Enquiries

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Abstract
Reflections on proactive and reactive enquiries, underlying mental models, and the rewarding burden of creativity.

1 Introduction

Some of the most popular enquiries, such as criminal investigation and medical diagnostics, are reactive — that is, they respond to emerging situations. Planning such as urban and regional can be made proactive, in which case enquiry takes place before system breakdowns such as crises. Given the choice, how would it feel to be carrying out a proactive versus a reactive enquiry?

2 Justice

Criminal investigation is about finding the culprit: ‘Who did it?’ ‘What exactly happened?’ ‘How?’ ‘What were the motives?’ Such enquiries aim to recreate the story of the crime (Figure 3) — for instance as a mental model explained in terms of ‘XYZ’ (Perdicoúlis, 2010). The enquiry examines the criminal act, the motives and the mechanism, and is coupled to a judicial line of action.

![Diagram of coupled action lines in crime and punishment](image-url)

**Figure 1** Coupled action lines in crime and punishment
3 Health

Diagnosis is a crucial point in health care: the medical doctor (or team) is called to ‘tell what is going on’. In more technical terms, diagnosis — from *dia-* [Gk] (apart) and *gnosis* [Gk], (knowledge) — distinguishes or discerns a disease, and for this it is necessary to have a full mental model of ‘what is happening’ to the patient — Figure 2.

![Figure 2](image)

Figure 2 Coupled action lines in health care

The medical diagnostic enquiry examines symptoms ($Z'_s$) and makes alternative hypotheses about the causes ($X_s$), while its characteristic function is to make the distinction among the various alternatives. This enquiry is also coupled to a line of action, related to the health system ($Y_h$ to $X_h$).

4 Planning

Planning — for instance, spatial or sectoral — is practised in a variety of process models (Perdicoulis, 2011b, 2010). These can be deciphered with methods and techniques such as the ‘decision model analysis’, or DMA, and the ‘XYZ problem definition’, or XPD (Perdicoulis, 2011a).

![Figure 3](image)

Figure 3 Proactive planning and the generic line of action

Whether practised as proactive or reactive, planning has the duty to conceive a mental model for the system of interest. Contrary to reactive models, though, when there are no ‘issues’ to begin with adds considerable difficulty to creating the mental model and directing the enquiry. In the language of the above (reactive) enquiries, ‘there is no dead body’, or ‘there are no symptoms’. Hence, the proactive planning enquiry is of a nature similar to that of a designer or other artist.
Proactive enquiry also requires good knowledge of the ‘material’ to work with — that is, the system of interest —, so the mental model is constructed by scoping its contents, and then by seeking to document its structure and function \((\text{Perdicoúlis, 2010})\).

5 Challenges

In all of the above cases, whether in proactive or reactive enquiries, it is very important to ‘get the system right’ — that is, to formulate a mental model for the system of interest that is accurate, or as close to reality as possible. However, it is easier to focus on reactive models because the concerns are evident. Proactive enquiries require more knowledge of the system of interest, but they give an opportunity for directed change and associated leadership. Such power requires appropriately skilled planners \((\text{Perdicoúlis, 2011b})\).

Contrary to the reactive enquiries of justice and health, the mental model of the system of interest in the proactive planning practice \((\text{Figure 3})\) appears to be void. Unlike Figures 1 and 2, this mental model is not to be completed with an action line. Appropriate contents for such a mental model in a proactive practice would be a description of the system of interest in the form of a ‘blueprint’ — for instance, using the ‘reverse blueprints’ (RBP) technique \((\text{Perdicoúlis, 2010, 2011a})\). Creating system blueprints by reverse engineering is quite interesting, but not a task for the faint hearted, and definitely needs good company in its explorations.

References

