

A Transformative Approach to Grounded Theory

Reflective (Axial) Coding Analysis
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Reflective Coding

In grounded theory procedures axial coding is the answer to questions generated during open coding. The term axial does not generate the visual image of what is taking place during this procedure. Axial coding is the process of reflecting on and about the categories that are emerging and reassembling them in a meaningful way. That depth of that “meaningful way” is directly informed by the researcher’s experience with the phenomenon of interest and appropriateness or “fit” of the theoretical sensitivity achieved. For that reason I refer to axial coding as reflective coding. Corbin and Strauss, (1990) recognized that open and reflective coding are distinct analytic procedures. However, they concur that in coding the data a researcher will alternate between the two modes. Let’s explore that reality a bit more.

I suspect that during open coding we find ourselves connecting to the data by way of sorting through it. We are not really seeking anything in particular in the process of pulling the data apart into chunks of meaning that resonate with our established theoretical sensitivity. We are reacting to the data stream in a very objective way. It would appear to be a very deductive process. If there is a way of knowing within open coding (an epistemology) it is one that is directly connected to our level of theoretical sensitivity and our experiences with the phenomenon of interest. Absence any depth of experience and/or theoretical sensitivity we will find ourselves unable to make good or real sense of the data stream. We will just as likely pick up pennies as we are to miss the real gold of our inquiry. In this way the truth of our discoveries are directly relevant to our depth of experience and theoretical sensitivity. It is a tentative truth or a more prevailing truth that is generated in open coding. This type of knowing (epistemology) is very subject to change – truth is relative (see the file on Jamesian Pragmatics for more depth of understanding). In short the truth found within open coding, which is directly dependent upon experience and theoretical sensitivity, is subject to change in time and space during reflective coding. Our epistemologies – our ways of knowing, can be transmuted by our participant’s perspectives joining our own preparation. This continues in a flow until that point where saturation is reached.

In a very general sense open coding holds a historical perspective. In reflective coding we begin to take on a different epistemological stance that is much more axiological (personal centered – experiential centered – beauty centered [as in the phrase “beauty is in the eye of the beholder”] in its intentions. This can be thought of as an axiological epistemology. It tends to be more personal and both reflective and reflexive. It brings us to way we are with the data and our experiences and begins to bend it forward in wonder.

Reflective coding begins weaving the strands together.

Step back - what's happening here?

Reflective coding, in its simplest intention is the process of putting the data back together in meaningful way by making connections between the properties of a code, its dimensions range, and the context in which it is found. Reflective coding is concerned with developing the data into schematics that explain the nature of the interactions. This is best done by examining the properties that emerge from the causal conditions, the processes that explain the conditions, the dimensions of the processes, and the relevant context of the conditions. The emergence of key properties (the core category) and strategies for understanding the consequences or relevance of these properties is a signal that theoretical saturation is approaching. The generation of a reflective coding matrix (see Reflective Coding Matrix handout) serves as an aid in reconnecting the data that surfaced from the open coding procedures.

Reflective coding, following open coding, compares the open coding categories with the ecology and reassembles the data in new meaningful ways by weaving connections between and among categories reflective of the ecology in which they were found. Reflective coding transcends the detail of open coding by moving to a higher level of abstraction and developing a hierarchy of main categories within which lesser categories will be grouped. Categories are specified in terms of conditions, contexts, action/interactional strategies, and consequences. Reflective coding naturally loops back into open coding and vice versa, allowing interplay between phases as new relationships yield new perspectives, which must be verified against the data and the informants' ecology. The emergent theory is limited to those categories, their properties and dimensions, and statements of relationships that exist in the actual data collected.

Open to Reflective Coding

What follows are the open codes that were generated from an interview /reflection on the construct of Eco-Leadership. There are 66 open codes that were lifted from the interview/reflection. Next the codes were gently connected through a color coding sequence (thematic content analysis). The initial results were as follows:

1. A spiritual practice

2. Involves purifying intentions

3. Honoring what is sacred
4. Believing in sustainability
5. Encouraging others
6. Brings innate knowing to the surface
7. Contributing to collective awareness
8. Acts of compassion
9. Initiated with spiritual transformation
10. Pure intention, right thinking comes into play, resulting in right action, with an open heart full of compassion.
11. Greater understanding is achieved
12. Initiates a deeper awareness of our relationship
13. Serving a greater purpose
14. Pure intentions are commenced by becoming an observer, or becoming the watchman at the door of thought.
15. Paying attention
16. To practice sincere listening with an open heart
17. Bringing deeper meaning
18. I feel relaxed within my personal sacred space
19. I felt a deep relaxing peace
20. Feeling free to express my authentic feelings
21. I realized that sacred space comes with presence
22. I felt at home in traffic, at work, in the store, in public, a neighbor's house, and even in the court house.

23. Spiritual awareness is recognizing and honoring what is sacred
24. Becomes a responsibility
25. With wisdom comes responsibility which requires us to practice what we know as the deeper truth.
26. Pure center focus
27. Self-awareness leads to eco-awareness
28. Continual process of learning and discovery
29. Inner peace is developed
30. Strengthens our faith in trusting the process
31. Awareness of unlimited possibilities
32. Gaining this freedom can be a struggle while learning to overcome habitual patterns of thinking. Spirit innately desires to return to Original Greatness.
33. Soul innately seeks for ways to express Original Greatness. Spirit and Soul merge with intention towards finding ethical approaches to draw out human potential.
34. empowers others
35. Compassion changes lives.
36. Kind words and deeds are worthless without sincerity.
37. True meaning and purpose are channeled through the heart.
38. Intention is to heal relationships
39. Honoring what is sacred
40. Divine goodness makes integration possible
41. Pure intention, mutual respect, with kind consideration is the collaboration of potential that becomes something beautiful and real.

42. Life is Spirit.

43. Contributes healing energies

44. Intentions purify thought and emotion with a sense of gratitude for the goodness life has to offer

45. Focused intention works like magic

46. Gratitude is an essential aspect

47. Developing Eco-awareness is a process of sharing our authenticity

48. Innovative confidence

49. Capacity to empower

50. Pure intentions and compassion warmth penetrates every barrier

51. Tilling the ground is self work. Planting seeds is done by demonstrating compassion and kindness. Watering is done with the spirit of gratitude. Sunshine is the recognition of beauty. Inner light shines outward, giving life to all it touches. Weeding out thoughts that are not aligned with Original Greatness will protect what is sacred. The harvest benefits everyone with a balanced ecological system manifested as an Eco-unified society.

52. Balance is created

53. Demonstrates truth as a practice

54. Contemplating questions with curiosity develops into awareness of potential.

55. Constructs meaning

56. Personal transformation develops into higher levels of consciousness

57. Intellectual maturity

58. Emotional stability

59. Spiritual fulfillment

60. Physical well being

61. Social unity.

62. Creative solutions are abundant

63. Honoring what is sacred, believing in sustainability, and recognizing and believing in the possible person.

64. Brings deeper meaning into every relationship and interaction.

65. Authentic creative expression lives are touched

66. Every person has the potential to contribute healing to the world.

Next we begin to bring the various codes together – to reconnect them in a reflective process. Below is a list of those open codes related using green highlights. We begin by examining this group of codes and look for ways they connect – to name them collectively. For this exercise they were collectively name “**Spiritual Awareness**”.

- a) A spiritual practice
- b) Honoring what is sacred
- c) Initiated with spiritual transformation
- d) I feel relaxed within my personal sacred space
- e) I felt a deep relaxing peace
- f) I realized that sacred space comes with presence
- g) Spiritual awareness is recognizing and honoring what is sacred
- h) Inner peace is developed
- i) Strengthens our faith in trusting the process
- j) Gaining this freedom can be a struggle while learning to overcome habitual patterns of thinking. Spirit innately desires to return to Original Greatness.

- k) Soul innately seeks for ways to express Original Greatness. Spirit and Soul merge with intention towards finding ethical approaches to draw out human potential.
- l) Honoring what is sacred
- m) Divine goodness makes integration possible
- n) Life is Spirit.
- o) Spiritual fulfillment
- p) Honoring what is sacred, believing in sustainability, and recognizing and believing in the possible person.

The Conditional Relationship Guide

When grounded theory analysts code reflectively we are acting very much like investigative reporters, asking the questions, what, when, where, why, how, and with what result or consequence (Strauss & Corbin, 1998). Answering these questions weaves the loose array of concepts and categories we unraveled and sorted in open coding back together into a pattern. Our questions ensure that our patterns are not merely woven into two-dimensional pictures of reality, but rather woven into the much more complex, three-dimensional ecology of the informant. Asking and answering these investigative questions also allows for a fourth dimension of time to be included. Our tapestry is living, dynamic within its ecology. The informants, as we have learned, carried threads and trends from childhood or other rich areas of their unique backgrounds through the years to weave them into the challenging life pursuits that emerged after age 50. Strauss and Corbin (1998) refer to that dynamic element as Process. Studying Process allows us to understand the evolution of the informants and their pursuits, an important piece, as we discovered in open coding (Scott, 2002).

The Conditional Relationship Guide (Scott, 2002) is a very useful tool. If I were to begin with the code category, *Spiritual Awareness*, I can use the guide as a way to connect and understand its depth and meaning as it relates to the similar codes. First, recall the investigative questions that Strauss and Corbin (1990, 1998) suggest, and the ones we have previously revealed establish the basis for understanding the relationships among our categories. The questions for our inquiry are restated here.

We began the inquiry with:

- What is the central theory that explains the nature of transpersonal leadership?

Refined it was revealed that there were deeper and more pointed questions:

- How do transpersonal qualities empower the nature of leadership?

- How do they embody a potentiating awareness, intention, and presence?
 - How do we employ these potentiating practices within the human eco (home, community, society) towards revealing and actualizing individual potential as well as the society?
- What is the nature of eco-leadership?

It became apparent to the principle investigator that the central question held by each of the potentiating practices could also serve as tools for ontologically approaching qualitative data streams. The potentiating questions are:

- Am I ready to learn?
- Am I ready to become creatively self-aware?
- Do I hold the will to believe in the possible person?
- Am I ready to become in reality what I appear to be?
- Am I becoming a *well being*?

As the above questions are introspective they were remolded in order to form active (action questions) transformative intent:

- What am I learning? What is my awareness surrounding eco-leadership?
- What is being created? What is my sense of presence concerning eco-leadership?
- What is being made possible? What is the nature of my intentions concerning eco-leadership?
- What is the reality of human potential? What is now being accepted as possible?
- What is the nature of a well being?

Notice that the Conditional Relationship Guide is formatted to ask and answer the relational questions about the emerging code category.

- *What* is [the code category]? (Using an informant's words helps avoid bias.)
- *When* does [the code category] occur? (Using "during..." helps form the answer.)
- *Where* does [the code category] occur? (Using "in..." helps form the answer.)
- *Why* does [the code category] occur? (Using "because..." helps form the answer.)
- *How* does [the code category] occur? (Using "by..." helps form the answer.)
- With what *Consequence* does [the code category] occur or is [the category] understood?

What we do at this point merge the action questions with the relational questions and begin building depth of understanding around the emerging code categories. In the table to follow I simply collapsed the open codes into a simple matrix where I named the emerging code category and then collected the open codes from the first data stream under the initial code category. In addition I found opportunities to move some open codes to a more appropriate code category. What I have effectively done is to reduce the date 62 open codes to 6 reflective or axial codes with supporting data streams. The table below shows my work. The next step and your task for this week is to create a tentative Conditional Relationship Guide from this initial interview/reflection.

Emerging Code Category	Spiritual Awareness	Pure Intentions	Eco-Awareness	An Open Heart	Creative Expression	Acts of Compassion
	<p>A spiritual practice</p> <p>Honoring what is sacred</p> <p>Initiated with spiritual transformation</p> <p>I feel relaxed within my personal sacred space</p> <p>I felt a deep relaxing peace</p> <p>I realized that sacred space comes with presence</p> <p>Spiritual awareness is recognizing and honoring what is sacred</p> <p>Inner peace is developed</p> <p>Strengthens our faith in trusting the process</p> <p>Gaining this freedom can be a struggle while learning to overcome habitual patterns of thinking. Spirit innately desires to return to Original Greatness.</p>	<p>Involves purifying intentions</p> <p>Brings innate knowing to the surface</p> <p>Pure intention, right thinking comes into play, resulting in right action, with an open heart full of compassion.</p> <p>Pure intentions are commenced by becoming an observer, or becoming the watchman at the door of thought.</p> <p>Focused intention works like magic</p> <p>With wisdom comes responsibility which requires us to practice what we know as the deeper truth.</p> <p>Pure center focus</p> <p>Kind words and deeds are worthless without sincerity.</p>	<p>Believing in sustainability</p> <p>Feeling free to express my authentic feelings</p> <p>Contributing to collective awareness</p> <p>Initiates a deeper awareness of our relationship</p> <p>Awareness of unlimited possibilities</p> <p>Self-awareness leads to eco-awareness</p> <p>Becomes a responsibility</p> <p>Developing Eco-awareness is a process of sharing our authenticity</p> <p>Serving a greater purpose</p> <p>Contemplating questions with curiosity develops into awareness of potential.</p>	<p>To practice sincere listening with an open heart</p> <p>Continual process of learning and discovery</p> <p>Bringing deeper meaning</p> <p>I felt at home in traffic, at work, in the store, in public, a neighbor's house, and even in the court house.</p> <p>True meaning and purpose are channeled through the heart.</p> <p>Contributes healing energies</p> <p>Contemplating questions with curiosity develops into awareness of potential.</p> <p>Personal transformation develops into higher levels of consciousness</p>	<p>Gratitude is an essential aspect</p> <p>Tilling the ground is self work. Planting seeds is done by demonstrating compassion and kindness. Watering is done with the spirit of gratitude. Sunshine is the recognition of beauty. Inner light shines outward, giving life to all it touches. Weeding out thoughts that are not aligned with Original Greatness will protect what is sacred. The harvest benefits everyone with a balanced ecological system manifested as an Eco-unified society.</p> <p>Creative solutions are abundant</p> <p>Authentic creative expression lives are touched</p>	<p>Encouraging others</p> <p>Acts of compassion</p> <p>Greater understanding is achieved</p> <p>Paying attention empowers others</p> <p>Innovative confidence</p> <p>Capacity to empower</p> <p>Balance is created</p> <p>Demonstrates truth as a practice</p> <p>Constructs meaning</p> <p>Intellectual maturity</p> <p>Emotional stability</p> <p>Physical well being</p> <p>Compassion changes lives.</p>

	<p>Soul innately seeks for ways to express Original Greatness. Spirit and Soul merge with intention towards finding ethical approaches to draw out human potential.</p> <p>Honoring what is sacred</p> <p>Divine goodness makes integration possible</p> <p>Life is Spirit.</p> <p>Spiritual fulfillment</p> <p>Honoring what is sacred, believing in sustainability, and recognizing and believing in the possible person.</p>	<p>Intention is to heal relationships</p> <p>Pure intention, mutual respect, with kind consideration is the collaboration of potential that becomes something beautiful and real.</p> <p>Intentions purify thought and emotion with a sense of gratitude for the goodness life has to offer</p> <p>Pure intentions and compassion warmth penetrates every barrier Brings deeper meaning into every relationship and interaction.</p>				

I provide below an excellent example from Karen Wilson Scott's dissertation (2002); "High Self-Efficacy and Perseverance in Adults Committed to New Challenging Life Pursuits After Age 50: A Grounded Theory."



Beginning with *Ability to Adapt*, the first category of the 54 listed in the "Category" column at the far left of the guide, we will follow my process of asking and answering the six relational questions. The first question is "What is *Ability to Adapt*?" The *Ability to Adapt* is defined by the informants as "shifting perception to discover and implement new alternatives." It works to either paraphrase the informants' collective definition or to use the words of a specific informant that seems to capture the collective intent of all informants who contributed to this category. For *Ability to Adapt* I provided a collective definition, however for most categories I used the words of a specific informant. I chose the latter method for myself, because it seemed as if it could become relatively easy to drift into my meaning. I was at that point so steeped in data, that I paraphrased the informants with ease and then stood back and questioned how much of me I was blending with them. I decided to restrict my descriptions of "What" to an informant's words to keep the intent clean and clear for myself.

The second question is "When does *Ability to Adapt* occur?" (Notice that it helps to use the word "during" in the answer of "When.") The informants use their *Ability to Adapt* during times of *Adversity* or challenge, often during their *Pursuits*, when *Age Factor* is an issue, and when dealing with the *Negativity* of others. Recall that we identified the relationships just named during our open coding in Chapter V. The relationships we just named are in the data provided by our informants and we can easily go to specific entries to verify that fact. The third question is "Where does the informant's *Ability to Adapt* occur?" (Using the word "in" helps to form the answer to "Where.") The informants employ their *Ability to Adapt* in their *Backgrounds* and in the *Steps of their Pursuits*. Notice that this process relies heavily on the judgment of the researcher. Another researcher might make slightly different decisions. For example, *Ability to Adapt* could also be said to occur "during" the *Steps of the Pursuit*, answering the "When" question. As I had chosen to be more specific in the answer to "When," I made the decision to answer broadly, in the *Steps of the Pursuit* for "Where."

The fourth question asks "Why does *Ability to Adapt* occur? (It helps to begin with "because" in answering this question.) The informants adeptly use their *Ability to Adapt* because they expect *Obstacles to be Part of the Process; Business as Usual, Nothing Personal*; and because *Others Affect their Pursuits*. Notice that the "When, Where, and Why" questions are identifying conditions and the structure or frame. The fifth question, asking "How," is getting at actions and interactions among the categories, the idea of dynamic process over time. It is this latter question that provides the depth that leads us to the informant's mode of understanding the consequences.

The fifth question, then asks "How the *Ability to Adapt* occurs?" (Using the word "by" helps form the answer to this question.) The informants use their *Ability to Adapt* by shifting their

Perception, remaining Open to Possibility and Open to Learning from any Source, by being willing to Risk, approaching situations with a Must-Be-A-Way attitude, by Focusing on What's Important, and by Doing Those Things That I Can Control.

The sixth and final question on our guide asks “With what Consequence does *Ability to Adapt* occur or with what Consequence is *Ability to Adapt* understood?” The consequence is the experience, living, being, meaning level. It is what the informant gets – in this case purposefully, intentionally, and sometimes at extreme expense through his or her own action. The informants understand the consequences of using their *Ability to Adapt* as *Choice*. Considering the importance of the consequence to the informants, it seems the key element to investigate with regard to relationships and ties to the others in whatever way they seem to occur.

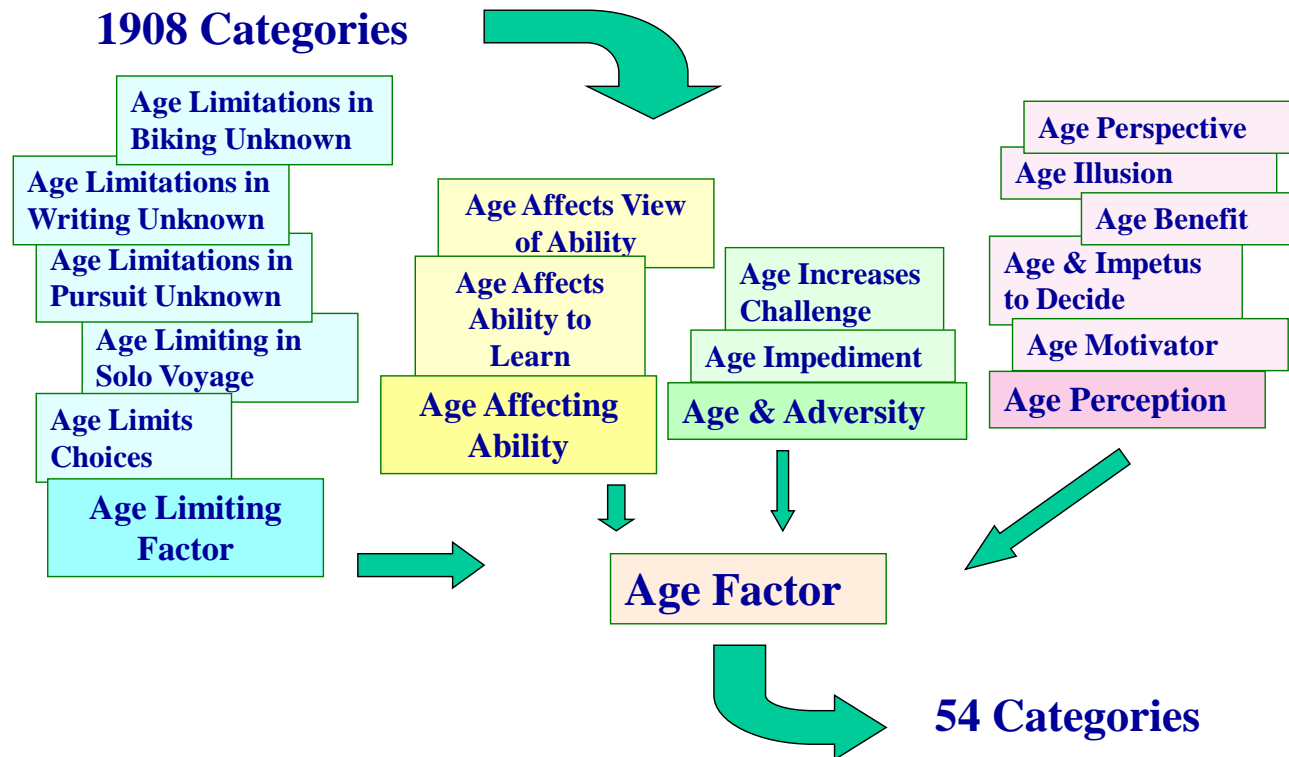
Table 2. *Conditional Relationship Guide*

Category	What	When	Where	Why	How	Consequence
<i>Ability to Adapt</i>	Shifting Perception to discover & implement new alternatives	During times of Adversity, often, when Age Factor is an issue, dealing with the Negativity of others	In informant's Background, in Steps of Pursuit	Obstacles Part of Process, Business as Usual, Nothing Personal, & Others Affect Pursuit	Shift Perception, Open to Possibility, Open to Learning from Any Source, Risk, Must be a Way, Focus on What's Important, Do Those Things I Can Control	Choice
<i>Adversity</i>	Obstacles, illness, injury, rejection of others, negativity, lack of resources, & fundamental to growth	Throughout life, Pursuit	In Background, in Steps of Pursuit	Others Affect Pursuit, Risk, Age Factor; Obstacles Part of Process; Business as Usual, Nothing Personal	Perceptions of: Negativity, Lack of Knowledge, Differences Between US & Other Countries	Perception
<i>Age Factor</i>	In late life, age affects view of ability, not limiting if have health, provides sense of urgency	Mid- to late-life (56 – 70 in this study)	Extraordinary Involvement in Pursuits	Physical/Health Limitations, Others Affect Pursuit	In sailing, age diminishes endurance, in racing ill health & slower recovery from injury diminish	Perception

Category	What	When	Where	Why	How	Consequence
					strength, expressions of age-related Negativity in writing, music, research	
<i>Background</i>	Expressed areas of Informants' history & philosophy	Throughout life	Venues of life & Pursuit	Belief	Influences of: Others Affect Pursuit, Support & Belief of Others, Coach/Mentors	Belief & Self- Belief/Efficacy

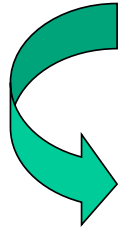
Note: This is only a small section of the Guide. It should be noted how the data was collapsed. In the Scott study she reduced 1908 open codes to 54 categories. She then used the Conditional Relationship Guide a way to lift five key properties from the guide that served as the foundation for her Reflective coding Matrix.

Open Coding Analysis



Reflective Coding Analysis

**Conditional
Relationship Guide:**



54 Categories



**What? When? Where? Why?
How? Consequence?**

Reflective Coding Matrix

Properties	Process	Position	Perception	Product	Purpose
Processes	Choice	Conviction	Belief	Achievement	Development
Context	Challenge	Personal Criteria	Identity	Personal Goal	Personal Meaning
Consequences	Momentum in a Direction	Sacrifice Ordinary for Extra- ordinary	Self- Efficacy	Progressive Realization of Goals	Maximizing Potential Creates Positive Force