

# Extended process diagrams

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## Abstract

Concise process diagrams (CPD) may be enriched to accommodate more detail, as required in some cases. Extended process diagrams (EPD) thus emerge as a new instrument of the Systems Planning Modelling Language (SPML).

## 1 Introduction

Concise process diagrams (CPD) provide simplified views of processes, accompanying action in a step-by-step perspective instead of a cause-and-effect perspective (Perdicóúlis, 2010, pp.67–76). To accompany processes with more detailed information, such as the specification of action or methods of implementation, an *extended* process diagrams (EPD) are required. Thus, EPDs become a new addition to the Systems Planning Modelling Language (SPML) (Perdicóúlis, Website).

## 2 New information

As per previous suggestions (Perdicóúlis, 2011), it is possible to add more resolution to the action — e.g. the actor and/or the actor’s method — by adding compound boxes to the text that describes the task (Figure 1). In the same way, we can also add extra information to the stages through another set of compound boxes.

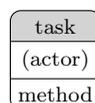


FIGURE 1 Giving more resolution to the ‘action’

Let this be the general modification to the CPDs in their way of becoming (or giving rise to) extended process diagrams (EPD). And let us give a relatively simple (and interesting) example to see how EPDs can be implemented.

### 3 Recipe

Cooking recipes communicate normative processes, with detailed content lists and step-by-step instructions. In fact, the typical presentation of recipes includes (a) a list of ingredients, and (b) some text with instructions that represent the preparation process. Such a relatively simple production process would already contain far more information than a CPD could accommodate. However, an extended process diagram (EPD) can easily display a process given by a recipe, including the list of ingredients, instruments, and settings — Figure 2.

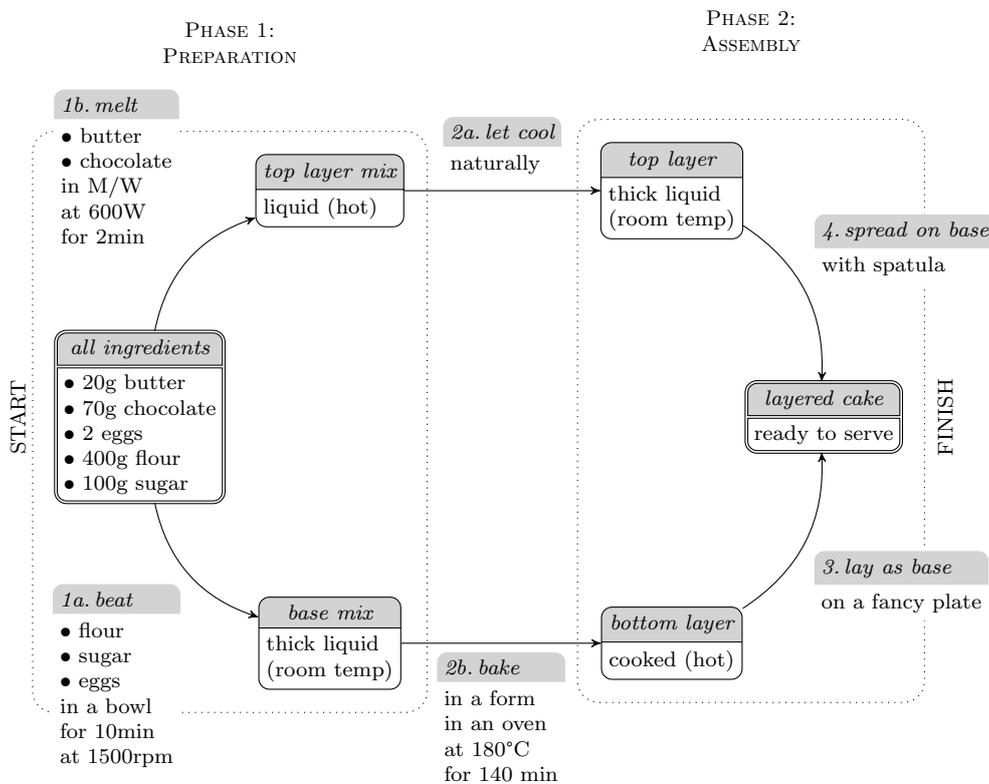


FIGURE 2 Making a layered cake described as an extended process diagram (EPD)

### 4 Discussion

It is not perhaps not very usual to cook with process diagrams, but it could easily become a fad with young cooks — especially those who are becoming familiar with modern visualisation technology. Figure 2 becomes a schematic diagram, and can even be enhanced with check boxes for the conclusion of tasks and stages.

Choosing between CPD and EPD would be like ‘zooming in’ or ‘zooming out’ of the information regarding a process, to see more or less information. A transformation between the two types of diagrams could even be possible, if visualised in an application rather than on paper.

## 5 Conclusion

The addition of more detail to the tasks and stages of the concise process diagrams (CPD) gives rise to another class of diagrams: the extended process diagrams (EPD). The choice between the two diagrams depends on the amount of detail required in each case.

## References

- Perdicoulis, A. (2011) Application manual for the ‘Systems Thinking’ book. *Systems Planner*, **2**.
- Perdicoulis, A. (2010) *Systems Thinking and Decision Making in Urban and Environmental Planning*. Cheltenham: Edward Elgar.
- Perdicoulis, A. (Website) *Systems Planning*. <http://www.tasso.utad.pt>.

