

# The Systems Thinking Tool Box

Dr Stuart Burge

---

*“.. bump, bump, bump, on the back of his head. It is, as far as he knows the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it.”*

Winnie the Pooh - A. A. Milne

---

## Rich Picture

---

### What is it and what does it do?

A Rich Picture is a cartoon-like picture drawn by a group/team of people about a real-world situation. It is a free-form picture where group members are allowed to use whatever representations they like to capture their view of the situation.

The tool was developed by Peter Checkland [2001] and his co-workers as an integral element of the Soft Systems Methodology. He realised that human-based activity systems are complex and messy where what occurs does not reflect any documented procedures or practices. Conventional system modelling tools and/or plain text could not capture the complexity, nuances or multiple perspectives that typified the systems he was interested in. He needed a tool that could capture the “richness” of what was perceived to be happening.

The idea behind the construction of a Rich Picture of a particular situation is that it:

- Allows differences of interpretation to be identified.
- Permits agreement to be made on the interpretation to be taken.
- Is a source of inspiration as to what aspects of the picture should be analysed further to seek out opportunities for change.

Because every situation is different and it is necessary to capture this variety, there are no formal modeling symbols. The group or team can draw whatever they like. However, over the years of use, a number of symbols have become accepted as standard. Figure 1 shows a Rich Picture that I drew with work colleagues. It was drawn as part of a marketing meeting to discuss how to win new business and it summed up situation at that point in time.

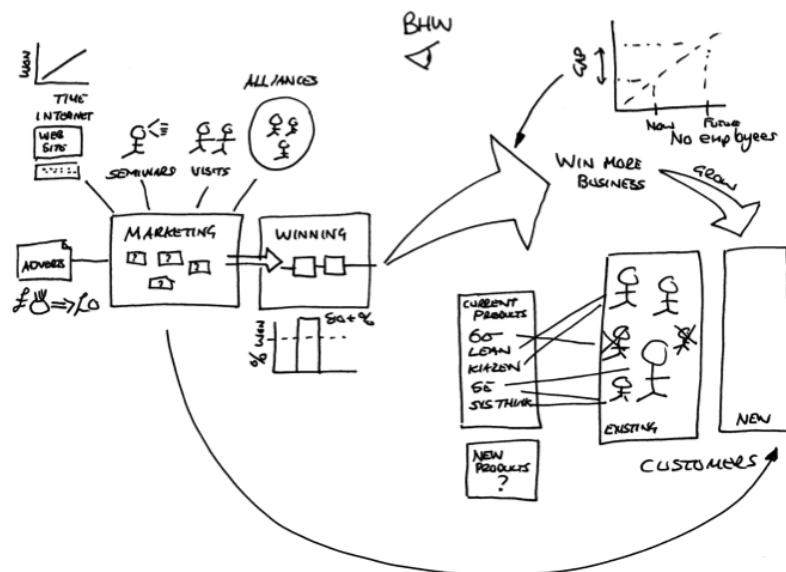


Figure 1: Win More Business Rich Picture.

In describing Rich Pictures there is value in trying to explain Figure 1. My training and consultancy company Burge Hughes Walsh needs to win more business if it is to meet its strategic goal of increasing size. It is a chicken and egg situation where our strategy is to grow the business first to support my employees. The impetus for constructing a Rich Picture was how to achieve this. Previously several obvious strategies had been attempted and all failed dismally. These included expensive advertising campaigns etc. all costing money but none bringing in new business.

What Figure 1 captures are many subtleties that could not be achieved by words alone. For example the box labeled “marketing” contains lots of randomly placed boxes containing “?”. This was drawn to say we do not have an effective marketing system. Around this box are some of the approaches to marketing we have tried, two of which have associated performance results. We have tried advertising (at great expense) but it yielded no business. Equally, our website is now a major contributor to new business. The box labeled “winning” shows an orderly process, we feel are quite good at this achieving a success rate of over 80%; we know what to do and how to do it.

The bottom right hand corner of the picture shows our existing customers (some big some small in terms of revenue stream) aligned to our “product” portfolio (typically training courses). Here you can see that an existing customer has been crossed out – a re-structuring has caused a shift in training provision to an internally based system.

What came out of this Rich Picture were two aspects that we have pursued further:

- Development of new products.
- Review of our marketing.

It is perhaps important to stress that while these two “aspects” are obvious, they had NOT been the focus of previous Marketing meetings. Moreover, the subsequent analysis yielded actions that have reaped significant rewards – i.e. it worked!

### **Why do it?**

Human-based activity systems are typically either evolved or heavily adapted systems where what occurs does not reflect any documented procedures or practices. Such systems are large and complex and suffer from “can’t see the wood for the trees”. We suspect things could be better but don’t know where to start. Capturing these messy situations using words is not possible because of the linear nature of spoken or written words - what is needed is the “simultaneity” of diagrams or pictures to capture the whole and in particular the possible interconnections. Moreover, when constructed using a group or team of people the picture can capture the multiple perceptions that will exist among the individuals allowing a consensus view to emerge.

### **Where and when to use it?**

Rich Pictures are aimed at situations of uncertainty and fogginess. Consider constructing a Rich Picture if:

- the group or team struggle to reach agreement on what is the situation of interest to explore or cannot define clearly the problem or opportunity.
- the situation of interest is likely involves significant human activity
- the situation cuts across several departments or functions within an organization
- you are considering large elements of an organization

### **Who does it?**

An individual can draw a Rich Picture, but the real power comes from involving a group or team who have different perspectives on a particular situation. If you are investigating a messy complex situation then a team-based approach is preferable as it can lead to common understanding and agreement.

### **How to do it?**

There is no process for drawing a Rich Picture but a set of guidelines. Fundamentally the approach is to ask a team or group of people to draw a picture of their understanding a situation. They can use any diagramming symbols or conventions they like, but it must be possible to explain the picture to somebody else at a later date. Having said, anything goes, over many years of use a set of “standard” symbols has emerged. These are shown in Figure 2 with the caveat that they do not have to be used.

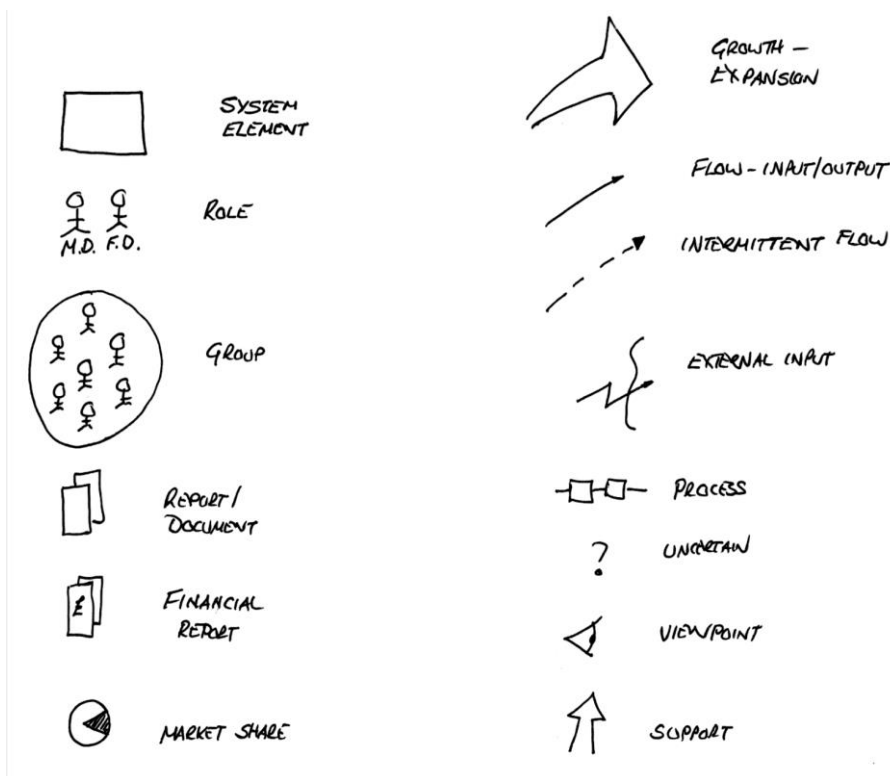


Figure 2: The “standard” Rich Picture symbols

The drawing guidelines are:

- A Rich Picture is an attempt to capture *everything* that could be relevant to a particular situation.
- Use symbols, scenes or images that represent the situation, such that somebody else can “read” the picture.
- Try to minimize the use of words but do use them if pictures don’t come to mind.
- Try not to impose any style or structure on your picture like time goes from left to right – let people’s instincts guide them.
- Remember that different people will perceive different things about a situation - it is necessary to somehow represent these views.
- Rich pictures are a representation of the real world and therefore avoid using systems terms like marketing system and a production system and a quality control system.
- Try not to include system boundaries or references to systems in any way.
- Capture whatever connections that are perceived between the symbols.
- Let people use colour.
- Never use computers to construct a Rich Picture – the tool of choice is the White Board (the bigger the better).
- Capture the picture with a camera or draw the final version on a sheet of paper. If you need to store it electronically scan as a .pdf or .jpeg.

## **What Goes Wrong: The limitations of Rich Pictures**

Whether you are using Rich Pictures as part of a Soft Systems approach or just to obtain clarity about a particular situation of interest, it is vitally important that you allow the team or group to express their view of reality. People can be guided as to how to capture pictorially a particular aspect but avoid “I would draw it like this” and offer “it could be drawn like this”, “does this capture what you are trying to describe?”

A Rich Picture is only the START! I have come across too many instances where a group has proudly shown me their Rich Picture – but done nothing else. The purpose of a Rich Picture is to capture a messy situation in order to extract aspects for further investigation and ultimately action. A Rich Picture on its own is of no use but ornament. Ornaments do not improve an organization.

## **Success Criteria**

The following list represents a set of criteria that have been found to be useful when developing a Rich Picture:

- Try to keep the group/team size between small. More than three but less than six.
- Ensure the team will provide multiple perspectives. Do not be afraid of including people who are known to oppose each other.
- Use an experienced independent facilitator, particularly when attempting to combine individuals' efforts.
- Provide several examples to show what a Rich Picture.
- Explain the free form nature – but do consider showing the “standard” symbols of Figure 2.
- Get hold of a big white board or better still a white board with built in recording (flip charts do not work).
- Do not try to capture the picture directly on computer.