

What is 'Frameworks'?

'Frameworks' is the name I have given to a methodology for structured, independent, thinking and a simple computer-based tool for the construction of simple graphical images of thinking and understanding - that are simple graphical visualisations and interfaces to thinking that can be shared with others.

Keywords: methodology and tool (SIMPLE, entry-level*); structured and independent thinking; construction (constructivism and constructionism, Jean Piaget, Jerome Bruner and Seymour Papert); education and learning; understanding (comprehension); simple graphical visualisation; interfaces (thinking centred); representation, communication and sharing.

*Entry-level: "a good start" (providing for graduation to more sophisticated methodologies and tools).

'Frameworks' may be thought of as a paradigm for information modelling with a visual theme, and the graphical modelling of schemata. It is a simple general-purpose methodology.

It is focused in the first instance on children ("*the next generation of citizens of the world*" as Daniel Levitin wrote in his book "The Organised Mind, Thinking Straight in the Age of Information Overload").

I have argued in my book it is for the education of early years children "*who need to understand complexity as soon as possible*"; who need to learn capabilities and skills in "informatics" in the 21st century digital world, who will need to analyse and reduce complexity in global domains and systems to comprehensible and manageable proportions; who will need to deal with the chaos of the infosphere and to make sense of it all and solve key existential problems.

I have argued and urged for understanding and engagement with the ideas and the practice of prototyping and Type C Projects. I submit that 'Frameworks' has merit and potential and should be tested and evaluated NOW.

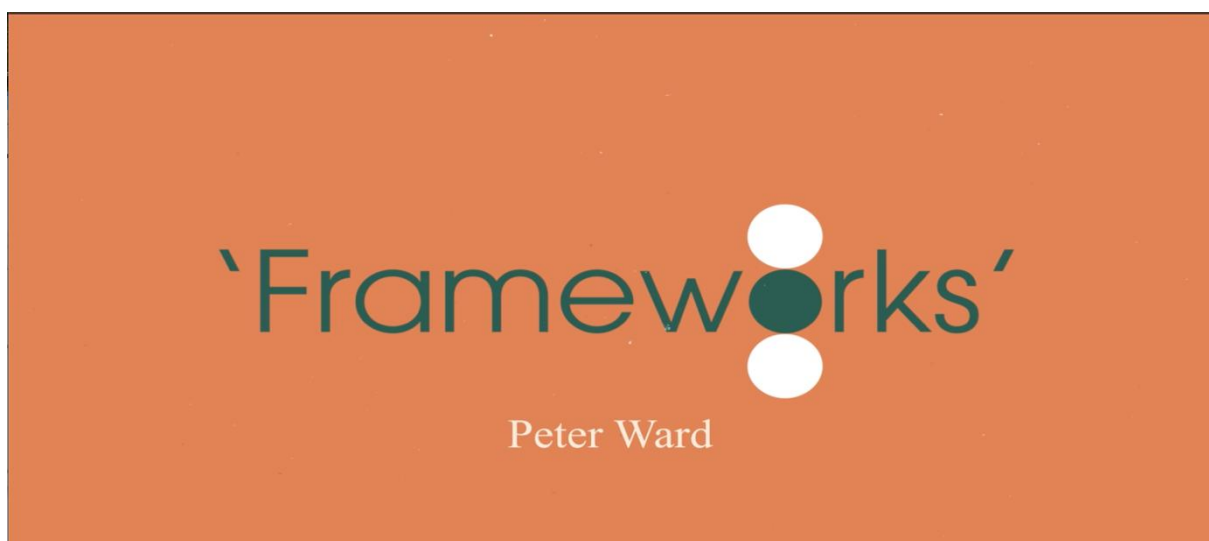
My thesis is concerned with human-centred computing and computing as should be exercised by "ordinary people". My thesis is that the original vision of "personal computing" has become buried and overwhelmed by the ubiquitous technological development of smart IT with very smart algorithmically fashioned interfaces marketed by Big Tech. And now "AI". The question is "Who is to be Master"?

'Frameworks' is for "ordinary people" who, with the benefit of the smart phone have been becoming gadget-led consumers. Browsing, streaming, chatting and entertainment. Creativity; creative thinking beyond the superficial, beyond the trivial,

beyond the received, beyond the obvious, beyond the headlines? Leaving deeper and original creativity to the experts or the professionals? And becoming consumed by the current revolutionary development of AI (artificial intelligence) and the AI assistants/agents which at the touch of a button will automate so much – not only simple tasks but to relieve the individual of the task of creative thinking? In the construction of texts? In the processes of education – of teaching, of understanding, of learning?

While so much attention is being given to the development and application of AI across the board – including AI in Education, my thesis is that we should (re)consider the notion of “Human-Centred Computing” and the notions of augmentation (c.f. *augmenting* the human intellect ref AUGMENT, Douglas Engelbart) and symbiosis (ref Man-Computer Symbiosis, JCR Licklider). How about “AI *and* Education”?

‘Frameworks’ might occupy the territory between “AI” and HI” (human intelligence)



‘Frameworks’ addresses key simple questions: How do we (begin to) think? What are the simple steps in thinking about things? How might we communicate our thinking and understanding? How as adults (teachers, parents) might we discover (see) what children are thinking (about their world)? ‘Frameworks’ is about visual thinking and the visualisation of thinking.

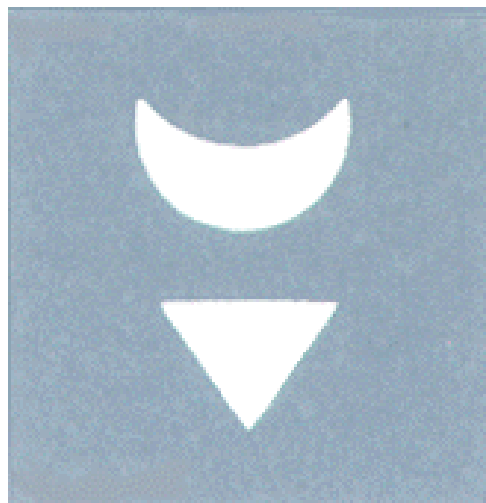
As an educator I have been concerned and focused on facilitating learning and understanding, especially in those who appear to find it difficult to readily grasp things.

‘Frameworks’ is a methodology (and a tool) for Structured and Independent Thinking

and for the construction of simple graphical models of thinking and understanding. It is for children (the next generation of citizens of the world) and their teachers and their parents.

In the face of complexity and information chaos, it is a way of reducing scale and complexity to manageable proportions and a vehicle for sharing ideas and thinking. It is for entry-level structured thinking and analysis and visual modelling for 'ordinary people', setting aside the wealth of more sophisticated information modelling tools and methodologies that may be preferred by the tech-savvy and professionals.

The 'Frameworks' methodology has been greeted positively by a number of computer scientists, educationalists, designers and psychotherapists.



The 'Frameworks' Project

The 'Frameworks' Project today is composed of two parts/phases and is an example of rapid prototyping: From Ideas, to the Theoretical, to the Design, to the Working Prototype.

PHASE ONE

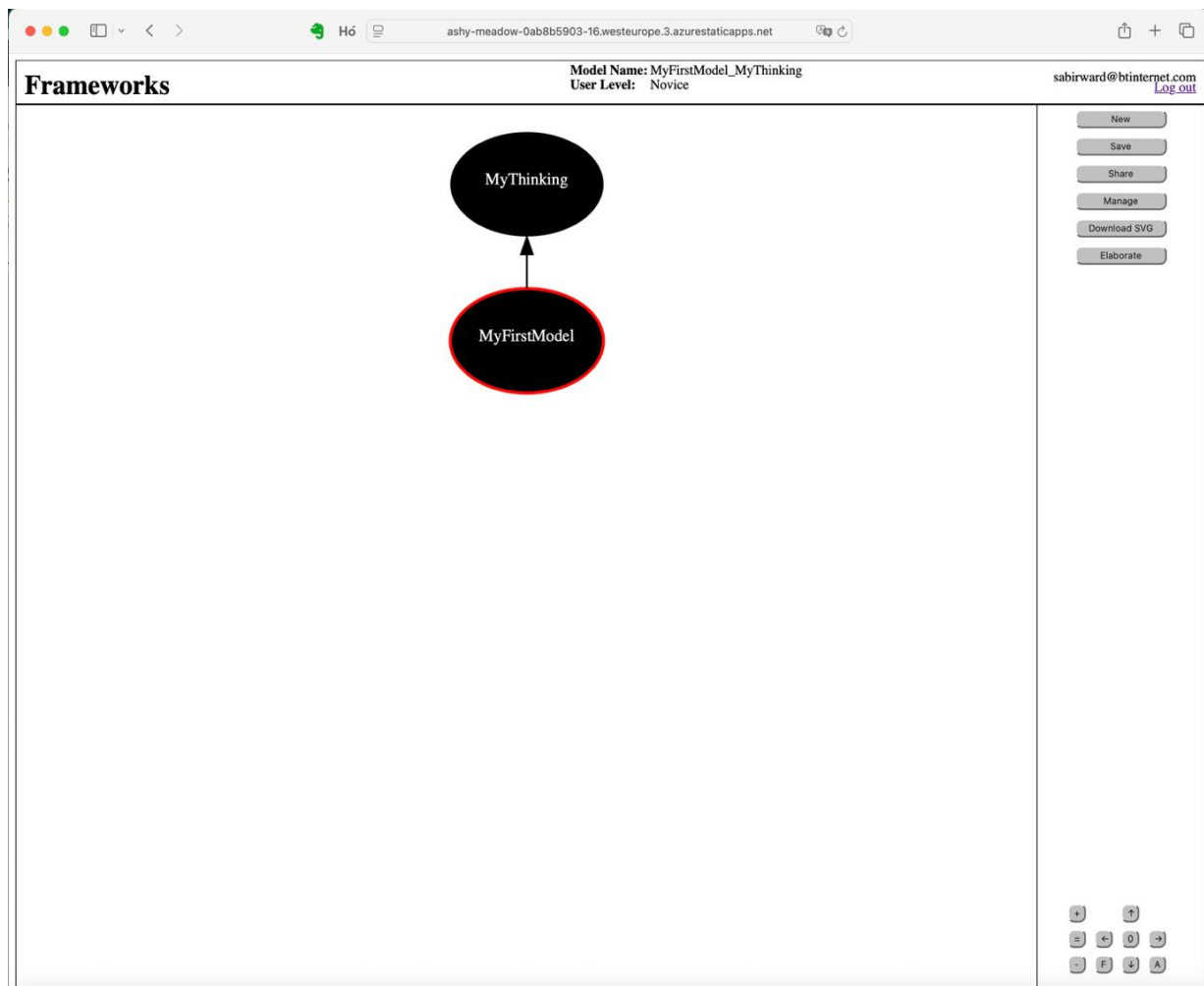
Book (published January 2024, Brandspire Digital)

Methodology

Prototype Tool Version 3

In PHASE ONE of the 'Frameworks' Project, Version 3 of the Tool was situated and accessible on the Magic Browser Website.

<https://magicbrowser.co.uk/frameworks/>



PHASE TWO

Uplift of Tool Version 3 to Version 4

Test & Evaluation in Test beds with Teachers, Parents, Children; and also Psychotherapists and Designers.

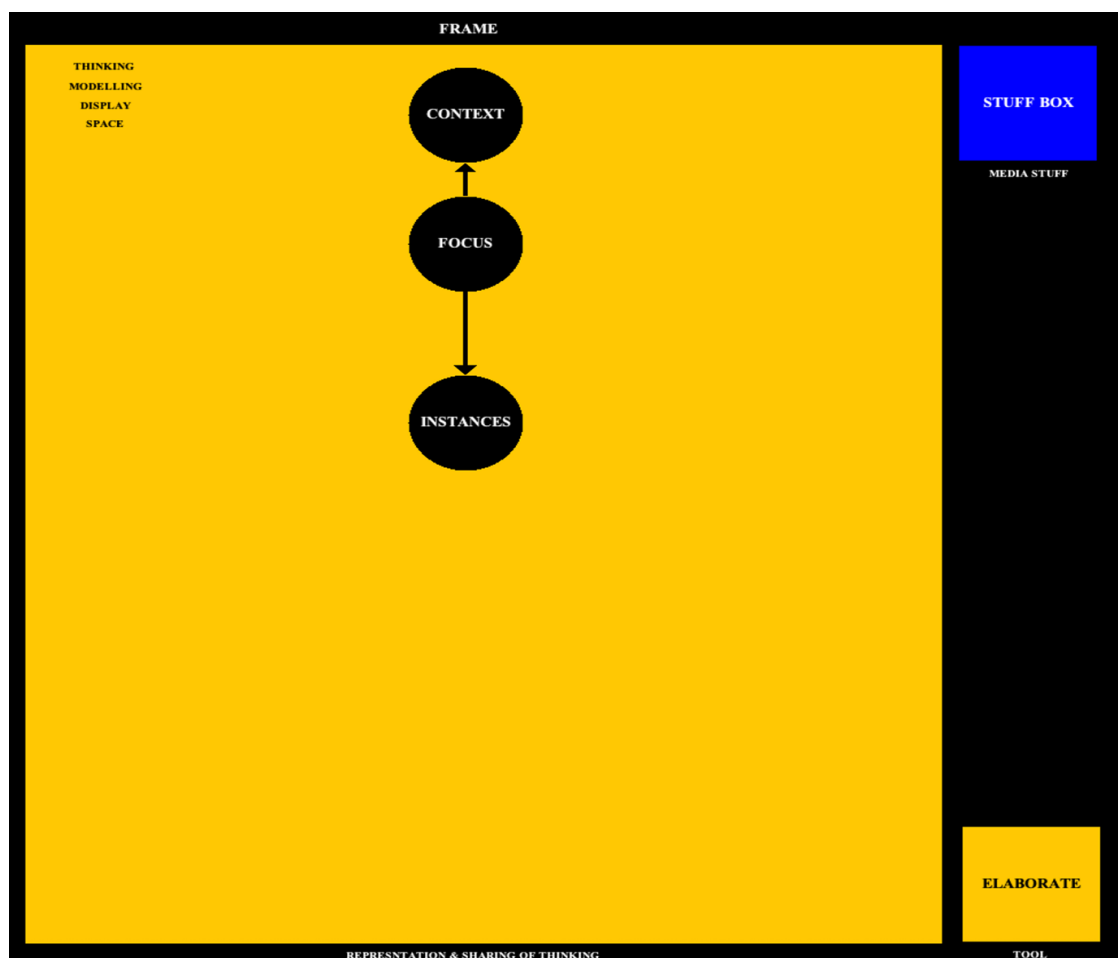
'Frameworks' to be an exercise (for children) in learning about complexity in the real world; and learning about strategies and skills for the chaotic and rapidly evolving digital world and for the vast 21st century infosphere including all sorts of bad and misleading stuff.

My OBJECTIVE in pursuit of the 'Frameworks' Project is to initiate PHASE TWO *as soon as possible* and to deliver Version 4 of the tool (web based) to be tested and evaluated by teachers, pupils and their parents. The 'Frameworks' methodology and tool are prototypes deserving of test and evaluation e.g. with 3 trainee teachers, 3 classroom teachers, and around 30 pupils.

The Uplift of the 'Frameworks' Tool Version 3 to Version 4 is an Exemplar of a Type 'C'* Project- small; speculative; short time frame; inexpensive.

*ref Douglas Engelbart and Alan Kay & Vishal Sikka

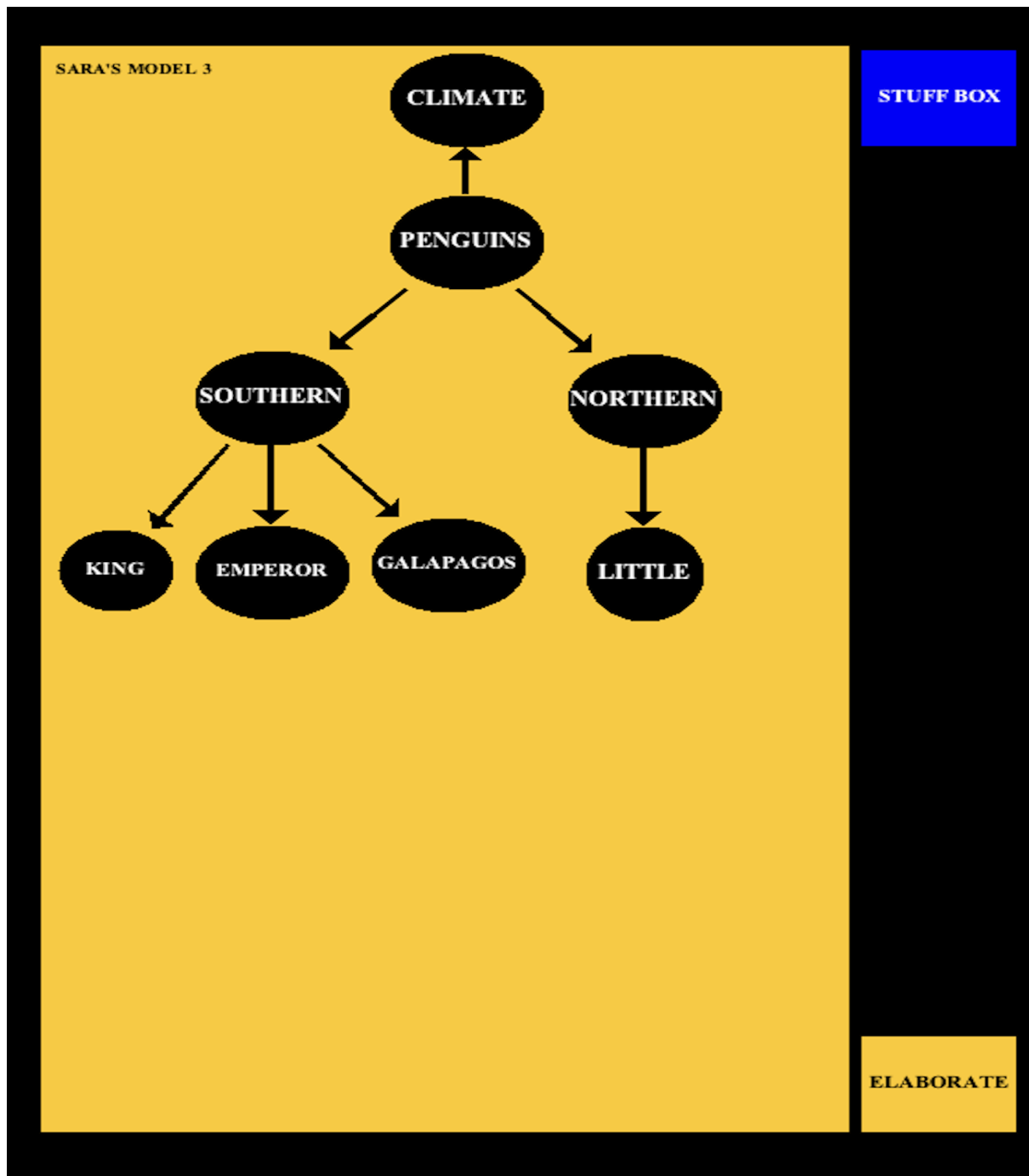
The Shared Model (Coloured Meta Model) - To be implemented in PHASE TWO



The idea is progression from the Meta Model, through the elaboration of Thinking Models (with the Tool), to sharing the 'Frameworks' Models with others (teachers, project team-mates): from the monochrome world of static design and modelling tool, to the coloured world of communication.

(Refer: "The Wizard of Oz", where the action begins in Kansas as Dorothy is caught up in the tornado and is transported to the Emerald City along the Yellow Brick Road and the picture transforms from black-and-white to colour!)

The Thinker Modeller shares/ships/communicates their thinking and their modelling (displayed in the Display Space of the Meta Model) to a colleague who can adopt the Model (as freely available), populate the Model with Stuff (employing the Stuff Box) and/or edit the Model in order to represent their thinking and understanding.



An example of the SHARED THINKING MODEL

The Coloured Meta Model is shared with the Thinking Model displayed and the Stuff Box and Elaborate Button now active and interactive.