**MAKING SENSE CONSTRUCTIVELY**

Bob Eddy

**MAKING SENSE** is a surprisingly difficult process. It involves the unique structure of the brain and central nervous system, the inventory of meanings we collect, the reality structures we construct throughout our lives, categorization, frames of reference, comparisons, generations, geographic locales, occupations, and many other subtleties. This paper discusses those hurdles to successful sense-making and concludes with some simple but actionable tips for increasing the odds of sharing the same sense with one’s communications partners.

We’ll start with the following definitions.

**MAKING**: constructing, assembling, putting together;

**SENSE**: meaningfulness, logic, understanding;

**CONSTRUCTIVELY**: 1. positively, helpfully; 2. per the constructivist worldview;

**CONSTRUCTIVIST WORLDVIEW**: The philosophy which holds that, unlike solipsism, there is an independent reality “out there” but, unlike realism, it has no absolutely-known form, so humans construct models of it.

Our focus here is how one human system (speaker/writer) communicates with another human system (listener/reader), and how both parties can contribute to the probability that the receiver will construct a close-to-the-same sense that the sender intended.

Our major assumption is that:
Words don’t mean...PEOPLE mean.

In exploring sense-making we’ll use several models. The models are constructed by humans ... thus they are not the way sense-making really is. They are maps, not territories.

Our first model is of the communications process between two human systems.

**THE COMMUNICATIONS PROCESS**

<table>
<thead>
<tr>
<th>SENDER</th>
<th>RECEIVER</th>
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</thead>
<tbody>
<tr>
<td>1. Selects a medium (sound, sight, touch)</td>
<td>4. Senses (involuntary physical reception)</td>
</tr>
<tr>
<td>2. Selects symbols (“I,” “like,” &amp; “you”)</td>
<td>5. Perceives (the “secretary-to-the-brain” permits awareness)</td>
</tr>
<tr>
<td>3. Transmits (talks, shows, touches)</td>
<td>6. Selects a concept (runs a card sort)</td>
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At each step of the process something can go wrong. In step 1, the sender may select an inappropriate medium, such as talking to a deaf person. In step 2 an inappropriate symbol might be selected, such as touching the receiver in a way that might be received as sexual harassment. At step 3, the sender may speak with a confusing accent.

The receiver is equally susceptible to error. In step 4, the receiver might have a sense problem, such as color blindness, preventing the proper sensation of a colorful pie chart. In step 5, the “secretary-to-the-brain” (actually, the reticular activating system) might “screen the brain’s calls,” preventing perception. And in step 6, the symbols sent by the sender might be interpreted by the receiver in a manner not intended. This misinterpretation is a major cause of breakdowns in sense-making, so we will now explore it further.

We’ll use the model of a “mental card deck of meanings” to drive home the lack of absolute meanings in words. When we were babes, we heard new words and saw how each was used; they became familiar to us. So we began to construct our individual card decks — we ‘wrote’ it and its intended meaning on a card and filed it away in our brains. (This is just an analogy ... there aren’t really cards up there.) Most of the time we wind up with several cards on the same word. Throughout the rest of our lives, when someone talks to us (sends words), we perform a “card sort” in our brain (clickity clickity clickity) on those words and select the cards we think the sender intended. There are two major problems with this process.
First, because we filed away multiple cards on each word, we guess which card the sender intended and often select (clickity clickity clickity) a wrong one. The result can be an argument over what was said: “Why did you do THAT?” That’s not what I told you to do!” “Yes you did.” “I DID NOT!” And the imperfection transforms kind people into liars when, after giving us directions on how to get somewhere, they assure us, “You can’t miss it.”

The second problem involves the receiver not having the sender’s card in his/her deck, resulting in non-understanding. We older folks have had more time to collect cards on words than younger people have. Ask young people who Ramon Navarro was (I have done this many times) and they probably will not know. The nearby gray-haired people will often say, “He was Ben Hur in the silent movies in the 1920s.” Move to the 1930s and ask who Jeanette McDonald was. The youngsters tend not to know, but, again, some oldsters say “Oh, she sang with Nelson Eddy [no known relative of mine] in the movies” and then break into *The Indian Love Call*. One real oldster said, “She sang in the silent movies” (clickity clickity clickity). Then move to the 1940s and ask about Wendell Wilkie, then the 1950s and Adlai Stevenson, then the 1960s and Cat Stevens. Same result.

As you approach the current decades, an interesting phenomenon occurs: the youngsters start to chime in with correct answers, and the oldsters start to say “I dunno!” When we get into the rock bands, rap, and today’s young movie heartthrobs, the older generation has not kept up. They have fewer modern cards: “I don’t know about these youngsters and their unkind rock band names, like *Stompin On Pumpkins*.” No wonder there is a generation gap. Their card decks are different!

We also stumble over geographical card deck differences. Coming from my native California to the east coast, I found myself in a bar in Philadelphia in 1976 ... the bicentennial year. A patron sitting next to me had had too much to drink and was becoming unruly. The bartender said to him, “Buddy, you keep that up and I’m gonna flag you.” I thought that was bicentennially patriotic and waited for the ceremony. I subsequently learned that in Philly “flagged” meant to be cut off from further drinking and/or evicted from the bar. “Ohhhh,” I thought. “That means to be 86ed!” Geographical differences.

Then there are differences in cards between industries, technologies, companies, organizations, occupational specialties, etc. A young accountant in an injection molding company in Idaho has a much different card deck from that of a retired high school drafting teacher in Texas. There are more than six billion people on the planet, and *no two card decks are the same*.

The purists, who believe in absolute meaning as divined from the dictionary,
feel their card decks are the same as God’s. But words don’t mean...PEOPLE mean (clickity clickity clickity). Even when sender and receiver are discussing the same card, they might well miscommunicate because of dissimilar assumptions about category membership.

Disputes over category membership hugely impact sense-making. Every sentence we utter is replete with categories, including this one:

Every | Might there be one sentence that doesn’t fall into this “every” category?

sentence | What constitutes a “sentence”? A phrase? A clause?

we | Does “we” include trained chimps, computers, Martians?

utter | Does “utter” include writing, signing, and singing?

is | Is completely? 100%? 87%?

replete | How much of the sentence must be categories for it to qualify for “replete”?

with | Compared with “without”? Sort of “with”? Mostly “with”?

categories. | What percent of our symbols are “categories”? Is the pound sign (#) a category? Or is category membership in the word “category” a matter of degree?

For example, if the sender calls the receiver “aggressive,” that entails drawing the boundaries of a category along a spectrum of assertiveness, thus:

A problem is, of course, that sender and receiver might draw the boundary lines at different points along the spectrum (which is why even experts disagree on what constitutes aggressive and passive behaviors).

Why do we categorize? According to Lakoff & Johnson, we have to:
“[T]he formation and use of categories is the stuff of experience. It is part of what our bodies and brains are constantly engaged in. We cannot, as some meditative traditions suggest, ‘get beyond’ our categories and have a purely uncategorized and unconceptualized experience. Neural beings cannot do that.”(1)

Categorization can be viewed as the “operating system” hidden behind the brain’s computer screen.

Without categorizing the seamless non-verbal world, we would be mute. But in this simple act of construction, we help to create both 1) our ability to communicate and 2) the source of most of the human race’s problems — disputes over category membership: Did I pass the course or fail? Is Joyce’s Ulysses art or pornography? Is the suspect guilty or innocent? Is a political criticism free speech or sedition? Are the interrogation tactics torture or not? Is a particular act of war offensive or defensive? We construct these unavoidably amorphous categories and then try to make our realities fit the categories — with a shoe horn, if necessary.

Another model we’ll use is that of a reality structure. As we learn words and concepts, we fit them into an ever-growing mental structure which models what we think reality is like. Again because of age, geography, culture, et al, no two people have the same reality structure. One person might model electrons as tiny particles orbiting the atom’s nucleus. Another might model them as waves of probability surrounding the nucleus. The first person might tell the second that an electron is like the Earth orbiting the sun. The second, upon hearing this, might be unable to make sense of the statement because the Earth is not comparable with a probability wave. In order to make sense, we must have similar reality structures — or the willingness to spend time negotiating bridges between different structures. That involves a lot of “What I mean by …” and “What do you mean by ...” and it requires epistemological humility, which is in short supply amongst dogmatic fundamentalists.

When we come upon a new concept, what determines if we will add it to our reality structure? I model this decision’s criteria as form, fit, and function. To what degree does the new concept carry simplicity and beauty (form), mesh well with our previous knowledge (fit), and work for us (function)? So we make sense to one another to the degree with which the sender’s message is installable in the receiver’s reality structure.

Another aspect of “meaning” is that each of us makes sense through comparisons. We compare A to B and find that meaningful.

Karl Weick quoted Upton as saying, “[F]or one thing to be meaningful, ‘you must have three: a thing, a relation, and another thing.”’(2)

Am I a fortunate person? Compared to a homeless person, I certainly am.
Compared to a wealthy, good-looking, athletic, talented genius, I seem most “unfortunate.” \textit{I was unhappy I had no shoes until I met a man who had no feet.} The meaningfulness is in the comparison. As an aphorism states: \textit{Everything is relative.}

In my opinion, that’s why we have created opposites — so that words can be meaningful \textit{by comparison. Tall} would have absolutely no meaning without the existence of \textit{short.} Was Adam handsome? As the lone male in Eden, the question made no sense until other males were produced against whom he could be \textit{compared.} And then he only seemed handsomer or less handsome. You can see that comparisons are not as severe as constructing so-called “traits” in someone by using the IS of predication. As George Carlin said, “The cheetah is not really faster than the turtle. It merely seems that way because the turtle is so slow.”

Mathematics is built upon comparisons that produce meaning. Look at ratios, which are the comparison of numerators with denominators. If one travels 65 miles (numerator) in one hour (denominator), the speed is 65 miles per hour — a meaningful number. Ratios make things \textit{rational.} Meaningful. By comparison.

Communications are also relative to our frames of reference. For example, according to NASA, Neil Armstrong stepped onto the moon on July 20, 1969. According to the British Broadcasting Corporation, he did so a day later — on July 21, 1969 — because it was after midnight in England. What the hell is the \textit{real} date on the moon? The question makes no sense because the concept of a “date” refers to the reference frame of the earth rotating about its axis, not the moon orbiting the earth. I’m not even going to address what \textit{time} it is on the moon. That question could drive one to drink.

So there you have it. Making sense is a difficult business, subject to: sensation barriers; perceptually tuning each other out; differing card decks; fuzzy categories; differing reality structures; so-called “traits” being relative. The human system being what it is, it’s amazing to me that anyone ever makes sense with anyone else. How do we? Well, we’ve worked out some practical methods of getting around our built-in imperfections. From that “bag of tricks” I recommend these:

\textbf{ASK FOR FEEDBACK WHEN YOU’RE A SENDER}

Don’t ask “Do you understand?” That’s the same as asking “Do you have the gray matter to comprehend what I’m saying?” It’s demeaning. Instead, put the responsibility for potential miscommunication directly on your own shoulders (putting the receiver at ease) and say something like:

1. “I’m not sure I’m communicating clearly.” and/or
2. “Would you \textit{help} me by restating my message in your own words?”

They will. People love to help sincere, imperfect folks.
VOLUNTEER FEEDBACK WHEN YOU’RE A RECEIVER

Sometimes when we aren’t understanding what senders are saying, we don’t want to admit it because it might impugn our intelligence. So we go to Plan B: smile and nod so we look like we’re understanding, hoping the meaning will become clear later. Don’t! Instead say something like:

1. “Hold on a minute. I’m not sure I’m understanding.” and/or
2. “By ‘stop sign’ do you mean the red/yellow/green-lighted sign or the red metal octagon?”

People won’t think you’re ignorant. They’ll think you’re a good communicator.

NEGOTIATE MEANING

Accept the fact that:

1. Everyone’s card deck is different from yours, and that’s okay;
2. No one’s card deck is right or wrong, just different; words don’t mean ... people mean!

Clarifying a message up front through negotiation will take you a little extra time, but it will amount to far less than the time you’ll devote to damage control after a miscommunication has dealt its blow.

That’s what I have to say. Make sense to you?

NOTES

1. George Lakoff and Mark Johnson, Philosophy in the Flesh, 1999, p.19; for excellent treatments of categorization see the rest of this book and George Lakoff, Women, Fire, and Dangerous Things, 1999
2. Karl Weick, Sensemaking in Organizations, 1995, p.110