The semantic content of strategy maps

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Abstract
Strategy maps help visualise the semantic content of proposed action, which is particularly useful in the case of abstract features such as the relations between elements. An illustration of their capability as well as variability is provided in a common case study example using the widespread Kaplan-Norton (K-N) strategy maps juxtaposed to the newer descriptive causal diagrams (DCD).

1 Introduction
Strategy is a prominent entity in the military context: strategy is associated with events at the scale of war, and refers to the work and related competence of the army general (στρατηγός) to lead the military business. Hence, strategy represents action at an abstract level, well in the realm of ideas and imperceptible by the senses. In the same context, ‘practical’ action associated with events at the scale of battle can be easily sensed, and is known as ‘tactics’ — that is, arrangement or order (τάξις), often with the intention of movement.

The military has inspired a number of ‘strategic’ games, which represent conflict in alternative interpretations. Chess is perhaps the leading example in this category, while football and/or soccer tend to be more popular. Card games follow suit [sic]. Such games devise their own specific techniques to display the actors (players or soldiers) in spatial diagrams, where action can be marked and communicated (Figure 1).

![Figure 1](image-url)  
Figure 1 Chess and football maps refer to spatial formation and movement
Whether in its original military context, or in its simulation as games, the ‘practical’ kind of action — the tactics — is conceived and communicated much easier than the more abstract strategy. For instance, representing strategy with the diagrams of Figure 1 would require a sequence of those. Furthermore, the higher-tier and abstract nature of strategy implies that it includes all the subordinate tactics and — if the whole is greater than the parts — also the relationships (such as the coordination) between the lower-tier and easier-to-describe action. In addition, strategy must contemplate the possibility to adapt its action to external conditions, which may be changing interactively or independently.

2 Strategy Maps

The creative freedom of strategy makers and participants (such as stakeholders) is generally advantageous, but implies no strict universal standards or specifications for the representation of strategy: good practice is out there to be discovered or designed. However, despite this freedom, the graphical means to represent strategy — let us call them ‘strategy maps’ — must inform about (a) the conceived or proposed action inherent to the strategy, or ‘what to do’, (b) the important elements associated with this action, such as the motives and consequences, and (c) the logical links between all these. The representation of a strategy constitutes the semantic content of the strategy map, and must be coherent, clear, easy to understand, and informative if the strategy is to be communicated effectively.

Strategy represented by means of concept maps and mind maps generally features high tolerance for ambiguity in the expression of the semantic content, or perhaps even lack of a verification mechanism. This group of strategy maps includes the attempts of the strategic choice approach, or SCA (Friend and Hickling, 2005), and the soft systems methodology, or SSM (Checkland, 2000, 1981). The Kaplan-Norton (K-N) strategy maps are perhaps the most popular, featuring some flexibility in the representation of strategy (Kaplan and Norton, 2000, 2004).

Other types of diagrams are inherently less permissive regarding ambiguity in the expression of the semantic content of strategy. This group includes variations of causal loop diagrams, or CLD, as well as their quantitative (or numerical) counterpart, stock-and-flow diagrams, or SFD — both from system dynamics and/ or systems thinking (Sterman, 2000; Warren, 2002). This group also features the descriptive causal diagrams, or DCD, which have been designed specifically for the communication of strategy (Perdicoúlis, 2010).

To gain some insight about the semantic content of these two groups of strategy maps, let us illustrate two through a case study (Perdicoúlis, 2012): on one hand the most popular representative of the first group, the K-N strategy maps, and on the other the most recent representative of the second group, the DCD strategy maps. This analysis is relevant to (a) strategy makers — that is, while composing the strategy — and (b) stakeholders or any interested party, in general — that is, while reading the strategy.

3 The DCD Strategy Map

Descriptive causal diagrams, or DCD, are used in the ‘explicit causal thinking’ planning method, or ECT, to assist the conception and communication of strategy in a very clear and highly communicative way based on causal reasoning and systems learning (Perdicoúlis, 2010).
In terms of semantic content, DCD strategy maps comprise four semantic categories: (a) system elements, or ‘what is involved’, (b) action, or ‘what is being done’, (c) causality, or ‘how the action induces changes’, and (d) outcomes, or ‘what happens as a result of the action’ (Perdicoulis, 2010). The action and associated elements are coordinated as a tripartite ‘planning problem’: the concerns (Y), the intended outcomes (Z), and the action (X) that should achieve the intended outcomes. The likely outcomes (Z'), which include the side-effects of the conceived action are also included, and are considered as a special type of outcomes — hence, they are also labelled as ‘Z’, but with some distinction.

Hence, the departmental publishing strategy (Perdicoulis, 2012) can be represented as a DCD strategy map (Figure 2). The semantic content is marked on the left and right flanks, both as strategy elements and parts of the problem; the type of information processing (inductive or deductive) is optionally marked on the arrows that link the parts of the strategy.

![Figure 2: The DCD strategy map and its semantic content](image)

4 The K-N Strategy Map

The Kaplan-Norton (K-N) strategy maps originated in a general management framework known as the “balanced scorecard” (BSC), rapidly gaining widespread recognition and use (Kaplan and Norton, 1992, 1996; Niven, 2003). Their semantic content features a characteristic organisational scheme of four tiers or ‘perspectives’ (Kaplan and Norton, 2000, 2004), with some variability across the private and the public sectors (Figure 3). Such flexibility reflects freedom, on one hand, and reduced value of guidance on the other. Therefore, K-N strategy maps have a certain descriptive value, but not much instructive or guidance value.

The work of Kaplan and Norton can be credited for introducing causal reasoning into business dealings, even if that is done with lax rules — e.g. regarding the semantics of arrows and nodes. K-N maps have managed to shift business culture from merely financial outcomes to diverse perspectives (e.g. company, stakeholders), seeking causal reasoning between sets of objectives. The authors admit that strategy-making is, and will always remain an art (Kaplan and Norton, 2000, p.10),
and this artistic tolerance prevails in their description and communication of strategy. Figure 4 represents the departmental publication strategy in a K-N strategy map, following the ‘public’ version of tiers or perspectives.

5 Discussion

In the DCD strategy map (Figure 2), the sequence of semantic categories is cyclical: ‘concerns → objectives → action → outcomes → concerns’. This includes the causal reasoning (logical and physical causality) for discovering the appropriate action for the stipulated concerns and objectives, and also a simulation about the capacity of this action to satisfy its purpose — that is, an *ex-ante* evaluation of the strategy’s effectiveness. This detail of explanation is useful to the strategy maker as well as to the reader, in a concise form.

In the K-N strategy map (Figure 4), the sequence of semantic categories is linear: ‘resources → capacities → action → outcome/ benefit’. This sequence includes some causal reasoning (e.g. before and after the ‘action’ tier), but with loose rules such as the causality represented by the arrows (e.g. increase or decrease, relative or absolute) that subtract from the rigour of explanations by introducing uncertainty.
6 Conclusion

Specialised maps such as the DCD and K-N strategy maps display the semantic content of strategy — e.g. strategy elements and associations between them. In the interpretation of the common case study example, DCD strategy maps appear more explicit and informative than K-N strategy maps, at the cost of a more demanding preparation. This additional investment may be desirable for more complete reasoning in strategy making and transparency in the communication of strategy.

References


