

Power and the Rhetorical Manipulation of Cognitive Dissonance

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Introduction

Leon Festinger proposed a theory of cognitive dissonance in which he argued that a person experiences psychological discomfort if two cognitions are equally important but logically contradictory (Festinger 1956). As a result of this discomfort, the subject changes behavior or seeks new information to enhance one of the cognitions or seeks to reduce the importance of the other. This theory became a dominant paradigm in psychological research and led to thousands of studies in which subjects were forced to deal with their cognitive dissonance under controlled conditions so that researchers could observe changes in individual values, opinions or behaviors. The bulk of this research focused on individual cognition and veered away from Festinger's focus on *group* dynamics. Experimental results in the literature strongly suggest that cognitive dissonance does not occur until logical inconsistencies are exposed via social interaction like conversations. Billig (1987) argued that cognitive dissonance is not confronted except in discourse, and the interlocutor's key purpose is maintaining positive self-perception. Specifically because the creation of cognitive dissonance is social, I suggest that people are more likely to avoid or reduce cognitive dissonance via shared communicative strategies than to change individual cognitions or behaviors.

Cognition involves various levels of abstraction ranging from simple, contrastive sets to highly inclusive but abstract sets. People share frameworks for linking propositions within levels of abstraction and between levels--what cognitive anthropologists usually refer to as 'cultural models' or 'cognitive models'. But what has not been addressed adequately in the literature is that these models often include conflicting logics. Normally, we don't confront such contradictions. But at times, for

example in discourse, we are forced to confront them. This causes cognitive dissonance, which is an emotional (affective) response to cognitive processes.

I propose that there are a variety of discursive strategies aimed at avoiding or ameliorating cognitive dissonance.¹ One strategy is to move the discourse to more abstract concepts, where one can obfuscate and/or ignore contradictions at lower levels. Thus, we have a discursive solution to an emotional response to cognitive processes. I am calling this process “abstractification.” An interlocutor attempting to move the discourse to a higher level will do so by invoking a shared abstract belief like “that’s just the way God made it.” The particular belief chosen reflects the expectation of the first interlocutor that the other interlocutor shares the abstract belief. The process of abstractification using shared beliefs to escape cognitive dissonance is probably universal. The particular beliefs used are culturally relative.

I hypothesize further that some discursive strategies or behavioral norms keep individual cognition or discourse abstract to preclude cognitive dissonance. This process can enhance social cohesion, but the cost is that logical inconsistencies are never resolved. What’s more, those who are best at manipulating levels of abstraction have a political advantage. Thus we have political advantage (i.e., power) deriving from a discursive solution to an emotional response to cognitive processes.

The manipulation of cognitive dissonance by relocating discourse and cognition to higher levels of abstraction may reduce the potential for adapting to environmental change. Logical inconsistencies created by environmental information in conflict with existing beliefs at lower levels of abstraction may be glossed over by the emotional benefits of reducing cognitive dissonance at higher levels. Leaders of political systems in crisis attempt to maintain social cohesion by reducing cognitive dissonance by using increasingly abstract rhetoric. However, such a system could eventually collapse if the critical environmental information causing logical inconsistencies at lower levels continues to be ignored. During periods of environmental stress, and as the situation

¹ The notion of discursive strategies for manipulating cognitive dissonance raises interesting cross-cultural questions. Cognitive dissonance is probably universal. But discursive processes that create or resolve cognitive dissonance are culturally relative (Nuckolls 1993). For example, European Americans desire logical order and we experience dissonance when we don't find it. Some other cultures may not desire logical order, or at least don't look for consistency in the same cognitive domains as most Americans.

worsens, societies often exhibit proliferation of monumental architecture and/or militarization based on abstract notions like “good” and “evil”. Examples may include the Classic Maya, Easter Island, the Soviet Union, and current attempts to use religious rhetoric in the U.S. to avoid addressing climate change (e.g., “It is God’s will”).

Here I present some examples from my research. Since 1998 I have been studying how Tzeltal Maya in Chiapas, Mexico share information about medicinal plants. My original idea was to determine how shared cognitive models guided the selection of medicinal plants and facilitated communication about them. In other words, I was studying the functionality of the group’s cultural models—how logical relationships between shared propositions functioned to structure the medicinal plant knowledge system. A fundamental assumption of this research was that people must share logically coherent explanatory models in order to facilitate the discovery of cures and share that information. For example, previous research showed that how a plant tastes is an important culturally-shared indicator of how that plant may cure. One of my predecessors (Brett 1998) hypothesized that the Tzeltal associate bitterness with respiratory illnesses. I found this to be partially true. The following is a typical excerpt from an interview:

Q: Bi yu’un ya sposhta obal ch’a bakal.

Why does *Salvia lavanduloides* cure cough?

A: Yu’un ha lom ch’a. Ya sposhtaik obal ch’a wamaletik.

Because it’s bitter. Bitter plants cure cough.

A Chi Square analysis of data from 53 interviews using 203 plant species showed that cough treatments were significantly more likely to be bitter than other taste categories like astringent, sour, sweet or pungent ($X^2 = 30.15, p < 0.001$). But I also found many contradictions in this (and other) shared explanatory models. For example, later in the same interview, I was asking about a different plant:

Q: Bi yu’un ya sposhta tza’nel yakan k’ulub wamal.

Why does *Verbena litoralis* cure diarrhea?

A: Ha lom ch’a.

Because it's very bitter.

Q: Ya bal a poshta obal yakan k'ulub.

Does *Verbena litoralis* cure coughs?

A: Ma poshta

No.

Q: La a'wal ya sposhta obal ch'a wamaletik. Bi yu'un ma sposhta obal ha'mene.

You said earlier that bitter plants cure coughs, why doesn't this one cure coughs?

A: Mash k'il . . . ha te, ha nash . . . mash k'il. Ha nash la spas El Señor.

I don't know . . . well, it's just . . . I don't know. That's just the way God made it.

The rate at which interviewees contradicted themselves in this way was 29%. How could such logical inconsistencies persist in a system so important for survival? It was obvious that these potential contradictions either simply did not occur to my interviewees, or if they did, their importance was somehow minimized. What might be the point of having a shared model if its logical incoherence inhibits its functionality?

Hierarchical levels of abstraction

My use of the phrase “hierarchical level of abstraction” draws heavily from Bateson’s “hierarchical orders of learning” (Bateson 1987:279-308). Let me use a taxonomic example from ethnobiology to explain. A person discriminating between a sparrow and a robin is doing so within a particular set of criteria of set inclusion—a specific taxonomic level—and the saliency of this contrastive level tends to be consistent across societies (Berlin 1992:19). More hierarchically inclusive categories like “birds” or “living things” are more abstract, and the criteria that people use to form these categories tend to vary across cultures. Hence, European Americans would consider a New Guinean cassowary to be a large flightless bird. The Kalam of New Guinea, however, place the cassowary in a category with humans, rather than birds (Bulmer 1967). At higher levels of abstraction, boundaries and criteria for set inclusion are more flexible. The Tzeltal lexeme *tza'nel* refers to the directly observable physical symptom we call “diarrhea.” The

more abstract lexeme *poxil* (to cure) can refer to the cessation of physical symptoms like diarrhea, or the restoration of social relations by returning one's soul to its proper location, both of these in combination, or neither.

Gregory Bateson's "hierarchical orders of learning" help to clarify this idea.² In Bateson's Type I learning, premises are learned through rote repetition. For example, after repeated observations a Tzeltal child learns that drinking tea from *Salvia lavanduloides* relieves coughing. Level II learning is learning about contexts of level I learning, or applying premises from one set of observations to another context. It is inductive or deductive. For example, the Tzeltal child may reason that *Salvia* and several other plants that cure coughing are bitter, so bitter plants must cure coughing. Most importantly, level II learning includes *social* context. According to Bateson, much of our most important communication is *about* communication (Bateson 1987:201-227). The Tzeltal child learns social information like "mother knows best" because a mother knows lots of cures. The child might also deductively reason that other mothers also know best.

When trying to extract the most relevant information for Level II learning, some logical inconsistencies must be ignored, while others are deemed more important and are reconciled. For example, the child might be able to ignore that, in addition to cough remedies, some diarrhea remedies are bitter too. Due to the fuzzy nature of hierarchical inclusiveness, logical inconsistencies persist at lower levels of learning, but can be ignored. An example of a higher level, more abstract, logic is: medicinal plants are imbued with a power to cure, bitter plants cure diarrhea, but bitter plants can be used to cure other things as well. Note that at level I, "*Verbena* cures diarrhea," the potential for logical inconsistency does not exist, only falsification of a premise. It is only at successively higher levels of abstraction that logical contradictions are either created or reconciled.

Logical contradictions can become highly problematic with level III learning, wherein we learn and apply logical propositions to the context of the context. For

² See also Pierce's typology of hierarchical abstraction, Klir's (1985) epistemological hierarchies, and Wegner and Vallacher's "action identity" scheme for behavioral hierarchies. In addition to Bateson's (1958, 1987) logical types of learning, these are all examples of hierarchical organization of abstraction, although not necessarily mutually exclusive or taxonomic.

example, human subjects in laboratory experiments contextualize their experience within the motives of a university or broad social ethics. As Gregory Bateson stated: “If . . . the creature is driven to level III by ‘contraries’ generated at level II, then we may expect that it is the resolving of these contraries that will constitute positive reinforcement at level III” (Bateson 1987:305). In other words, level III learning is where we learn the socially acceptable rules for dealing with cognitive dissonance, including socially acceptable techniques of abstractification in discourse. Level III learning is the social process that recursively validates discursive strategies. When I confronted my Tzeltal informant with the logical inconsistency regarding the bitterness of plants, the socially acceptable strategy was to default to a higher level of abstraction and say that he didn’t know why bitter plants also cure diarrhea, he said “that’s just the way God made it.” This is socially acceptable in that both interlocutors assume that the other interlocutor shares a valid but fuzzy notion of “god making cures,” *and* that this fuzzy notion is *more important* than subordinate logical contradictions.

In 2003 I started interviewing people who live in the Phoenix, Arizona metropolitan area about water scarcity and the way they use water. This population has one of the highest per capita water consumption rates in the country. Although they live in a very arid climate, many have lawns and swimming pools (Yabiku et al. 2008). They also are aware that water is scarce. I conducted these interviews during a severe drought that received extensive media coverage (Casagrande et al. 2007). I was interested to see how they might deal with the potential cognitive dissonance resulting from these facts. During interviews, I attempted to expose logical inconsistencies to see what abstract beliefs interviewees would invoke to avoid cognitive dissonance. I made notes to myself when interviewees said things that could be logically inconsistent. As the interview proceeded, I attempted to covertly steer the conversation so that potentially conflicting logics would become closer to each other in the mind of the interviewee. In one example, a woman told me about her pool, which requires a lot of water due to evaporation. Later, she was telling me about the nearly empty reservoirs she had seen, which she attributed to the drought and excessive use of water by people. After a slight pause, I re-introduced the topic of the pool as follows:

Q: . . . so you have a pool . . .

A: yeah. It's small.

Q: but does it use a lot of water?

A: (hesitating) "You know . . . here's what I don't understand, why are they spending all this money on Mars? Why don't they build a . . . uh . . . a big plant to change salt water?"

As the logical inconsistency of being concerned about drought and having a water-intensive pool began to materialize into consciousness, the interviewee abruptly moved the discourse to the more abstract, widely-shared American "belief in the technological fix." Note that she knows she is talking to college professor, and chooses a belief (most likely subconsciously) that she is sure I will share. During 33 interviews, I was able to create 13 cognitive dissonance events that resulted in interviewees invoking abstract beliefs (Table 1).

Table 1. Shared beliefs presented by interviewees in metropolitan Phoenix, Arizona to avoid cognitive dissonance related to water issues.

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| <ul style="list-style-type: none">• Technological fix (n = 5): e.g., more dams, ocean water desalination, a pipeline to the Great Lakes• Scapegoating (n = 3): e.g., it is the fault of Mexican immigrants, people relocating from the Midwest who want lawns, or water-hoarding by the state of California• Distrust of experts (n = 3): e.g., there isn't really a drought, water is mismanaged• God / religion (n = 2): e.g., God will provide a solution |
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Perhaps the most widespread use of Festinger's theory of cognitive dissonance outside of academia is in marketing. Metropolitan Phoenix has been consistently and successfully marketed since the 1950s using the abstract cultural model of 'the oasis'. In many campaigns, desert imagery is intentionally juxtaposed with water-intensive imagery

with the effect of creating inconsistencies that are reconciled using other images of palm trees or slogan's like "the desert is a myth."³

The notion of hierarchical levels of abstraction provides an explanation for why people *appear* to act in contradiction to some of their beliefs. If researchers fail to specify hierarchical levels of learning or abstraction we have no way of explaining why a Tzeltal mother might say bitter plants cure cough, but use them to treat diarrhea, Americans are concerned about pollution and global warming, but continue to drive SUVs, or why people in Phoenix, Arizona are worried about water and drought, but make minimal attempts to curtail personal water use. These paradoxes are resolved by situating discursive data within hierarchical levels of abstraction.

Political power and rhetorical manipulation of cognitive dissonance

How does a communicative system loaded with logical contradictions function to allow people to react to critical environmental information and adapt to environmental change? In the case of Tzeltal medicinal plants, I believe that detailed, individual logical models guide experimentation by *experts*. Only enough schematic details are widely shared by *non-experts* to allow for legitimization of expert knowledge (see also Garro 2000). In other words it is more important for the larger group to agree about general principles of plant curing than potentially conflicting details. Thus, important information can flow from experts to the rest of the population.

For example, I found the Tzeltal hot/cold medicinal classification system is even more contradictory than that of taste classification. I recorded a conversation in which an expert was trying to explain a treatment to two non-expert men, whose confusion about hot and cold classifications led the expert to say:

K'ishin ta poshta mak sik'il ta poshta wamaletik. Ya hta'etik te poshiletik. La spas wamal ta sposhta spisil chamel El Señor. Ya hta'etik.

Sometimes plants are hot, sometimes cold. We find the cures. God made a plant to cure every illness. We find them.

³ "The Desert is a Myth" is the slogan used by the Greater Phoenix Convention & Visitors Bureau in its 2004 advertising campaign.

The two novices appeared to be convinced.

This raises an interesting theoretical prospect. Are those people who are very good at manipulating other people's cognitive dissonance more likely to accumulate power?⁴ It is no coincidence that President George W. Bush and his advisors consistently and strategically inserted highly abstract themes like "good" and "evil" into the national discourse about terrorism and the Iraq war after 9/11. No social decision to go to war is simple and clear cut. If the American public dwells on potentially conflicting information they will experience cognitive dissonance. It is not my intention to disparage the president. In fact, I'm arguing that manipulation of cognitive dissonance is natural and necessary for maintaining social cohesion. The American public, indeed any public, looks to leaders to preempt cognitive dissonance. Most importantly, research has clearly shown that people want to avoid cognitive dissonance very much and are therefore willing to embrace abstract rhetoric of their leaders, even when there are obvious contradictions, or their leaders are invoking ideas that would not be palatable in other contexts. Leaders, in turn, discourage people from critically examining details or considering potential contradictions by steering the public discourse away from potential inconsistencies.

Use of abstract concepts in public rhetoric is absolutely necessary to maintain social cohesion, especially in a nation-state as diverse and large as the United States. *Somebody* has to manipulate levels of abstraction or the system will fall apart. It may be that individual talent for manipulating cognitive dissonance is a fundamental precursor to the accumulation of power and maintenance of social cohesion. This probably includes any type of social organization, including foragers, subsistence horticulturists like the Tzeltal, or post-industrial Americans. This creates what I call the "leader's paradox." The more environmental information conflicts with popular beliefs, the more necessary it is for a leader to promote abstract rhetoric to hold the society together, but the less likely it is that the society will act to correct environmental problems. Also, the more complex a culture is, and the more diverse the beliefs in the population are, the more a leader must

⁴ This was Festinger's (1956) original proposition in his fascinating description of the cult who believed the world would end on a specific day. When the world did not end, the cult leader actually accumulated more power as the members attempted to avoid their cognitive dissonance.

promote abstract concepts like “freedom” or “terror” as in the case of the U.S. Again, it is less likely that such a society will act to correct logical inconsistencies. This proliferation of logical inconsistencies can continue only to a point at which systemic collapse or some major crisis re-organizes the system.

Conclusion

Leon Festinger proposed a theory of cognitive dissonance in which he argued that a person experiences psychological discomfort if two cognitions are equally important but logically inconsistent (Festinger 1956). As a result, the subject seeks new information, or changes behavior, to enhance one of the cognitions or to reduce the importance of the other. More attention should be paid to social processes implied by his theory. Logical inconsistencies arise primarily in discourse or other social interaction, not in an individual’s private thoughts. Much social discourse involves collective strategies to avoid, manipulate or otherwise ameliorate cognitive dissonance that arises through social interaction. A widely-used rhetorical strategy for avoiding logical inconsistencies is to steer the discourse toward more abstract and logically indefensible beliefs. These beliefs are usually widely shared within a culture. An interlocutor is confident that such beliefs will be shared by another member of his or her culture. I have conceptualized political power as the ability to rhetorically steer people away from their cognitive dissonance by invoking abstract beliefs. This produces the benefit of social cohesion, but also creates the potential cost of reducing the ability to react to important information, which preserves maladaptive, lower-level logical inconsistencies. This creates the “leader’s paradox.” In complex pluralistic systems, such as states and modern nations, the proliferation of abstract evasive mechanisms may preclude resolution of logical inconsistencies needed for adaptation to environmental change, eventually leading to systemic collapse.

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