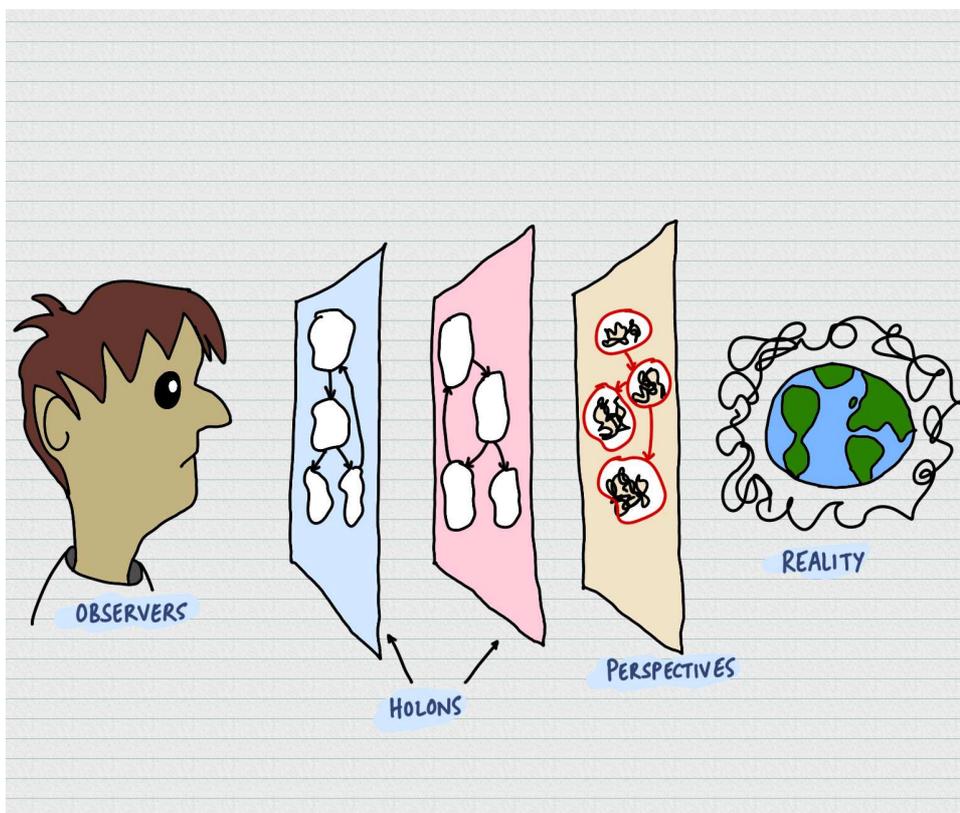


Deconstructing And Reconstructing Thinking

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ABSTRACT

This paper looks at methods that people use to visually represent thinking and how to use them better.



1. The nature of thinking

When you think about thought it really hasn't changed that much over a few hundred thousand years. At the same time it's changed in every possible way. That creates a challenge for human beings and we're still figuring out how to do this thinking thing better.

The earliest pictures of thinking are probably cave paintings — put together as teaching aids to help young hunters identify the kinds of creatures they would find out there and work out which ones they could hunt and which ones would hunt

them. Drawing was the first way you could get thoughts out of your head into a form you could share with others that was permanent. After all, the words you spoke evaporated, disappeared once you had said them.

So pictures were the ancestors of recorded thought and once people got tired of drawing a detailed picture every time they wanted to record when they sold an ox, they started to simplify it and eventually those simplifications became letters and alphabets and then grouping them created a language and, well, all that activity led to what we have in the world now.

I'm surmising — I'm no expert on the origin and spread of languages but it seems plausible that something like this happened.

Language evolved because we had big brains and it was easier to evolve language than evolve ourselves, our genes required a few million years and our brains were in a hurry and layered over the older, animal parts of our brains with a newer layer capable of abstract representation and thought.

And we're still figuring out how to cope with this.

2. Drawing vs writing vs both

If you wander through the Treasures Room of the British Library you see a selection of ways in which people have recorded thought over the years. You see pictures, you see words and you see pictures and words. The Magna Carta, for example, is one massive paragraph — no breaks and apparently not much punctuation. It's like the words said everything that needed to be said.

You still get this approach with lawyers who sit down and figure out everything that can go wrong and write a document with a sprinkling of Latin that you then pay a lot of money for. But the document isn't absolute — you only find out if it's any use when you get in front of a judge. A picture is much the same — you might draw something that means one thing to you and someone else might get something completely different.

This whole language thing, then, is not a matter of recording. That's one aspect of it but equally important is the act of interpreting, of getting from the recorded aspect to meaning and the bits of meaning that are lost or created along the way.

Drawing isn't enough, writing isn't enough, both together aren't enough. So what is?

3. The purpose of recording thought

I'm approaching this subject from the point of view of someone looking at several methods and wondering how they fit with the method that I've been using during the last couple of years.

In other papers on this site I've written about my approach to a methodology called Soft Systems (SSM). One part of SSM is to get a rich picture of a situation. This does not mean a literal picture but a picture of what's going on can be very useful as a way to get that "rich picture", a

sense of what's happening that's as full as possible.

For example, this paper is being written at a time when a virus is streaking around the world, we're in the middle of a pandemic. I'm sitting in a leisure centre, a place where people of all ages congregate and come into contact with each other. What should the management do?

If they were talking through this problem then they could take turns giving their views, which would be recorded, minuted as statements. From that they might vote on certain decisions, from closing the centre to increasing cleaning and handwashing.

If they were to take a more visual approach they might pull up a flipchart and start brainstorming, talking through all the points they have and seeing where the conversation takes them.

If they brought in a graphic facilitator then they'd have someone who would take their thoughts and set them out on a large sheet of paper, with images and words and make it look good. Someone who will create a work of art from their ideas.

All of these approaches may lead to insights into the situation, and the different ways of working may lead you down different thinking pathways. The linear, minuted approach might root you in the here and now. The brainstorming approach might create innovative approaches you hadn't considered. The graphic facilitation might open up new avenues, new connections and shared resources that you didn't realise you had.

So far so good.

4. Thinking in layers

The thing that makes the written word so powerful and why we don't use graphic approaches more probably goes back to the reason why we created writing in the first place. Writing is a very economical and compact way of encoding information. A picture may be worth a thousand words but that's often only when you haven't got much to say. Yes a picture of a sunset conveys much more than words but a treaty between two countries agreeing to stop four years of war cannot be easily captured in a drawing. For "serious" stuff words seem to win, and drawing is relegated to the world of children and artists. It's something that's play for a while and something that's pretty later but it's not important. Not like words are.

What I've discovered in my practice of SSM is that pictorial approaches reassert their power when you start to look at layers of thought. For example, a set of arguments put down in a linear form in writing, point after point, can be represented graphically in a variety of ways. The Thinking Maps approach, for example, might arrange these points in a hierarchy, a tree form. Now, if you were able to draw on top of that layer, taking one of the arguments and dissecting it further, you'd be able to do that with pictures of words and in some cases pictures and words work better, when you create models, for example. Gaps in thinking or logic often become clearer when you lay out the points graphically.

You can create layers that drill down into a thought but you can also create layers that wrap up thoughts into bundles. For example, all that discussion about avoiding contact to prevent spread of the virus is wrapped up into a concept called "social distancing". This drilling down and wrapping up is all about getting comfortable working in layers and that's something that pictures on a page and words on a page both have difficulty doing. But, these days we have computers and layers and it's much easier to do that kind of thinking with the right tools.

5. Emergence and layers

The difference in my approach to SSM and the traditional approaches, whether written or visual, is this approach to layers of information. It matters less how you capture it, whether you use words or pictures or a combination of the two — what matters is whether your approach lets you move easily between layers of thinking, move easily from detail to the big picture. When your brain can see that it can see gaps, it can do comparisons and it can better understand others. That's because the better you get at seeing the world the way someone else sees it the better you understand them. This has nothing to do with the world and everything to do with other people — and that matters because every time you come to an agreement you do so with someone else.

One thing that people find hard to get their heads around is that reality is one thing and their idea of reality is another thing. The two things seem like the same thing but they aren't. In physical terms your world is something you construct entirely in your head, taking pictures that should be upside down and turning them the other way around, converting electrical signals into colour images that are just created, not projected, in your

brain. It's the same with everyone else. We agree that the reality out there is the same as the one we share with others because they tell us they're seeing the same things as we are. The thoughts in our head, then, are not reality but they're a very good model. But what we're also very good at is creating abstractions, models, ways of grouping and categorising and structuring things.

Those things definitely don't exist in the world. A system doesn't exist anywhere except in your mind. It's a convenient way to represent something outside yourself, a sort of language for showing connections and complexity.

And that's the language we are still in the early stages of understanding.

6. Conclusion

This paper is a very quick attempt to look at how we represent thought and how we might do it better. Thinking is complicated and it happens in layers and it changes all the time. We can't capture it in a single image or in a set of words and expect it to stay there, trapped and unchanging. It's more like the sea, sort of restrained and predictable and at the same time untamed and sometimes vicious. The tools we use, the charts we create are a way to map what's going on, so we can make better decisions on when and where to travel. And it's the same with our minds, individually and as a collective. The objective is to be better.

And that will take some thinking.

About the author

Karthik Suresh is a Management Consultant who helps customers with energy, utility, sustainability, research, innovation and knowledge management projects. His experience includes working with large and small organisations to select and implement strategic decision systems, improve and develop management capability and deploy risk management, IT, communications and information systems projects.

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