Top-down, bottom-up, or sideways?

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Abstract
A common dilemma in institutional planning turns out to be a ‘conditioned question’, with the best solution coming from an unexpected direction.

1 Overview
A common question in institutional planning is whether the process should start from the ‘top’ and go down, or from the ‘bottom’ and go up. Both expressions refer to tiered structures such as those of Figure 1 (Perdicoúlis, 2014c).

![Figure 1](image-url)  
It is expected to move across planning tiers; adapted from Perdicoúlis (2014c)
2 Tiering

Institutional stakeholders such as employees or clients relate to their direct interests, which usually correspond to the detailed tiers of planning (Figure 1) — e.g., ‘what is my work schedule?’ or ‘how much is my tuition?’ While this is respectable and must be addressed by the institution’s administration, ‘strategic’ planning relates to the abstract tiers, including both the intents (‘to have’) and the corresponding actions (‘to do’) — i.e. the two ‘pyramids’ of Figure 1.

Moving up and down the planning tiers is equivalent to ‘zooming’ in or out in photographic cameras with special lenses, or in digital maps (Perdicoúlis, 2014b), and does require some practice. Stakeholders may be able to ‘zoom out’ and see the institution as a whole, but are not likely to do so because they ‘must defend their interests’\(^1\). As for the institutional administrators, they have a tendency to see the whole rather than the parts, due to their global responsibility for governance, so they are likely to start with a top-down tiering approach — Figure 2.

\[\text{MISSION}\]
\[\text{VISION}\]
\[\text{OBJECTIVES}\]

\[\text{--- ACADEMIC SECTOR ---}\]
\[\text{--- ANCILLARY SECTOR ---}\]

\[\text{pedagogic competences (Z}_1\text{)}\]
\[\text{scientific knowledge (Z}_2\text{)}\]
\[\text{type-A students (Z}_3\text{)}\]
\[\text{organisational culture (Z}_4\text{)}\]
\[\text{financial reserve (Z}_5\text{)}\]

\[\text{(Y}_1\text{)}\]
\[\text{(Y}_2\text{)}\]

\[\text{teaching quality}\]
\[\text{administrative efficiency}\]

\[\text{earmarks}\]

\[\text{requires}\]

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3 System

A dynamic representation of physical causality — i.e., 'how things work' (Figure 3) — constitutes a complementary systems view of the institution. In a way equivalent to the ‘zooming’ exercises of the tiered approach, it is possible to start documenting knowledge and assumptions either from a succinct or a detailed view, but eventually both must be elaborated (Perdicoûlis, 2016, 2017a).

![Figure 3](image-url)  
**Figure 3** [RBP] Viewing and understanding the dynamic system; adapted from Perdicoûlis (2017a)

An aggregated systems view presents a holistic perspective that is meaningful and convenient to administrators (Perdicoûlis, 2017a). Figures 3 and 2 are at the same aggregation level, but the systems view provides insights with regard to leverage (Perdicoûlis, 2017b) and re-constructing a system typically starts with a search for concerns and relations (Perdicoûlis, 2012a,b).
4 Discussion

Institutional planning eventually requires that the tier of intents (i.e. the left pyramid in Figure 1) be developed into a corresponding tier of action. In tiered thinking, the transition from intent to action is a great challenge, and often resolved with dubious heuristics such as computational techniques (Perdicoúlis and Glasson, 2011) or ingenious schemes (Perdicoúlis, 2017b).

The complementary systems view addresses physical causality directly, so identifying leverage points (Meadows, 1999; Perdicoúlis, 2017b) practically finds the ‘solutions’. While an overview of a system (e.g. Figure 3) serves well to start with the definition of the planning problem, exploration (e.g. simulation, efficiency assessment) follows at levels of more detail — for instance, all system elements of Figure 3 are considered as ‘concerns’ (Y) to be enhanced, and the respective study is carried out in a set of coordinated theme-specific DCDs (Perdicoúlis, 2017a).

5 Conclusion

Getting busy to resolve whether to plan ‘top-down’ or ‘bottom-up’, it may be easy to forget to take a ‘sideways’ look at the actual system of concern, and to understand how it works. Eventually, all of the planning work must be done: complete all the tiers in both pyramids, and re-create the system at one or more appropriate levels of aggregation. The order of execution is one of the least concerns, with the major ones being the completeness and quality of the work, as well as the capacity of the administrators (and designated stakeholders) to deliver on their functions.

References


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2Figure 1 is too abstract to mark this correspondence with arrows, but logical causality must be present in strategic and operational plans — e.g. prepared in a descriptive causal diagram (DCD) format (Perdicoúlis, 2014a).

3This is also known as ‘silo thinking’ and is evidenced in the administrative ‘departments’ of institutions.