



# System to strategy

Anastássios Perdicóúlis

Assistant Professor, ECT, UTAD (<http://www.tasso.utad.pt>)

Affiliate Researcher, CITTA, FEUP (<http://www.fe.up.pt/~tasso>)

## Abstract

Reverse blueprints clearly expose the mental model of the ‘target system’, which is essential for the definition of the planning problem and its solution as an efficient strategy. ‘Visual notes’ are crucial for bridging system and strategy, and also contribute to the good practice of SWOT analysis and indicators.

## 1 Introduction

A strategy can be conceived and expressed in alternative ways — for instance, with the help of causal loop diagrams (Perdicóúlis, 2012a), Kaplan–Norton strategy maps (Perdicóúlis, 2012b), or descriptive causal diagrams, or DCDs (Perdicóúlis, 2012a,b). Besides the issues of communication inherent to the respective techniques, such as their handling of uncertainty or causality, there is yet another level of information that planners and stakeholders must be aware of: the underlying mental model upon which the strategy is based, including all related assumptions and ‘external factors’. This is typically carried out through a SWOT analysis, but with significant shortcomings regarding both causal reasoning and the process protocol (Perdicóúlis, 2012c).

If a planning operation is to (a) help understand the ‘target system’ — that is, what we are trying to change plus its environs — and (b) use this understanding to methodically formulate and solve the planning problem, then we need the mental model of the system to articulate with the strategy map. This articulation has been explained and illustrated in the ‘Systems Thinking’ book (Perdicóúlis, 2010, pp.102–110), but let us give yet another example with material used in previous issues of the *Systems Planner*.

## 2 A working (sub)system

The ‘article-publishing system’ can be perceived in number of ways — in other words, there is no single ‘correct’ system model (Stermán, 2002). Despite the fact that we all have our own models in mind, we need to reach consensus about ‘how the system works’. There is no point of proceeding with the planning operation if this is not settled, as we would be talking (and planning) about different objects — that is, systems.

Although debatable, we saw one such model of the ‘article-publishing system’ in an earlier issue

(Perdicoulis, 2012d), which is no more than a working hypothesis. Based on this, we can easily distinguish three actors: the authors, the publishers, and the indexing and abstracting service providers. These groups are expected to have different interests: some in common and some in conflict.

As an exercise, let us take the perspective of an academic department. From that perspective, the ‘view’ of the system is likely to include only a part (Figure 1). That is, elements and related interactions such as the financial affairs of publishers and I&A providers are likely to be ignored through a scoping exercise, judging for relevance to the interests of the group (department), or generally for the sake of simplicity.

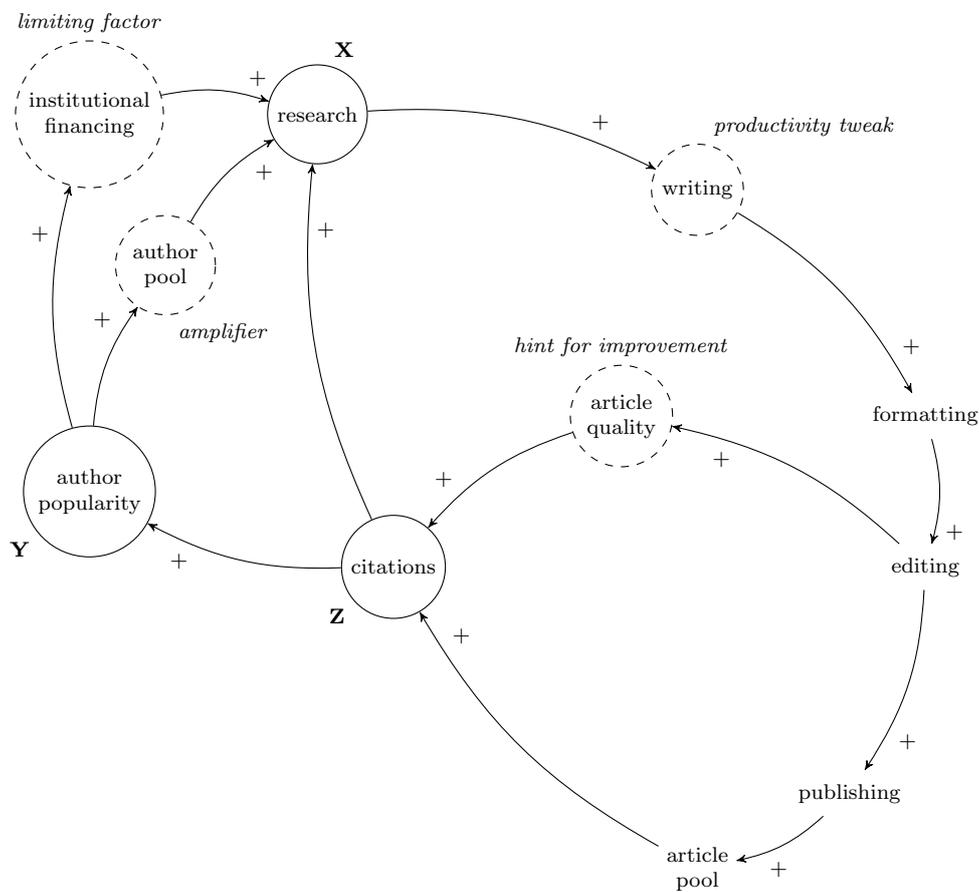


FIGURE 1 The ‘system’ as considered from the perspective of an academic department is a subset of the ‘article-publishing industry’ model (Perdicoulis, 2012d); this provides a good base to identify and mark (a) the elements of the system that should participate in the strategy (in ‘XYZ’ terms and solid circles), and (b) potential weaknesses or leverage points (in italics and dashed circles) in the form of indicators

The reverse blueprint (RBP) of Figure 1 has been enhanced with extra markings, which are a graphic equivalent of a SWOT analysis. For instance, we can see that the ‘author pool’ is a potential ‘amplifier’ of research: the more researchers there are, the more research can be conducted. As another example, ‘institutional financing’ is a potential ‘limiting factor’: simply put, the less support available, the less research can be conducted. Carrying out a ‘SWOT’-like analysis in a graphical

manner has the advantage of explicit causality, which means that we are able to know the causes and the effects of the critical factors we identify through their visible relationships — something gravely missed in the classic SWOT (Perdicoulis, 2012c).

### 3 The strategy

From the markings of Figure 1 we can make a ‘basic strategy’ by linking the ‘XYZ’ elements in a descriptive causal diagram (DCD), as in Figure 2.

THE OBVIOUS PROBLEM: Concerned about popularity (Y), what should the department do (X) in order to achieve the requisite citations (Z)?

The suggested (or already known) answer from the RBP is ‘research’. Thus, according to the ‘basic strategy’, the department should conduct research, which should result in publications: this should produce the requisite citation rates.

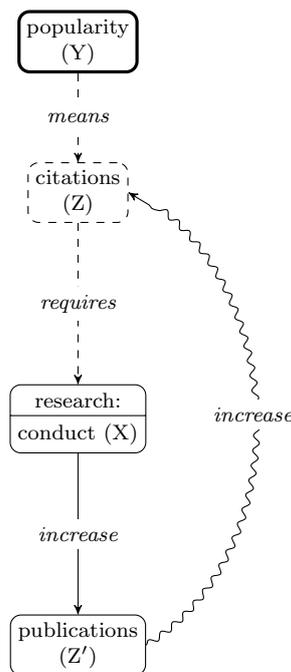


FIGURE 2 The basic strategy

But the question of the problem must go beyond the obvious, and into more substance:

THE DETAILED PROBLEM: Concerned about popularity (Y), what should the department do *in or about research* (X), in order to achieve the requisite citations (Z)?

According to this new and more substantial definition of the problem, we can now take advantage of the marked elements of the RBP and create a more complete and meaningful strategy, as in Figure 3.

The first draft of a more substantial strategy (Figure 3) needs to be complemented by certain elements that would serve as indicators for measurement — for instance, how do we know that

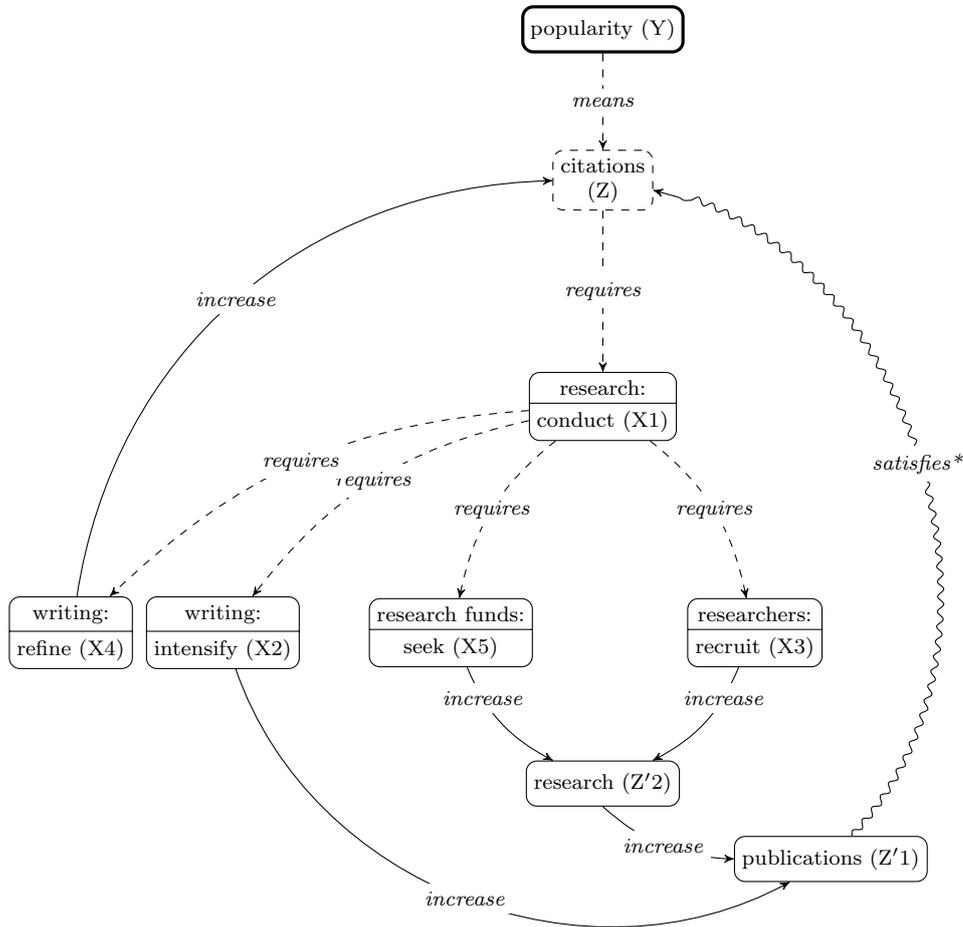


FIGURE 3 A first draft of a more substantial strategy

‘writing’ is ‘intense’ enough, or ‘refined’ enough? Such indicators should be part of the ‘system’ as well as of the strategy. Their appearance in both RBPs and DCDs is taking the use of indicators to new levels — that is, beyond the common ‘loose point’ practice (Perdicoulis and Glasson, 2011). In systems view, and now in strategy view, we know (or at least assume openly) the causes and effects of those elements called ‘indicators’, and can prepare for appropriate action.

## 4 Discussion

### 4.1 The ‘everything visible’ maxim

Articulating system and strategy requires two types of diagrams, and in the given example these were an RBP and a DCD. If the ‘transition’ or ‘bridge’ from system to strategy appears as ‘visual notes’ similar to Figure 1, this helps in the formulation of the strategy and avoids deviations, uncertainty, and even the ‘author’s fear in front of the blank page’.

Indeed, the vision of ‘explicit planning’ requires that everything is visible, or ‘spelled-out’. This is further evidenced in the formulation of the planning problem as text — as extensively used in the ‘Systems Thinking’ book (Perdicoulis, 2010) — which also helps in the formulation of the strategy diagram. The same ‘everything visible’ maxim demonstrated in this ‘system to strategy’ example also provides (a) an interpretation of a ‘graphic SWOT’, as suggested in Perdicoulis (2012c), and (b) a sample of an indicator network (Figure 1), as suggested in Perdicoulis and Glasson (2011).

### 4.2 The ‘other strategy’

The ‘departmental publishing strategy’ used as an illustration in previous issues (Figure 4) was produced directly — i.e. not alongside an explicit background mental model of the respective ‘publishing system’. In the particular example, the departure from citations — maintaining a mere association with the ‘reputable journals’ — elevates the sophistication of the strategy.

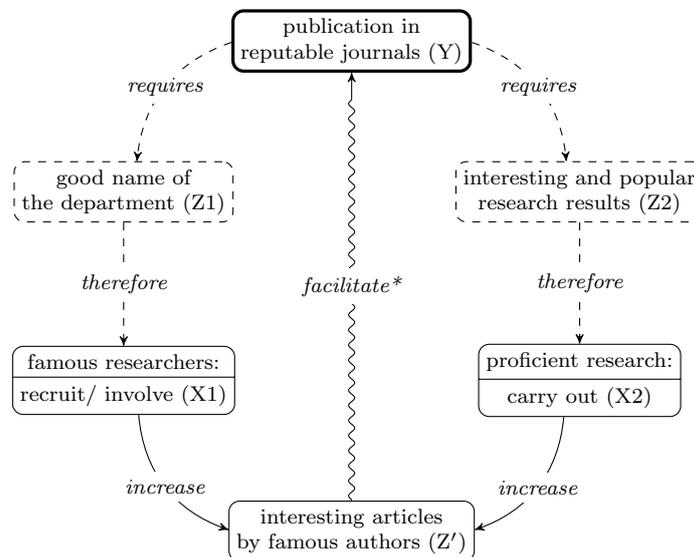


FIGURE 4 The strategy presented in previous issues (Perdicoulis, 2012a,b) has an undisclosed mental model of the respective system

What often matters is the strategy, but planners and stakeholders should always ask to see the mental model behind that — for instance, an RBP. Furthermore, they should ask to see a correspondence between the two (such as the ‘visual note’ of Figure 1) to check for coherence and discuss all possible ideas for improvement of the system’s function through the strategy — which is the strategy’s *raison d’être*.

## 5 Conclusion

In starting a planning operation from ‘zero’ until producing a strategy (or policy, or plan), it is important to (a) understand what we are trying to change plus its environs — that is, the ‘target system’ — and (b) use this understanding to methodically formulate and solve the planning problem. This calls for an articulation of the system’s mental model with the strategy map in a collaborative mode, assisted by techniques such as reverse blueprints (RBP) and descriptive causal diagrams (DCD), and the very important ‘visual notes’. This practice also provides good standards for an enhanced (visual) SWOT analysis, as well as a systems view of indicators.

## References

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