

2021 Climate Change Chronicle 3

New Systems Thinking

For a Radically Changing World

About this chronicle

As I was preparing to write this chronicle I was reminded of a favourite scene in one of my favourite movies—2001: A Space Odyssey.

A tribe of hominids has been driven away from its watering hole by a rival group of hominids. Later an alien hominid appears in their midst. They watch the new arrival as he makes a discovery--how to use a bone as a weapon. There is that lovely scene of the delight in the alien's face as he throws the bone up in the air and realizes what he has just discovered. He can use the bone as a club. After a successful hunting trip the hominids go back to successfully reclaim their watering hole. This was the emergence of a new system in the competition for resources.

So what does this scene have to do with climate change? Systems have always been crucial to the way our world functions. For a long time we have thought that our current systems were the only way the world could operate. Climate change tells us that those systems are not working in our favour. Instead they are leading the whole biosphere down a slippery slope and taking us along, too. Perhaps through the study of systems change we can learn how to make important course corrections.

Recently I came across an article by Margaret Wheatley and Deborah Frieze on Wheatley's website. It was written in 2006 and is about systems change. It is entitled [USING EMERGENCE TO TAKE SOCIAL INNOVATIONS TO SCALE](#).

In this chronicle I'll summarize some of the key points of Wheatley's article. I would encourage you to read the whole article as well.

From the past to the present

Since the Industrial Revolution in the late 1700s many of our large corporations have taken over from Earth the process of evolution. Some scientists call this new era the Anthropocene . But today many corporations are still attached to the mission statement created by Milton

Friedman: “*The purpose of corporations is to maximize share-holder profits*”.

In pursuit of this aim many of our neoliberal corporations have been competing for all of Earth’s resources. They design their systems to enable them to extract, cut down and transport more and more efficiently. But as Thomas Berry noted many years ago, the GDP (the Growth Domestic Product) runs contrary to the EDP (the Earth’s Domestic Product) which is clearly limited. His point seems more relevant than ever in our climate changing world.

In recent years creative people have come up with new economic programs like the Green New Deal and the Doughnut Economy. They are already being implemented in some communities. If adopted globally, these programs could help us to make the transition from what we now have to what we will need in the future. So is there anything we can do to speed up the usually slow spread of excellent ideas and practices?

About Networks

Wheatley begins by noting that networks are the only form of self-organizing used by living systems on this planet. All living species organize themselves in networks.

It is essential that we understand the dynamics of networks and how they develop into communities of practice. Eventually new systems may emerge. This happens when connected networks become “more than the sum of their parts”. Can we learn to intentionally foster emergence?

THE LIFE CYCLE OF EMERGENCE

“Emergence” refers to the arising of something that could never be predicted by analyzing its individual parts. Emergence has a life cycle. It all begins with networks, shifts to intentional communities of practice and evolves into powerful systems capable of global influence. As an example she notes the behavior of hive insects such as bees and ants. Individual ants possess none of the intelligence or skills that are in the hive. But once the hive forms each ant acts with the intelligence and skillfulness of the whole. Apparently the change always comes from the bottom up, not from the top down. Here are the stages.

Stage One: Networks

We live in a time when people form networks as a way of creating change. These days evidence of self organization is everywhere: groups of social activists, terrorist groups, drug cartels, street gangs, web-based interest groups. As they begin to communicate, local networks engage with other networks. For the most part these are usually networks of self-interest. They tend to have fluid membership. People move in and out of them based on how much they benefit from participation.

Stage Two: Communities of Practice

The second stage of emergence is the development of communities of practice (CofPs). People form groups that work together and support one another. These differ from networks. They extend beyond the original group to share knowledge and expertise with others. New knowledge and practices are implemented quickly.

Stage Three: Systems of Influence

As people work together we see the appearance of systems that were previously believed to be radical. If CofPs are widespread, their new ideas may become the accepted standard. Other people and other communities are now ready to adopt these new approaches. People who said it could never be done are convinced that it can be done and want to become part of the action. Wheatley concludes with these comments.

“Emergence is how life creates radical change and takes things to scale.”

“Emergence is the fundamental scientific explanation for how local changes can materialize as global systems of influence. As a change theory it offers methods and practices to accomplish the systems-wide changes that are so needed at this time.”

“As leaders and communities of concerned people we need to intentionally work with emergence so that our efforts will result in a truly helpful future, No matter what other change strategies we have learned or favored emergence is the only way change really happens on this planet. And that is very good news.”

Into the Future

In many past chronicles I have mentioned the need for a vision. I've indicated the one I like: Thomas Berry and Brian Swimme's vision of "*a mutually enhancing relationship between our species and Earth.*"

A vision cannot be something we write down on a piece of paper and reflect upon once in a while. It must be implemented continually. If our networks follow a broad and helpful vision, they will stay on course.

Conclusion

In this chronicle we have come a long way; from the time our ancestor hominids began to develop systems, down through the ages when we humans began to take over the process of evolution. Today, even with the best of intentions, our systems are harming the living Earth. We desperately need viable systems that will benefit the living Earth as well as ourselves. Margaret Wheatley's study gives us courage as we seek to foster the emergence of new systems.

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