

Remembering a Message From Mary Catherine

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In August 2011, the American Society for Cybernetics recognized the many contributions of Mary Catherine Bateson to the field of cybernetics by awarding her the Norbert Wiener Medal. Mary Catherine could not attend the meeting for health reasons, though she did send a letter accepting the award and offering a warning and a challenge to the cybernetics community. The authors were both there and now, ten years later, reflect on that letter and its message.

Key words: Whole systems, interconnectedness, violations of communication, conversation, participation, performance, interactor.

Introduction

We, the authors, unable to get together in person to discuss the letter that Mary Catherine Bateson sent to the American Society for Cybernetics (ASC) in 2011, decided to exchange questions, comments, interpretations, extensions and other reflections via emails, with occasional phone calls to help clarify our thoughts. What follows is an edited version of that exchange. Suffice it to say that Mary Catherine's letter provided much more material for us to explore than we had originally anticipated. Jude's initiating thoughts are presented first, followed by the letter and then our reflections. Because we mention a few well-known cyberneticians in our exchange, we include a final section with some notes on each and our personal connections to them.

Jude Lombardi: Mary Catherine was a lifelong contributor to cybernetic ideas and, for many decades, a presenter at the American Society for Cybernetics (ASC) conferences. For me, she was influential in the ASC shifting its focus away from objects, goals, purpose and papers toward rhythms, processes, performance and conversation. Her involvement in systems thinking and cybernetics, particularly her involvement in the ASC, were part of her cultural upbringing since her father, Gregory Bateson, and mother, Margaret Mead, were both key participants in the development of first and second cybernetics.

First cybernetics is about... control, communication, goals and purpose.

Second cybernetics is about... autonomy, conversation, processes and presence.

I first met Mary Catherine Bateson in 1993 at the ASC conference in Philadelphia, Pennsylvania. Over the decades I had the opportunity to interact with Mary Catherine

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on many occasions. Our paths often crossed at ASC meetings where we would share a meal and catch-up. She was always willing to share her calm, pausing before speaking, presentation of self. I will miss her presence.

It is an honor to coauthor this report about Mary Catherine with my dear friend and colleague Larry Richards. I am reminded of another cybernetic colleague Annetta Pedretti who once said it's not about answers—it's about what the next question(s) will be. So, I will reminisce about Mary Catherine with Larry Richards by asking him several questions that arise for me when thinking and writing about Mary Catherine and her messages to the ASC, and cybernetic communities worldwide.

In this paper, I will focus on her written message in 2011, to the ASC membership in response to receiving the Norbert Wiener Medal for her outstanding contributions to the field of cybernetics. In her letter she emphatically suggests possible necessities for meeting the need for a radical shift in our thinking (epistemology) and doing (performance) if we are not only to thrive but survive as species on the earth that we—and the other living creatures—are dependent on. After all, as she says in her letter, who else is going to do it?

Letter from Mary Catherine Bateson, ASC 2011

To my colleagues at the American Society for Cybernetics.

I write to express my regret at not being present to receive the Norbert Wiener medal with which you are honoring me, to express my gratitude, and to convey briefly what I would be saying if I were present, emphasizing the contribution that I believe the ASC can and should make.

Many of you will have read the essay by my father, Gregory Bateson, called "From Versailles to Cybernetics," in which he traces much of the madness of the 20th century, still ongoing, to violations of communication. He ends by declaring that there is "...latent within cybernetics the means of achieving a new and perhaps more human outlook, a means of changing our philosophy of control and a means of seeing our own follies in wider perspective." This hope rests on the potential offered by cybernetics for thinking in terms of whole systems rather than in terms of separate and competing interests and specializations, a potential that must be explored and expressed.

We are at a time of great danger, when the planetary cycles on which life depends and the long term patterns of climate are being severely disrupted. Meeting this danger and the humanitarian disasters that lie ahead requires a whole new order of cooperation. Yet researchers in the earth systems sciences have limited understanding of social systems, while some politicians deny what is happening, and non-specialists around the world simply do not recognize the larger picture. One day of cool weather leads to comments like, "See, the climate isn't changing after all." At the same time, the danger is amplified by an ideology that idealizes competition and accepts deception as a means to winning. Human beings do not always behave well when they believe that their "share of the pie" may be reduced, and modern weapons can turn the habit of zero-sum thinking into a lose-lose outcome for the entire planet.

Most of us understand this, but we need to remember how rare it is to participate in an intellectual community like this one, in which, for example, the acidity of the oceans, the instability of financial institutions, the rise of fundamentalism, and the increase in diabetes can be seen as examples of similar processes—and as possibly coupled. Most of us work within the framework of academic conventions that constrain scientists and scholars to keep such questions separate. Do we understand that in achieving new kinds of control we must bring all of our knowledge about communication and decision making to bear? Who else is going to do it?

I applaud your experiments with new formats for integrative discussion at this conference. It may be that the intellectual structure of cybernetics requires a new kind of communication that will make a new kind of listening possible, listening that carries the awareness of being part of a larger whole. If so, it must go beyond this small community. My hope is that all of us will resolve to carry our study of systems and cybernetics into our engagement with society, speaking out and strengthening exchanges with other fields and with the public, learning to think and then act to achieve the shared understanding and shared willingness to change so urgently needed. We need to be vocal and political. Somehow we must transform our shared understandings into a new kind of common sense.

Reflections

Jude: Larry, In the context of Mary Catherine’s letter to the ASC, accepting the ASC’s Norbert Wiener Medal in 2011, how is a focus on conversation relevant?

Larry Richards: I didn’t get many chances to talk with Mary Catherine, although I did observe her presence and interaction with others at ASC meetings. Ranulph Glanville, then President of the ASC, did ask if I would read her letter at the 2011 ASC conference. Mary Catherine could not attend in person but wanted to express her appreciation for the award and take advantage of the opportunity to issue a warning to cyberneticians and systems theorists. It was my honor to read the letter.

Mary Catherine knew Gordon Pask; he was one of the attendees at the meeting on “Effects of Conscious Purpose on Human Adaptation” that she chronicled in her book, *Our Own Metaphor* (Bateson, 1991). While she may not have studied Gordon’s conversation theory, she definitely interacted with others as though conversation was distinct from the common conception of communication. In conversation, there is a back and forth between two or more participants, each seeking to understand the other, explore their disagreements and possibly create new perspectives that none, by themselves, would have come to. In the common conception of communication, participants assume they already understand each other and agree on desired outcomes of their communication. In the cybernetic version of conversation, participants accept their differences (asynchronicities) as opportunities for creating the new (moving toward synchronicity). The value of conversation is as much, if not more, in the interaction itself as in any possible outcomes. Mary Catherine clearly placed high value on this form of interaction, regarding it as essential for addressing the complex, interconnected issues that we face as humans.

Jude: So, when in conversation, the autonomy of any respondent renders participants unpredictable in their responses and is relevant for any interactor.

I remember in her letter, Mary Catherine emphasized our need for remembering how rare it is to participate in an intellectual community like the ASC, a society in which “the acidity of the oceans, the instability of financial institutions, the rise of fundamentalism, and the increase in diabetes can be seen as examples of similar processes—and as possibly coupled.”

When Mary Catherine talks about the existential issues facing humankind as possibly coupled, why does she suggest that cybernetics and systems theory might be useful, even necessary, for addressing the *whole*?

Larry: Mary Catherine would often speak of the interconnectedness of the various issues that threaten the well-being, if not survival, of humanity—issues like global warming/climate change, extreme inequality, terrorism and war, global health issues (e.g., diabetes, pandemics), environmental degradation, and so forth. When she says these issues are coupled, she is invoking a cybernetic idea. Early in modern cybernetics (1943-present), the idea that systems treated as separate could be connected (coupled) to other systems through a causal relation between single variables in each system presented a problem for traditional scientific thinking. In the biological and social sciences, the conditions of separability, assumed in the physical sciences, did not necessarily apply. Either the systems had to be expanded to try to encompass the whole, or the conditions under which separability could be reasonably assumed had to be identified and adhered to when drawing conclusions. This led to the idea of *whole systems theory*, where every system is assumed to be incorporated in larger systems, and the larger the systems we formulate and model, the more likely we are to address what otherwise would be unanticipated consequences. However, this relational and wholistic approach to coupling is not the only way of thinking about the interconnectedness of all things. Issues and systems can be dynamically connected. That is, a change in one system can potentially trigger a change in another system. This is not a causal connection, as the change does not result in a specific, hypothetically predictable change in the other system; it rather perturbs the other system in a way that taps its potential to respond, but not in a predictable way, even hypothetically. When we say that living (autonomous) systems are structurally coupled, we are saying that there is a pattern of dynamics in the interactions between/among them. This is also a way of thinking about the human phenomenon of conversation, as opposed to communication.

Jude: In this context, communication is causal and conversation dynamic. So, in conversation the focus is on processes and presence rather than purpose and progress.

In her acceptance letter, Mary Catherine reminds us of her father's essay, "From Versailles to Cybernetics," writing about how he spoke of the problems and disasters we faced then and, as she points out, now (population, climate and the occidental ideas of man). Echoing her father's essay, she suggests that many of these problems stem from our violation of communication.³

What is the "violation of communication" discussed by Gregory Bateson in his paper "From Versailles to Cybernetics"?

Larry: In "From Versailles to Cybernetics," Gregory Bateson (2000) identified what were to him the two most historically important events to have occurred in the 20th century at the time he gave the lecture (1966)—the circumstances surrounding the preparation of the Treaty of Versailles (1921) and the Josiah Macy, Jr., Foundation meetings on cybernetics (1946-1953). Both events, he claimed, changed the

3. Mary Catherine suggests a need for a new kind of communication, one nested in forms of listening that include an awareness of each one's participation in all that we do.

underlying epistemological basis for acting in the world—the former leading to potentially disastrous results for the world and the latter offering a new way of thinking about possibilities for a more sustainable world. The preparation of the Treaty of Versailles, bringing an end to World War I, introduced deception as an acceptable form of behavior in negotiations among adversarial nation-states. Bateson traces the circumstances that led to World War II to this Treaty, as well as to a way of thinking that the most acceptable ending to a war is complete annihilation of the enemy (which we saw at the end of WWII in both Germany and Japan). Whereas communication that would lead to a treaty had previously assumed that the participants could rely on statements made and offers tendered, the reversal of such statements and offers that characterized the proceedings surrounding the Treaty of Versailles represented a violation of the understood rules of communication.

Jude: So, in this context, communication is violence. Herbert Brün said: “Insistence on communication ultimately leads to social and physical violence” (Brün, 2004, p. 289).

Our situation in Afghanistan reflects our still being stuck in communicating rather than conversing.

Larry: ... and still relying on deception to **win** at all costs, which Mary Catherine referred to as an example of a common sense idea that is problematic.

Jude: What about the other event to which Gregory refers, the Macy conferences on cybernetics?

Larry: The Macy Conferences on cybernetics, on the other hand, offered an alternative epistemology, a way of thinking and knowing and a set of values that recognized that world problems are interconnected and that those interconnections embed circularities and processes whose complexity surpasses our individual capabilities to address them. That is, there are ways of acting in the world that recognize, as Mary Catherine points out in her letter, that we humans and our systems are part of wholes much greater than ourselves, complexities that our traditional ways of thinking cannot adequately address. The cybernetic alternative may not give us the certainty that we have come to think is possible and to demand—that is, there are no guarantees; however, the alternative may provide humanity with its best chance for survival, at least for a longer period of time.

Jude: I remember Humberto Maturana questioning the use of the term *wholeness* (holism) as relevant when thinking cybernetically.

How do you think Mary Catherine would bring together the cybernetic ideas of interconnectedness, conversation, and participation?

Larry: When Mary Catherine talked about systems being a part of a larger whole, I don't think she was suggesting that we should expand the models we use to address world issues until they include everything possible. This is a hierarchical approach to the problem—systems within systems, within systems, and so forth. And, systems that include everything distinguish nothing. Rather, I think she was pointing to the fact that we often erroneously assume we can know enough to solve these interconnected problems, as though we are outside of them. In other words, we need to think,

individually and collectively, that we must include ourselves in our formulations of the systems we are addressing and recognize that there is always a larger whole that we cannot fully comprehend. So, an alternative to thinking in terms of whole systems as systems within systems is to think in terms of the patterns of dynamics in the interactions among systems, among observers, and between observers and their systems—that is, in terms of processes. If our actions are to be in the interests of humanity, these processes must be participative. The more perspectives and insights that can be brought to bear on the issues of concern, the more likely are approaches to those issues to be robust. Participation implies that people are aware that they make a difference, even if they do not know and cannot trace the difference made on specific outcomes. Cybernetics provides a way of thinking that supports this assertion, with conversation being the process through which participation can occur. This view of participation suggests that people do not need to be in positions of power and influence to make a difference. They can make a difference through the dynamics of interaction generated through a network of conversations. The cybernetic epistemology that supports this view is a participative and emancipatory one. Rather than thinking in terms of specific goals, think in terms of desirable processes. Participating in desirable processes is more likely to produce desirable outcomes than specifying the outcomes first and then trying to achieve them. There is, of course, much more to think and talk about: that's the process.

Jude: Yes, processes, rhythms, and presence (Pedretti, 1993).

When you speak of desires it reminds me of the Desires Exercise as described in Manni Brün's little book *Designing Society* (1985).

One last question for now: What about performance?

Larry: The composer and cybernetician Herbert Brün spoke of performance as: "Sharing your presence; conveying your thought and your intention; carrying your messages so that they reach out the way you want" (Brün, 2003, #118, p. 6). So, performing is acting with intent, being in the present, with thought and awareness of our desires and possible consequences. Performance is not about pretending to be someone I am not; to the contrary, it is about becoming a thinking, caring person who takes responsibility for my actions. When Mary Catherine spoke about a needed shift in our thinking and acting, I speculate that she may have been speaking of turning our actions, including our behaviors in conversations, into performances. An important role for performance in society is to provoke conversation. An action undertaken as a performance not only has consequences for the target of the action but also has consequences for the conversations it provokes. It does the latter through the particular dynamics of the performance, not only through the causal intentions of the actor. I contend that paying attention to the dynamics of our actions and (especially) interactions is a derivative of cybernetic thinking. When speaking, paying attention to dynamics involves treating rhythm, speed, volume, pitch, emphasis, pivots, pauses, and so forth, with intent. I would also argue for the cybernetic version of intention as an awareness of our desires as constraints on the processes (and actions) in which we engage (in the present), rather than as goals or objectives to be achieved (in the

future). This is, obviously, more than a simple shift in thinking; it is a fundamental shift in our language and the way we interact with each other. Perhaps, this is why Mary Catherine targeted cybernetics and systems theory for her remarks.

Jude: I would say it requires a fundamental shift in our languaging which entails all that we say and do. Alas a provocation for another time.

Thanks Larry, for this almost conversation.

May Mary Catherine Bateson live on in languaging for decades to come.

Bee well.

Larry: Thank you, Jude. It is always a pleasure, and my best to your bees—we need them!

Some Notes on Cyberneticians Mentioned

- Gregory Bateson was among the original participants in the Macy meetings on cybernetics in the 1940s and 1950s. His contributions to cybernetics, systems thinking, mind, culture, power, psychosis, and research methods have influenced many of us.
- Margaret Mead, well-known as an anthropologist, was also present at the Macy meetings on cybernetics. Heinz von Foerster credits her with instigating what he would call second-order cybernetics through her paper, “The Cybernetics of Cybernetics” (1968). Mary Catherine wrote about her parents in *With a Daughter’s Eye* (1984).
- Annetta Pedretti was a student of Gordon Pask at the Architectural Association in London. Language was a central theme of her work and writings. Her unique approach to publishing (Princelet Editions) and participating in ASC conferences produced insightful interactions for both of us.
- Ranulph Glanville, also a student of Gordon Pask at the Architectural Association, served as President of the ASC for six years until his death in December 2014. He is often credited with connecting, in a deliberate way, design and the design community to cybernetics and the cybernetics community.
- Gordon Pask is especially well-known for his development of conversation theory. Through his influence, many now consider cybernetics to be enacted in conversation. Larry regards him as one of his mentors in cybernetics and conversation, along with Herbert Brün and his first teacher and mentor in cybernetics, Klaus Krippendorff.
- Herbert Brün, composer, graphic artist, pioneer with computers in art and music, participated in Heinz von Foerster’s Biological Computer Lab and Heinz’s course on *Cybernetics of Cybernetics* (1995) at the University of Illinois. He was a member of Jude’s doctoral committee and mentor in cybernetics for both of us over many years.
- Humberto Maturana, biologist and cognitive scientist, also spent time at the Biological Computer Lab at the University of Illinois. It was during this time that he, Francisco Varela, and Ricardo Uribe developed their seminal concept of

autopoiesis. He was also a member of Jude's doctoral committee. His ideas on the biology of language, languaging, cognition, and love have influenced us profoundly as well as many others in and out of cybernetics.

- Marianne Brün taught a course at the University of Illinois that morphed into the Princelet Editions book, *Designing Society*. The course became the inspiration for the School for Designing a Society, that began in 1992 and continues in various forms to this day. Both of us have participated often in this school, and the impact of Manni's presence cannot be overestimated.

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