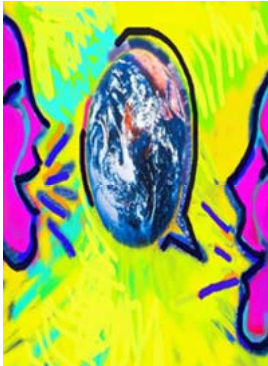


**NOTE:** *The evolution of CORPTALK involved many energetic and inspiring conversations with my dear friend, collaborator, teacher and mentor, Dr. John (Jay) Mince. Over the years, Jay and I joined efforts to transfer the principles of social constructionism and therapeutic dialogue – communication – into the corporate culture. Often our conversations would take on a life of their own and over time, we learned to trust these meanderings as actual examples of what it was we most wanted to engender through our work with those in industry. Interdependence, variation or diversification and self-organization -- the underlying principles of systems theory -- provide the architecture for recognizing conversation as a living system. Following is just one example of a thought process, a riff of sorts, conducted through our conversations and correspondence. It draws on Jay's explorations and teaching about "living scripts" and represents an investigation, and, an invitation to re-vision our work within the business world.*

– Maria Seddio, CORPTALK

## The Biology of Business

### **CORPORATE EVOLUTION OR DEVOLUTION: Parasites, Sex and Scripts in Corporations** by John Mince, PhD and Maria Seddio



**A word is dead  
When it is said,  
Some say.  
I say it just  
Begins to live  
That day.**

**Emily Dickinson**

Biology and business. The two are synonymous in that each encompasses a living process dependent on a series of underlying structures or principles for its development. For example: in biology, the study of life, chromosomes are coded to express themselves and it is only through their intricate interrelations with their environment and other chromosomes that they evolve. In business, a living organic process, it is the people, individuals with varying degrees of ability, talent, expertise and

mutual goals, who through a series of interactions and the exchange of information within their environment, are able to develop and achieve success. Both require communication and coordination. Whether in science or business, information is crucial.

We have recently begun to examine the ways in which the flow of information determines the viability and resiliency of a particular business. Let's consider what

Gregory Bateson, regarded as one of the great thinkers of the 20<sup>th</sup> century, termed "News of a difference." According to Bateson, "News of a difference," is any "difference that makes a difference."

***"I suggest to you, now, that the word "idea," in its most elementary sense, is synonymous with "difference..." In fact, what we mean by information – the elementary unit of information – is a difference that makes a difference..."***

***Bateson – Steps to an Ecology of Mind***

**“Thought is not merely expressed in words; it comes into existence through them. Every thought tends to connect something with something else, to establish a relation between things. Every thought moves, grows and develops, fulfills a function, solves a problem.”**

**Vygotsky – *Thought and Language***

How quickly do we access and assimilate new information? How often do we create and disseminate new ideas, products and applications? “News of a difference” applies to novelty, diversity and communication. It is a dance of distinctions -- ongoing reverberations of messages being sent and messages being received and the arena within which meaning-making takes place. It is the basic building block of evolution and the way in which we learn.

“News of a difference” can result in an advantage for those in organizations and elsewhere including science astute enough to note, decode, and translate it into meaningful action. Okay, fine -- but what do parasites, sex and scripts have to do with the corporate world and each other? First, let us examine our working as-

sumptions. It is this framework that enables our discussion and contributes to our understanding of biology and communication. We see language and experience as co-dependent. Each tends to construct the other in ongoing play that is both iterative and improvisational.

**“Thought is not merely expressed in words; it comes into existence through them. Every thought tends to connect something with something else, to establish a relation between things. Every thought moves, grows and develops, fulfills a function, solves a problem.”**

**Vygotsky – *Thought and Language***

The result of this is nothing less than what we come to know, what we believe is real. The metaphors we choose help to determine the realities we experience. Corporations have been in the process of re-invention for years now - reorganizing, learning,

growing, expanding and/or downsizing – evolving in ways so that they can survive and thrive in an ever-changing environment. Shifting the metaphors through which we describe business practices, and corporations in particular, enables us to deal with upcoming challenges in healthy and productive ways.

**“Any organizational change that requires people to reconceive the situation they face will require a change in the underlying and usually unexamined metaphors... The creative and constructive use of symbolic language systems is a critical leadership competency, especially during organizational change.... To ignore this aspect of change is to jeopardize the whole change effort.”**

**Robert Marshak – *Managing the Metaphors of Change***

Within the last decade, a wide range of business leaders and writers have used concepts drawn from the advances in the sciences -- physics, biology and anthropology -- to bring 'systems thinking' into corporate settings. Organic metaphors remind us that the whole is greater than the sum of its parts and that no parts are isolated. For example, every part of our body is dependent in specific ways on the overall set of interactions known as metabolism, respiration, circulation, etc. Together, the various components comprise the whole body that enables life. Living systems are designed to maintain the sets of relationships that hold components together in a coherent whole. Life produces life while creating environments to ensure its reproduction, over and over again.

*“Life is in motion, “becoming becoming.” The motions of life swirl inward to the creating of self and outward to the creating of the world. We turn inward to bring forth a self. Then the self extends outward, seeking others, joining together. Systems arise. Extension and desire or-*

*ganize into complex and meaningful forms.... Life takes form from such ceaseless motions. But the motions of life have direction. Life moves toward life. We seek for connection and restore the world to wholeness.”*

**Wheatley and Kellner-Rogers –  
A Simpler Way**

Let's consider the parallels. In business, the corporation is not unlike the body and while it is a social rather than a cellular structure, it may be viewed, at least metaphorically in its operation, as a biological body. There are many parts within an organization – finance, R&D (research and development), manufacturing, marketing, sales, etc. – all of which interact with each other. The sum of these interactions is responsible for maintaining the structure that keeps the business healthy, relevant and moving with the times. It is, therefore, incumbent upon the organization as a living entity to do all it can to ensure the robust growth of the corporation through the effective maintenance of all its components. To remain a living, viable enterprise, it is also im-

portant for the organization, not unlike the body, to create the kind of environment that maximizes its potential to survive. Such maximization ensures the sustainability of the enterprise during unexpected and/or external changes. Thus, a living organism has the dual problem of seeking 'fit' with the outside environment while simultaneously satisfying the need to maintain its internal set of relations among component parts.

Viewed through this lens, “survival of the fittest” takes on new meaning. *Survival of the fittest* has nothing to do with power or takeovers. The capacity for living systems to survive is based on their ability to cohere with their environments, rather than conquer or dominate them. This is one of the most misunderstood of all evolutionary notions. Survival has everything to do with the fit between organism and environment. It requires a dialogue of sorts to ensure reciprocity. Thus survival has everything to do with relationship and communication.

The analogy between the corporate body (i.e., “the corporation”) and the biological body is pretty clear-cut and straightforward and encourages this shift from a mechanistic, deterministic model for business to an organic, systemic model for business. What does it mean to make this shift? Again, how is it that the corporation goes about its business of being a living entity and how does it fit with its (often changing) environment? Here again we can look to explorations in the new sciences to enable our thinking. Social constructivists and social constructionists view language and biology as intertwined. Humans are fundamentally bio-linguistic systems -- you cannot separate out the ability to communicate (or language) from the phenomenon of being alive. Can we extend the biological metaphor to include our emphasis on language? Certainly, we can.

Can we understand corporations as bio-linguistic systems and does it make sense to do so? Certainly it does. A corporation, after all, is a rather

tightly knit social system. It is the next level out, a meta-level shift from the purely biological to the social. Social systems are produced by biological organisms who believe that the invention of the social system greatly enhances their ability to thrive and fit with their environment. From a biological standpoint, it was almost inevitable that organisms would have evolved social systems within which they could far more easily and efficiently find food, safety, comfort and the opportunity to reproduce. From a social standpoint, it is precisely the ‘social corridor’ -- the realm of interaction and interdependence -- that enables biology. Social systems rely on communication to coordinate their efforts. In addition, social systems are formed as a result of their communications. It is through this aspect of communication that identity formation occurs. Every corporation operates daily using the intricacies of our linguistic systems to coordinate its actions and evolve its sense of identity or culture.

We can scarcely imagine a

corporation running at all if it were not able to utilize the symbolic interaction system we refer to as “linguaging.” Linguaging is not something that we do, something that can be separated out or categorized – it is not just talking or transferring ideas or information or communicating, although all of these are involved. Linguaging represents a life process and a totality of being, hence, we can say that we “be”, “or exist”, in language.

***“Despite the fact that individuals speak and gesture, we must break away from the time-honored practice of explaining cognition primarily as something that individuals do in their heads. Instead, our attention must shift to the communal organization in which symbolic functions arise and without which language could not, and would not, have come into being. Linguaging requires the possession of a highly developed nervous system – there is no doubt about that – but it also requires the intimate communal contact that permits complex patterns of living to evolve and to be passed on from generation to generation. That is why Maturana argues that language, as a biological phenomenon, does not take place primarily in the head, but rather in the community.”***

**Efran, Lukens & Lukens, *Lan-***

Why do corporations fail? Perhaps they fail because of mismanagement, because they have not kept up with market demands, because they have lost to a more efficient or productive corporation or because they have become trapped in an evolutionary niche and have stopped evolving. As a matter of fact, we could say that each of these possible reasons for failure is encapsulated within the last. Corporations fail because they have stopped evolving and have become trapped in an evolutionary niche.

We often see companies dissolve as a result of their sticking with a strategy that helped them to succeed early on but which no longer reflects current changes within the business environment. The corporation becomes so comfortable, so self-involved in how it achieved a particular niche that it becomes blind to the changes that are taking place around it, relying

solely on the niche to sustain it. In effect, it fails to note, decode and act upon important information or “news of a difference,” thereby losing its relevance in the marketplace. Often these companies are deeply invested, both financially and emotionally, in behaviors that impede their learning and progress. It may be that no one has the courage to call attention to the need for change, or that those who have spoken openly have been ignored or peripheralized, or that the business is so embedded in the niche that no one is noticing the changes taking place outside. Remember the “News of a difference.”

Failure to recognize change causes the corporation to lose its ability (its awareness, intention, ethics) to maintain its relationship within the marketplace (or with its suppliers, workers, etc.). Once the relationship that enabled the corporation to connect, interact, respond and grow is lost, the business becomes fundamentally changed. (A corporation outside the fit of its relationship with its marketplace is literally not the same

corporation it had been while it was in the relationship.)

Some corporations work very hard and achieve pre-eminence in some market niche. This can sometimes result in a false sense of confidence that the future is assured. But even pre-eminence in the market does not ensure future success or permanence because, truth be told, no organism can tell the future. In biology, this is called the impossibility of teleology. No organism can know precisely how it may have to adapt to survive in the future in an environment where conditions have changed. So even a healthy, wealthy, robust corporation cannot predict the course of future circumstances. The rules of the impossibility of teleology still hold even for bio-linguistic systems. Although here, the linguistic aspect may provide us with an advantage. Indeed, languaging can create futures!

***“The past is included, but the future remains uncertain.... That is the meaning of the arrow of time.... Time flows in a single direction from past to future.... Intrinsic irreversibility is the strongest property: it implies randomness and instability.”***

***The past is included, but the future remains uncertain.... That is the meaning of the arrow of time.... Time flows in a single direction from past to future...***

***Intrinsic irreversibility is the strongest property: it implies randomness and instability.***

Ilya Prigogine  
and Isabella  
Stenger

**Ilya Prigogine and Isabella Stenger**

It is in language that we imagine, conjecture and plan for what might be and it is precisely in that imagining, conjecturing and planning that we engage in living and we “become,” as we react and respond to what emerges in language. In effect, the language we use (a combination of words, symbols, signifiers, tone, tempo) and the conversations (the interactive, iterative languaging events) we engage in with ourselves and others can either engender or foreclose any particular future. The power and possibility of this premise lies in our ability to foster conversations of health, inclusion and sustainability.

**What needs to be considered?**

Future... past.... Present: the conundrum of time. Time and living systems are so intertwined that it is almost impossible to speak sensibly of a living system without referring to time.

The very growth of every organism can be measured over time. The life-span or ontogeny of an organism is its development throughout its life. Evolution is the term we use to look at the development of the entire spectrum of living things over hundreds of millions of years. We are steeped in time and yet we often lament the lack of it. Corporations are not much different. As social systems which are necessary for the care and maintenance of organisms, e.g., you and me, they provide sustenance, activities, goals, money and last but not least, meaning. This is where the corporation as a human institution becomes involved with the concept of scripts and where our ability to conceptualize conversations as living systems and conversation, as a core business process, deepens our understanding of how organizations function and thrive.

Organizations function and thrive when they create meaning for people and creating meaning takes place in language.

The renowned evolutionary biologist, Richard Dawkins introduced the concept of ‘memes,’ as ideas, concepts and practices that are passed down through a culture through imitation or replication. “Memes” function much like genes, their biological counterparts, in that they enable and inform the experience of the organism. Different genes produce different organisms through replication and different “memes” produce different cultures through imitation, the close to but not exact copying of symbols, gestures and sounds.

***“This is the power behind the idea of memes. To start to think memetically we have to make a giant flip in our minds just as biologists had to do when taking on the idea of the selfish gene. Instead of thinking of our ideas as our own creations, and as working for us, we have to think of them as autonomous selfish memes, working only to get themselves copied. We humans, because of our powers of imitation, have become just the physical “hosts” needed for the memes to get around.”***

**Susan Blackmore – *The Meme Machine***

Similarly, scripts may be viewed as sets of pre-written or pre-determined actions, positions, statements, interactions and sets of beliefs which are replicated -- passed down over time by an intricate and complex system of signals and stories. As these signals and stories are passed down they ensure that the next generation will have at least what the past generation had already figured out in order to increase the chances of survival for future organisms. Thus, we can view scripts as the vehicles or mechanism through which 'memes' are transmitted from one generation to another and the way in which cultures take hold. Liberally speaking. Scripts are not unlike formalized messages which move forward over time both within and between organisms. We can see how scripts in linguistic form are passed on from generation to generation among people.

Each parent generation seeks to pass on the information and patterns of information which will help the future generation survive and thrive. The impossibility of teleology, however, means that no parent generation ever gets it completely right because even though it passes on its best scripts, it cannot know which will be the most useful in the future. Scripts come to us in many forms. They come as biological messages, as messages built into our society over many, many years and as messages passed on to us by our parents and grandparents. We are truly born into the world not as a blank slate or 'tabula rasa' but rather as part of our parents' scripts -- and the social, cultural, familial scripts within which they are embedded. In addition, we are never fully aware of all the scripts that may be operating upon us at any one given time.

Since we dwell in a seething sea of messages: TV, radio, newspaper, family, marriage,

office workers, CEO's, managers, government, church, etc., we can never be completely sure to which scripts we may be responding in any given moment. Thank goodness, we have this "built-in amnesia" which allows us to focus long enough in our day-to-day world so that we can concentrate and coordinate our actions fairly successfully. Otherwise, we would experience a perpetual bombardment of contradictory scripts that would disable our ability to act with any sense of clarity and confidence. Holding multiple and contradictory scripts in any conscious or useful way is not for the faint of heart. We tend to organize our actions according to the 'dominant' script that governs our experience. It is simply too difficult to manage multiple and competing scripts at the same time for long periods. The philosopher Immanuel Kant's notion of 'indolent reasoning' describes this possibly hard-wired inclination to opt for single rather than multiple and/or contradictory explanations.

Yet, even as we do this, are we not dimly aware that we are not attending or perhaps just partially attending to an entire host of alternate scripts which are working on us? This multiplicity of scripts is one of the things that makes life in the 21<sup>st</sup> century as complicated as it is even as we seek to live our lives in some coherent and meaningful way. Now, it is one thing to become aware of these scripts but quite another to begin questioning which scripts are helpful to us and which may be harmful in some way. Which scripts are promoting our lives – our trust, our energy, our creativity; and which scripts may be causing doubt, illness and confusion? If one conceives of human scripts as having a life of their own, as being part of our bio-social makeup, one can begin to reference them in a new way. When we think of scripts as having the characteristics of living systems – interdependence, diversification and self-organization – we envision ourselves and our organizations differently.

Deepening the metaphor of script as a living system, we consider what other kinds of life-forms we have dwelling within us. For example, there are ancient forms we now call mitochondria. According to evolutionists, the mitochondria of our cells may once have been external invaders which then became permanent residents within our cells. As such they became incorporated into the internal workings of the cell and are now not only functional but actually necessary to our survival. Here's an interesting twist. The idea that some life-form which had once been invasive could be transformed into a useful, functional and necessary – even intrinsic – component of life itself. If we consider again the notion of the scripts in our lives having become embedded within us over millennia, then might we draw a parallel here? If some of the scripts we are born into are actually perpetually embedded and useful in important ways, there may be others that are no longer useful and may be keeping us from thriving and realizing our full potential.

Scripts that have either outlasted their usefulness or been corrupted into harmful behaviors and/or belief systems hang on tenaciously in many forms. They are expressed and experienced in different ways and at various social levels. “Kill or be killed” at the geo-political level, “survival of the fittest” at the business or corporate level, “not in my backyard” at the community level and “me first,” on the personal level. Therapists work closely with people who struggle to relieve themselves of some set of scripts that are no longer useful or productive for them. The anorectic whose original attempt to be thin and fit into a cultural norm becomes imprisoned in a set of rigidly prescribed scripts which now threaten her very life, positioning her as an outcast and excluding her from participating in the culture to which she had so aspired. Parents who, in seeking to shield their child from harm, may disable the offspring's ability to protect himself/ herself, exposing the child to greater and more enduring harm.

There are many scripts that undermine that which they seek to serve. But, how does this concept of scripts as either useful or stealthy and dangerous pertain to corporations? We can identify corporations that are somehow able to keep themselves alive, creative, energized, forward-looking and value driven. Too often, we see others that demonstrate the opposite characteristics. They are controlling, overly concerned with the bottom-line to the point of becoming blind or dismantling the organization. They may be rigidly hierarchical or overly focused on measurement, driving nearly all the human potential for meaning from each interaction. These are frightening corporations, and both the employers and the employees who constitute them look and act frightened. The dominant scripts in these organizations are scripts of fear and survival. These dominant scripts can be distilled to their essential form: *if we don't do this... we will not survive*. The employer says... "we must ignore the employee complaints, if we start to listen it

will never end and we will never get any work done." Or he/she rationalizes, "they are all whiners and just looking for excuses." The employee's reaction, "why bother saying anything, nothing is going to change," or "if I am the only one to speak up, I might be fired."

Pernicious scripts have a life of their own and leave no one untouched. They serve as parasites feeding upon management and employees in different but equally destructive ways. No one is left untouched by this parasitic script corruption. Perhaps even worse, these parasitic scripts are not intended by anyone, yet they are hosted by many in the corporation unknowingly. People within such organizations often feel that they need to participate in the script; that the script is so powerful and encompassing that any divergence will result in some severe or negative consequence; e.g., failure, firing, peripheralization, sarcasm. When passed on through the ranks such scripts destroy the spirit, energy, creativity and vision.

It is precisely this depletion that allows them to take such a vigorous and enduring hold. Perverse, constraining scripts can inhabit a corporation leaving the firm in a kind of trance which no one may know how to reverse. This trance is often experienced as the "culture" of the organization – the unwritten rules that dictate behavior.

It is important to note that a script is not a person. It is not the CEO, the president, your boss or an employee. Nor is it group of people; e.g., marketing, sales, finance, etc.. A script can be seen as a parasite, a linguistic message that has attached itself to some set of operations or procedures in such a way that it remains invisible or elusive. Parasites live off their hosts and corporate script parasites live off the people who comprise the corporation. They are embedded messages from long ago, engendered perhaps by a confused leader or an episode in the marketplace or economy. They remain active (alive) until someone finds a way to dispel them. Until then, they can exact a heavy toll on an organization and even cause its undoing.

We have recently witnessed the effects of deeply embedded parasitic scripts on such firms as Worldcom, Tyco and Enron, with greed, self-service and fear emerging as among the dominant factors. If scripts and parasites are all that powerful and if they are capable of going undetected and infiltrating our workplaces in such sublime but catastrophic ways, where lies the hope?

Here comes the real surprise, an opportunity actually. Parasites are not always evil. In a series of intriguing experiments in a major scientific think tank in Santa Fe researchers have discovered that over evolutionary time, those organisms with parasites actually evolved faster than those without them! This may seem counter-intuitive at first. How is it that organisms can benefit by those pernicious, little evil-doer parasites? Well, those organisms that had to fight off their own internal parasites, as well as continue to expend energy adapting to new environments, were by far the most robust –

easily winning niches over those organisms which had no parasites. It seems that there are some by-product effects that benefit those organisms that are under attack by parasites. In effect, they are stimulated toward health. This is good news.

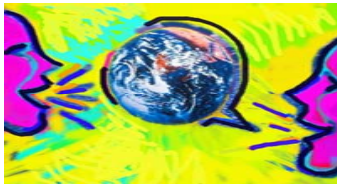
*“Throughout the evolution of earth’s current life-forms, many of the viruses and pathogens that invaded and destroyed host organisms through infecting them or parasitizing them became converted into benevolent forms. This certainly is the case with much of the human immune system. The immune system can be seen as an entire array of different organisms that originally may have been problems for the human body, but that over time became incorporated into the human biological system as agents of protection... This notion of incorporation as solution is key... it underscores the notion that any agent that initially seemed pathogenic or dangerous, even linguistic scripts, can be converted and incorporated for our defense and eventual success.”*

**John Mince – Family Scripts**

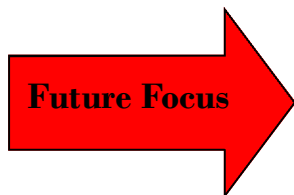
But what about sex, you ask? Ah yes, sex. Sex is the greatest of all evolutionary inventions. Sex guarantees mixture... recombinations: mixture of genetic patterns, mixture of genetic messages, mixture of genetic scripts. Sex enables organisms to adapt even more quickly and more effectively than any random mutations ever could have. Sex assures that the next generation will be sufficiently different from its parent generation and that over the course of several generations significant change can occur. This remixing of genes allows for the greatest number of possible combinations and permits us to evolve with our environment. Biology 101 - Adaptation through variation. – it’s a lesson that we can take to work with us.

How can we possibly use these insights for corporate health and evolution? How do they encourage us to more deeply examine the ways in which we go about doing business?

For the purpose of this dissertation, this is where we marry the concepts of sex and scripts and come to the conclusion that any attempts to help corporations in their evolution forward must have the following components:



- **Mixtures of people**
- **An emphasis on language**



Because the goal of the organization is to sustain itself, to stay alive into the next generation or iteration, we may be well-served to consider the law of teleology and future focus.

Anytime that we get together to talk about what matters most to us and to imagine what could be in the future, we automatically begin to examine underlying assumptions and the things that we take for granted: our scripts.

If we examine our scripts with care and courage, paying close attention to surface those elements that are most deeply embedded, we are apt to identify for ourselves those parasitic scripts that are eroding our organizations and workplaces from within. To do this well, we first need to examine two dominant scripts that we have inherited from prior corporate cultures i.e., “talk is dangerous” and “I don’t have the power to change anything.” These scripts are the most self-destructive scripts in that they literally disable the organization at the deepest level. We believe that it is precisely through talking that the organization strengthens itself and that each of us has the power (and the responsibility) to impact and influence the organization in healthy ways.

A healthy organization is an organization that is busy talking about things that matter. These organizations understand that information travels when people talk, that intellectual and social capital can grow and that positive change can occur when people talk.

They have the courage to look within and question what they believe about themselves and the world in which they operate. They make sure to bring people from different backgrounds, experience and perspectives together – and they use this mixture of people to elicit and evolve alternative scripts that help to engender health and sustainability for the business. These companies and the people within them demonstrate a willingness to change and adapt: to do things differently and to learn from the differences they embody. They spend a lot of time thinking through the questions they need to ask themselves and others. They examine their “sacred cows” and the ways in which they collude to defend them. They move quickly to decipher any “news of a difference” in whatever stage or state in which it appears so that they can be first to understand and address changes in the world and in the marketplace.

These organizations stay alive by adhering to the underlying principles of all living systems, interdependence, diversification and self-organization, and by paying close attention to the ‘biology of business’ – the ways in which their corporate scripts can either enable or disable their best intentions and efforts.

**END NOTE:** *In the last decade or so, we have seen various language-based perspectives and methodologies begin to take root and flourish in the field of organizational development. They include the work of Peter Senge and others through MIT’s Dialogue Project, David Cooperrider et. al. and Appreciative Inquiry, Juanita Brown and David Isaac’s World Café, Harrison Owen’s Open Space Technology, and many others, all of whom employ simple frameworks for getting people to talk about things that matter most. Our work through CORPTALK has been to educate organizations about the power of conversation as a living system and to understand and use more fully the architecture of talk to drive positive change and productivity. For more information and additional articles visit [www.corptalkonline.com](http://www.corptalkonline.com)*

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John Mince, Ph.D. is a Hofstra Associate Professor, Three Village School PPS member, private therapy practitioner, supervisor of therapists, and has a lifetime interest in both language and evolutionary biology. This article represents a synthesis of these interests.

Maria Seddio, M.A., LMFT, is the founder of CORPTALK, an executive coaching and organizational development practice located in Westfield, New Jersey, and a licensed Marriage and Family Therapist. Her writing, research and practice focus on self-organizing systems, collaborative cultures and the underlying principles that bring life to our conversations.

They are currently working on a collection of their efforts titled, *Conversation is the Cure: toward a culture of collaboration.*

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