharing or not sharing being a subcategory of concepts under that larger heading.

Another source of concepts is the literature. Terms such as “care-taker fatigue,” “illness experience,” and “status passage” all are strong concepts and come with established analytic meanings. If they have proven relevance to the present study by emerging from the data as well, then by using these established concepts rather than coining a new name, the analyst can extend development of concepts that already might be important to the discipline or profession. On the other hand, the use of established concepts might pose a serious problem. “Borrowed” concepts or names for phenomena often bring with them commonly held meanings and associations; that is, when we think about them, certain images come into our minds. These meanings might bias our interpretations of data and prevent analysts and their readers from seeing what is new in the data. Therefore, although it might be advantageous at times for the analyst to use concepts from the literature, he or she should do so with care, always making certain that they are embodied in these data and then being precise about their meanings (similarities, differences, and extensions) in the present research.

Another important source of category names is in vivo codes. When applied to categories, these are catchy terms that immediately
draw our attention to them (Glaser and Strauss, 1967; Strauss, 1987). Again, we illustrate this with an example from one of our research projects. The scene was a hospital ward, where we were doing a study of articulation of work by head nurses. While a head nurse and the investigator were discussing the policies and procedures of the unit, the head nurse pointed to one of the licensed vocational nurses (LVNs) and said, "She is the tradition bearer of the unit." The head nurse explained that the LVN had taken on the responsibility of initiating all new employees and patients to the traditions, rules, and policies of the unit. The LVN also acted as rule enforcer, reprimanding others whenever she noticed that the rules were broken. The term "tradition bearer" is a good name for a category. It is catchy and explains what is going on. We also know that it is likely that other units also must have tradition bearers, for every ward has its own policies, procedures, rules, and traditions that must be carried out and enforced for social order to prevail. If there is no tradition bearer, then what happens?

Developing Categories in Terms of Their Properties and Dimensions

Once a category is identified, the analyst can begin to develop it in terms of its specific properties and dimensions. For example, we labeled "bird," "kite," and "plane" as objects that share the characteristic of flight because each could soar in the air. We came up with the word "flight" because as we compared each event against itself and other events in the data, we noted that these objects held the following trait in common: They remained in, and moved through, the air, whereas automobiles and bicycles remained on the ground. What we want to do now is define what we mean by "flight"—why, when, how long, how far, how fast, and how high. We want to give a category specificity through definition of its particular characteristics. We also are interested in how these properties vary along their dimensional ranges. For example, birds fly lower, slower, and for shorter lengths of time than do many planes. These different objects, although similar in the sense of having the ability to fly, are dissimilar when compared against each other for specific properties and dimensions of these, giving our concept of "flight" variation. We have identified that it can range from high to low along the property of height, it can range from slow to fast along the property of speed, it can range from long to short along the property of duration, and so on. Notice that with each additional property and dimensional variation, we increase our knowledge about the concept of "flight."

Through delineation of properties and dimensions, we differentiate a category from other categories and give it precision. For example, if we take the concepts of "limited experimenting" with drugs versus "hard-core use" of drugs, we want to know what attributes distinguish each. Is it amount, duration, when used, and/or type of drug used?

To further clarify, whereas properties are the general or specific characteristics or attributes of a category, dimensions represent the location of a property along a continuum or range. For example, we might say that one of the properties that differentiates "limited experimenting" with drugs from "hard-core use" of drugs is "frequency" or the number of times a week the person is "stoned." We dimensionalize the property frequency by saying that with limited use, the user is stoned only occasionally. If we wanted to qualify or explain the term "limited experimenting" even further, then we could say that the teen uses drugs and gets stoned only when at a party with other teens at which drugs are readily available and passed around, whereas we might say that the hard-core user is stoned very often, using drugs three to four times a week, either when alone or when with selected others, and seeking out drugs on his or her own rather than having them passed around at a party. This qualifying of a category by specifying its particular properties and dimensions is important because we can begin to formulate patterns along with their variations. For example, we might say, based on frequency of use and the "type of drug used," that this situation can be classified into the pattern of "limited experimenting" with drugs. Perhaps if we do another interview and the pattern of drug use and getting stoned fits neither identified pattern, then the analyst can develop a third pattern such as the "recreational use" of drugs. Patterns are formed when groups of properties align themselves along various dimensions. In the earlier example, we noted that patterns of drug use among teens can vary dimensionally from limited experimenting to hard-core use.

To explain more precisely what we mean by properties and dimensions, we provide another example using the concept of "color."
Its properties include shade, intensity, hue, and so on. Each of these properties can be dimensionalized. Thus, color can vary in shade from dark to light, in intensity from high to low, and in hue from bright to dull. Shade, intensity, and hue are what might be called “general properties.” They apply to color regardless of the object under investigation.

Whenever we come across a property of a category in the data, we attempt to locate it along a dimensional continuum. Because each category usually has more than one property or attribute, we would want to locate each property along its dimensions. For example, a flower not only has color; it also has size, shape, duration, and so on. Each of these attributes can be broken down into various dimensions. We might want to group flowers according to one specific attribute such as color qualified into subdimensions of shade, intensity, and hue. Or, we might want to do a more complex grouping, differentiating flowers not only according to color (shade, intensity, and hue) but also according to size (large, medium, and small), duration (long lasting vs. short lasting), height (tall vs. short), and shape (circular petals vs. oval petals). Once we have specified a pattern of combined attributes, we can group data according to those patterns. For instance, all flowers showing certain patterns of characteristics might be labeled as “roses” along with their variations (the different types of roses such as climbing and early blooming). Note that when an analyst groups data into patterns according to certain defined characteristics, it should be understood that not every object, event, happening, or person fits a pattern completely. There are always a few cases in which one or more dimensions are off slightly. This is okay within limits. People still are people, whether they have black, red, or yellow hair. It depends on how precise the analyst wants to be or to what degree he or she wants to break down the classifications into subtypes.

To summarize what we have been saying, when we compare incident to incident, we always compare according to the properties and dimensions inherent within the incident or event, grouping like with like. For example, if we take an incident of drug use, we examine it for frequency of use, type of drug used, perhaps duration of use, and then we label it as either an example of “limited experimenting” with drugs or “hard-core use” of drugs, depending on the properties brought out in each situation. It is the properties of the drug use that enable us to place the incident into a larger, more abstract classification.

Subcategories

Little has been said, up to this time, about subcategories. These will become clearer as we continue with the explanations about category development under axial coding. Basically, subcategories specify a category further by denoting information such as when, where, why, and how a phenomenon is likely to occur. Subcategories, like categories, also have properties and dimensions. For example, one subcategory of “drug using” might be “types of drugs.” It explains the “what” of “drug using.” Types of drugs might be classified according to the specific properties that they demonstrate such as the forms in which they come, the body’s response to use, how they are used (e.g., inhaled, injected, ingested), and so on.

Variations on Ways of Doing Open Coding

There are several different ways of doing open coding. One way is line-by-line analysis. This form of coding involves close examination of data, phrase by phrase and sometimes word by word as demonstrated in the chapter on microanalysis (Chapter 5). This is perhaps the most time-consuming form of coding but often the most generative. Doing line-by-line coding is especially important in the beginning of a study because it enables the analyst to generate categories quickly and to develop those categories through further sampling along dimensions of a category’s general properties, a process of sampling we call “theoretical sampling.” Although theoretical sampling is explained in detail in Chapter 13, a short example is given here to illustrate our point. If a researcher is studying restaurants, then analysis of a very busy upscale restaurant with a large staff and a person to coordinate the work might lead the analyst to question what happens to the service in a very busy restaurant in which there are fewer staff members and no coordinator. (Notice that we are compar-
Each person must find the system that works best for him or her.

When coding, there are many different ways of recording concepts and theoretical ideas (see Chapter 14.1). The link between concepts is discussed further in Chapter 14.5. The value of concepts is discussed earlier in Chapter 14.1. Each coding concept is related to the concept of the concept's linking. When coding, it is important to keep in mind the differences between the various concepts. The purpose of this chapter is to begin coding with the concepts' differences.

**Summary**

Open Coding

**Coding Procedures**
Humans, the world over, cannot avoid giving explanations for events as they evolve over time.

**Definitions of Terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial Coding</td>
<td>The process of ranking categories in their subscale.</td>
</tr>
<tr>
<td>Process</td>
<td>Sequences of action/interaction pertaining to a phenomenon.</td>
</tr>
<tr>
<td>Structure</td>
<td>The conditional context in which a category (phenomenon) exists.</td>
</tr>
<tr>
<td>Phänomena</td>
<td>An analytical tool developed to help analyse hierarchy and interactions.</td>
</tr>
<tr>
<td>Prozesse</td>
<td>Sequences of action/interaction pertaining to a phenomenon.</td>
</tr>
<tr>
<td>Struktur</td>
<td>The conditional context in which a category (phenomenon) exists.</td>
</tr>
<tr>
<td>Phänomene</td>
<td>An analytical tool developed to help analyse hierarchy and interactions.</td>
</tr>
</tbody>
</table>
When we analyze data, we convert that data into concepts that stand
Whereas this lesson is telling us why lessons are different in text form,

If you are a learner, the thing you are looking to do is type.
It's something that a person is doing. To understand this, you need to know
accessible and expressible. It's hard to say that you know where it is.
There is a lot of learning, you just need to know where to imagine
experience. You haven't bought things. You have bought them for you.
We're not sure. Can only think of myself. For me, if was an
which uses drugs & release from their parents

Respondent. I think uses drugs & release from their parents

The CODING PROCESSES

Formulate design for well-developed & needed categories
demonstrates how to link data to the property and dimensional levels,
in this chapter we describe the logic behind axial coding and

Read your (p. 69)

Cohort analysis. Also before by Strauss (1987)

Coding as being by Strauss (1987) coding
after a sense of how categories relate begins to emerge. During open
axial coding does require that the analyst have some categories, but
axial coding does require that the analyst have some categories, but

The Impacts of axial coodring is to begin the process of reassembling

In method, 1991. P. 308

Axiel Coding

Axial Coding is very useful here in filling us what

125
THE PARADIGM

Interpreted in the terms used by P. B. Schlosser, in "Implied Experience Through Dynamic Process", the question is: "What is our understanding of experience?" and "What is our understanding of the process?"

The process, as we understand it, is composed of two levels: (a) Conceptualization of the experience, and (b) the actual world itself. These are the two levels of experience. These are the actual worlds and experiences.

Our understanding of experience is limited by our conceptualizations of these worlds. As readers might have noted, when we analyze data, there really are two levels of experience. These are the actual worlds and experiences.

Analysis at Two Levels

Subjectivities look quite different when compared dimensionally along these same lines. For example, the "subjective" experience of the reader's experience of the story in its "subjective" experience of the story, the "subjective" experience of the story, the "subjective" experience of the story, the "subjective" experience of the story.

In these cases, the reader is identifying categories at a dimensional level.

4. Looking for cues in the data that direct how major categories might relate
3. Defining a category in the data, through clear statements about how categories are associated with the phenomenon
2. Identifying the variety of conditions, actions, interactions, and so on
1. Learning the properties of a category and then dimensions, a last tier

Axial Coding

127

Coding Procedures

128

129
will follow.

Your advice is to let it happen. The more and more...
example, leaves might be modified to enhance a colony's interaction with its environment, which in turn might affect the behavior of the leaf cutter ants. Here, the ants do not have direct control over the leaves they harvest, but their interaction with the leaves is crucial for their survival. In this case, the ants are indirectly influencing the plants they exploit.

Thus, conditions are sets of events or happenings that create the situation.

**Explanations of Components of Conditions**

In a discussion of the components of the condition, we must consider the actions, interactions, and explanations of events that influence the conditions. These components are interrelated and contribute to the overall state of conditions. For instance, a leaf cutter ant colony might rely on the availability of leaves to survive, while the ants' behavior affects the growth of the plants they harvest.

**Example of Conditions**

Consider the following scenario: A leaf cutter ant colony is harvesting leaves from a nearby tree. The ants are able to harvest leaves effectively because of their ability to communicate and coordinate their efforts. However, if the tree is cut down or if the ants' habitat is altered, the colony's condition may be at risk.

**Explanation of Conditions**

To explain the conditions, we must consider the actions and interactions of the ants with their environment. The ants' behavior is influenced by various factors, such as the availability of leaves, the presence of predators, and the colony's size. These factors interact with each other, creating a complex system that is difficult to predict.

**Conclusion**

In conclusion, conditions are sets of events that influence the state of a system. When discussing conditions, it is important to consider the actions, interactions, and explanations of events that contribute to the overall state of conditions. By understanding these components, we can better predict and manage the conditions that affect our systems.
Another point that can be made about conditions that explain social order is that they tend to be processes that work on a global scale and that are not limited to individual actions or interactions. Although researchers tend to focus on local or micro-level phenomena, it is important to understand that the social order is the result of many interacting processes. These processes take place in different contexts and can have different effects. Some processes may have a more immediate impact on the social order, while others may have a more long-term impact. Understanding these processes is crucial to understanding how social order is maintained.

These processes include cultural, institutional, and structural factors. Cultural factors refer to the norms, values, and beliefs that shape social behavior. Institutional factors refer to the formal and informal organizations and structures that influence social behavior. Structural factors refer to the economic, political, and social systems that shape social outcomes. These processes are interrelated and interact with one another in complex ways. Understanding these processes is crucial to understanding how social order is maintained.

However, social order is not just the result of these processes. Social order is also shaped by the actions of individuals. Individuals make choices that have a significant impact on the social order. These choices are influenced by a variety of factors, including personal beliefs, values, and experiences.

In conclusion, social order is not just the result of the actions of individuals. It is also shaped by the processes that work on a global scale. Understanding these processes is crucial to understanding how social order is maintained. This understanding can help us to better understand the social world and to develop strategies to maintain social order in a changing world.
nearly who was studying the phenomenon of psychological pain in
response to an action/interaction or a lack of it taken in response to an issue of a
testimony. This was in an attempt to understand what it meant to see if they
were able to differentiate between various elements of the situation, and how
the situation affected the phenomenon in question. In some cases,
more complex explanations were produced, providing for the situation and
helping to explain the phenomenon in question. In other cases, the
explanations were more complex, involving a number of different elements.

When drugs are readily available, these are pressing, and: drugs are

Although some elements of situation include the following:

- A lack of a coherent/interactions and individuals acting in groups may or
- A lack of action/interaction or a lack of it taken in response to an issue of a
testimony. This was in an attempt to understand what it meant to see if they
were able to differentiate between various elements of the situation, and how
the situation affected the phenomenon in question. In some cases,
more complex explanations were produced, providing for the situation and
helping to explain the phenomenon in question. In other cases, the
explanations were more complex, involving a number of different elements.

When drugs are readily available, these are pressing, and: drugs are

Although some elements of situation include the following:

- A lack of a coherent/interactions and individuals acting in groups may or
- A lack of action/interaction or a lack of it taken in response to an issue of a
testimony. This was in an attempt to understand what it meant to see if they
were able to differentiate between various elements of the situation, and how
the situation affected the phenomenon in question. In some cases,
more complex explanations were produced, providing for the situation and
helping to explain the phenomenon in question. In other cases, the
explanations were more complex, involving a number of different elements.

When drugs are readily available, these are pressing, and: drugs are
Interpretation is a form of deduction. We are deducing what is going on interpretation is a process by which we infer, from the data we have, the underlying structure or the process by which we deduce an interpretation of the data. Interpretation is an act of thinking. It involves the construction of a model or a theory that explains the data. The concept of interpretation is applied to qualitative research.

Moving the concept of induction and deduction

Inference runs out of time, money or both.

We did in the chapter on open coding (Chapter 2) with the help of our research team. The data was analyzed and coded using the NVivo software. The data was then organized into themes and patterns. These patterns were then used to construct a theoretical framework. This theoretical framework was then used to guide the further coding of the data. In this way, we were able to identify the key themes and patterns in the data.

A category is considered significant when it occurs in a meaningful way within the data.

The next step was to open code the data. This involved reading through the data and identifying patterns and themes. The data was then coded using the NVivo software. The codes were then organized into themes and patterns. These patterns were then used to construct a theoretical framework. This theoretical framework was then used to guide the further coding of the data. In this way, we were able to identify the key themes and patterns in the data.

Theoretical development.

In the theoretical development of categories and subcategories, we began by identifying the key themes and patterns in the data. These patterns were then used to construct a theoretical framework. This theoretical framework was then used to guide the further coding of the data. In this way, we were able to identify the key themes and patterns in the data.

Further development of coding procedures.
**To explain it,** let your feet down and you'll know exactly how.

Encourage your thinking, feel your emotions. In your eyes—what you've never looked at them before.

Kind of opens your perspective on the lens you look at things through. Kind of opens your perspective on the lens you look at things. If you're not always open to new things, if you're not always open to new things, you're not always open to new things. If you're not always open to new things, you're not always open to new things. If you're not always open to new things, you're not always open to new things.

But there is something you do when you look at things. When you look at things. When you look at things. When you look at things.

Because of this, you see the world in a different way. You see the world in a different way. You see the world in a different way. You see the world in a different way.

**Response:** Well, you're in a different state of mind, a different state of mind, a different state of mind, a different state of mind.

**Intermediate Explanation:** Subconscious experiences with things to be stored.

The process of experiencing a thing is to store. The process of experiencing a thing is to store. The process of experiencing a thing is to store. The process of experiencing a thing is to store.

Without a conscious perception of the world, we would not be able to experience. Without a conscious perception of the world, we would not be able to experience. Without a conscious perception of the world, we would not be able to experience. Without a conscious perception of the world, we would not be able to experience.

**Question:** Have you ever thought about it before?

**Answer:** Yes, I have. I have thought about it before. I have thought about it before. I have thought about it before. I have thought about it before.
“an altered state” of mind. It is a process of “letting go” or “letting the drug have its influence over you.” This probably is why “getting stoned” is a learned experience. You also states that individuals can move out of the state if it is necessary to do so. One also can describe the situation as “being relaxing” or being “transforming perceptions.”

Interviewer: Whereas alcohol breaks down your inhibitions, pot doesn’t break them down. You do not tell people your darkest, deepest secrets when you’re high like you would with alcohol. With alcohol you lose your inhibitions, but with pot, you retain them. Most people when they are high, are high, are high. They know exactly what they are saying and doing. Like I said, my reaction to pot is rather rare. I have a strong reaction. [Full] 95% of the people are in control and have no problem. It makes me nauseous. It doesn’t take much for me to get stoned. Then, I’m out of it. I’m not much in control of what I am doing. I’m in a daze. I throw up. It is not a very pleasant experience for me.

Memo: Remaining “in control,” both over the self and over the drug, seems to be an important property of this person. She also tells us another concept, “super stoned,” which seems to vary from being “super stoned,” to “being in control,” with some people saying that they are having “an unpleasant experience.” The specifics of this for her were “being sized, not in control, and ill.”

The Use of Mini-Frameworks and Other Recording Techniques

Keeping a record of one’s analysis during axial coding is important. Two recording devices that we introduce here include the use of
The process of integrating and refining categories. This chapter focuses on the process of integrating and refining categories. The researchers use various techniques to integrate and refine categories to create a more cohesive framework. The goal is to develop a comprehensive and coherent understanding of the data.

Definitions of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coding</td>
<td>The process of integrating and refining categories.</td>
</tr>
<tr>
<td>Selective Coding</td>
<td>A specific approach to coding that focuses on the key aspects of the data.</td>
</tr>
</tbody>
</table>

Summary

The chapter discusses how we code around the axis of categories, focusing on the selective coding process. This involves identifying key themes and core categories within the data. The researchers use selective coding to develop a deeper understanding of the data and refine their framework. The goal is to create a coherent and comprehensive understanding of the results.
Important Points

CODING PROCEDURES

Selective Coding
Choosing Between Two Criteria for Choosing a Central Category

1. Must be central: that is, other major categories can be derived from it.
2. It must appear frequently in the data, meaning that it’s strong and
   essential element is the categories are intertwined into a larger theme.

Discerning the central category

Other elements

Coding Procedures

147
To understand what a descriptive story might look like, consider the following example. The story arises from a hypothetical study on concert attendance.

**Diving to Particles of When with Friends**

During the party, when friends gathered to discuss their most pressing issue, the*Diving to Particles* phenomenon occurred. This phenomenon is characterized by a shift in focus from a global to a local perspective, allowing individuals to engage in more detailed and specific discussions.

**The Following Story**

When a person feels overwhelmed by a large task, their thinking often becomes fragmented. However, when the task is broken down into smaller, more manageable parts, the individual is better able to focus and make progress. This is known as the *Diving to Particles* phenomenon.

**Techniques to Aid Information**

In the context of information overload, the use of techniques such as summarization, categorization, and prioritization can help manage the flow of information. These techniques can be applied to both written and spoken communication, making it easier for individuals to process and retain important information.
The image contains a page of text that appears to be a continuation of a discussion on learning and processing. The text seems to be discussing the role of feedback and its impact on learning processes. It mentions the importance of focusing on the process of learning over just the outcome, and the role of immediate feedback in reinforcing learning. The text also touches on the idea of selective coding, where individuals process information selectively, focusing on what is most relevant to them.
Identifying the properties of concepts allows for their dimensions. For the best possible explanation, it is essential to understand the underlying process. Although these dimensions are discussed in greater depth in Chapter 14, it is important to note that they are an integral part of the concept. Therefore, they are a storehouse of knowledge, allowing for meaningful learning and development.

**Reviewing and Summing up Themes**

With this chapter (10), the details should be kept in mind, as they are essential for the effective learning of the chapter. The themes should be kept in mind, as they are essential for the effective learning of the chapter. The themes should be kept in mind, as they are essential for the effective learning of the chapter.

**Using Diagrams**

Selective Coding

Coping Procedures

Although passing these themes might be a better explanation, our course-density is focused on the themes that are essential for the effective learning of the chapter.
Passage Through Adolescence

radially shaped and arrows the course

meaningful shapes and arrows the course

nature of drug experience

CODING PROCEDURES

Coding

specific coding

155
is looking for what is missing. Developing will not help and review the reasons. But the manager knows what on the other hand, should go back and once more use of organization and clear the consensus and logic should follow. Moreover, are not automatic. If the story the names and definitions are not clear, the above information should show how a logical manner and should be checked for consistency and logic.
What if a Case Does Not Fit

In Chapter 16, the topic of validation theory is discussed further. This theory is an aspect of Valda's model. The topic of validation is covered in the short section we have chosen to reproduce. It is a procedure of checking or testing a hypothesis in order to determine its validity. The hypothesis in the example is that being old and having less education is related to the number of friends a person has. This hypothesis would mean that the older a person is, the fewer friends they are likely to have.

The topic of validation is the process of determining whether or not a hypothesis is supported by the data. If the hypothesis is not supported by the data, then it is considered invalid. If the hypothesis is supported by the data, then it is considered valid.

The process of validation involves the following steps:
1. Formulate a hypothesis based on previous research or personal observation.
2. Collect data that can be used to test the hypothesis.
3. Analyze the data to determine whether or not it supports the hypothesis.
4. Draw conclusions based on the analysis of the data.

Valda's Theoretical Scheme

To contribute to the understanding of Valda's model, there is no reason to doubt. It is possible that what we call error is...
and when others keep their expectations personal in writing about
and discussing their experiences, I can very well discuss about
my experiences. I often think that this could be many variations
between categories. Our theory of or present hermeneutic
explanations. For example, when I go on a trip, I go on a
trip that is different than the one I go on a day. I often think
that this could be many variations between categories. Our theory
of or present hermeneutic explanations. For example, when I go on a
trip, I go on a trip that is different than the one I go on a day.