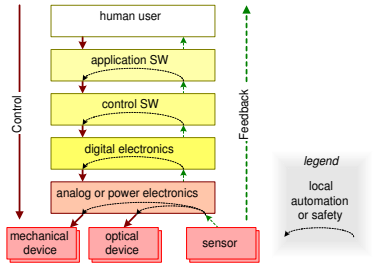
The Role of Software in Systems

by *Gerrit Muller* Buskerud University College
e-mail: gerrit.muller@embeddedsystems.nl
www.gaudisite.nl

Abstract

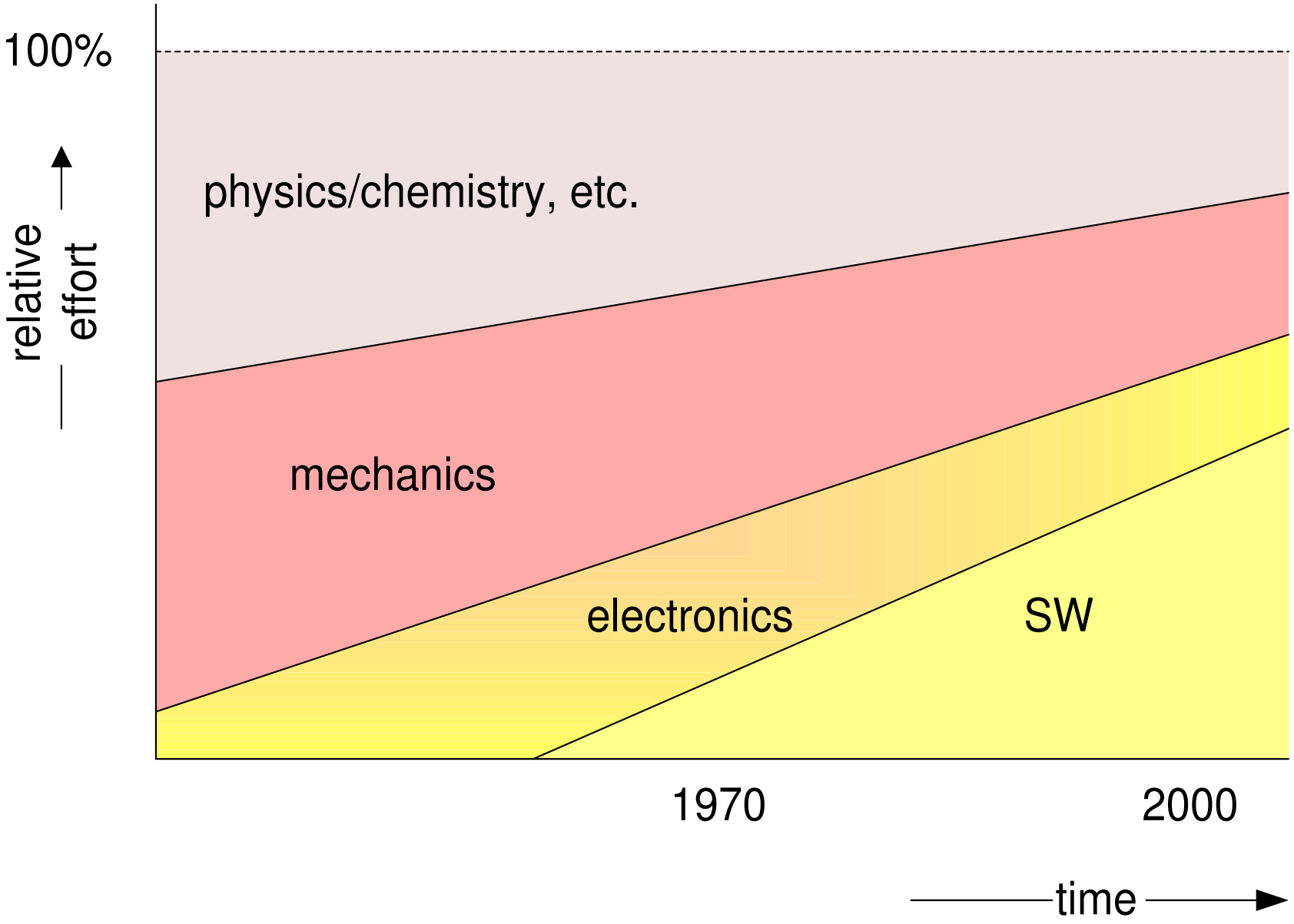
Software is a dominating factor in the development of complex systems. It plays a crucial role in the performance of the final product at the one hand, while it contributes significant to the development cost and elapsed time of development.

This paper will discuss the role of software in the broader system context. An improved understanding of the role of software enables the system architect, and the other stakeholders of the product creation process, to integrate the software development better. In this way hardware-software tradeoffs can be made, balancing performance, costs and risks.

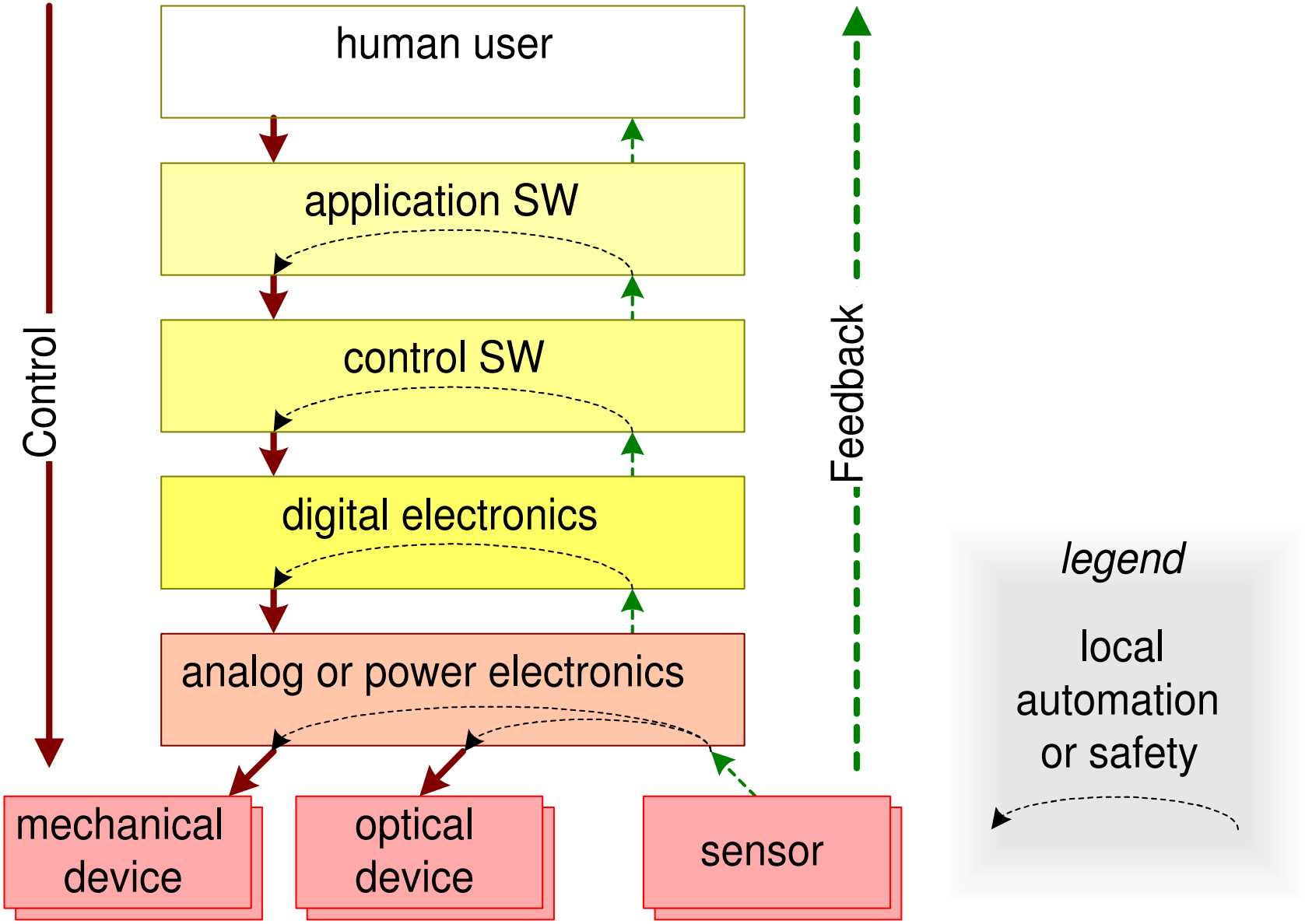


July 1, 2011
status: concept
version: 1.2

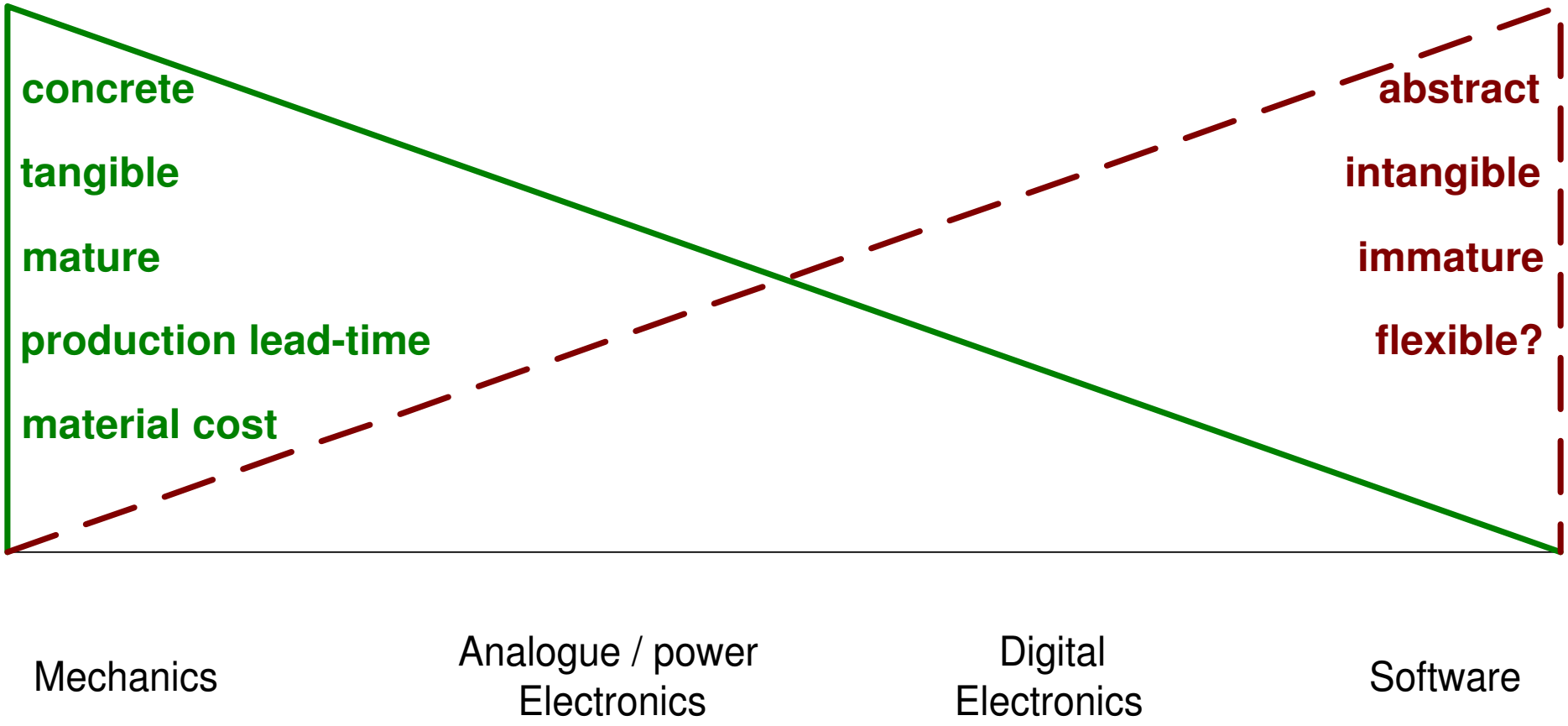
Relative Contribution of SW



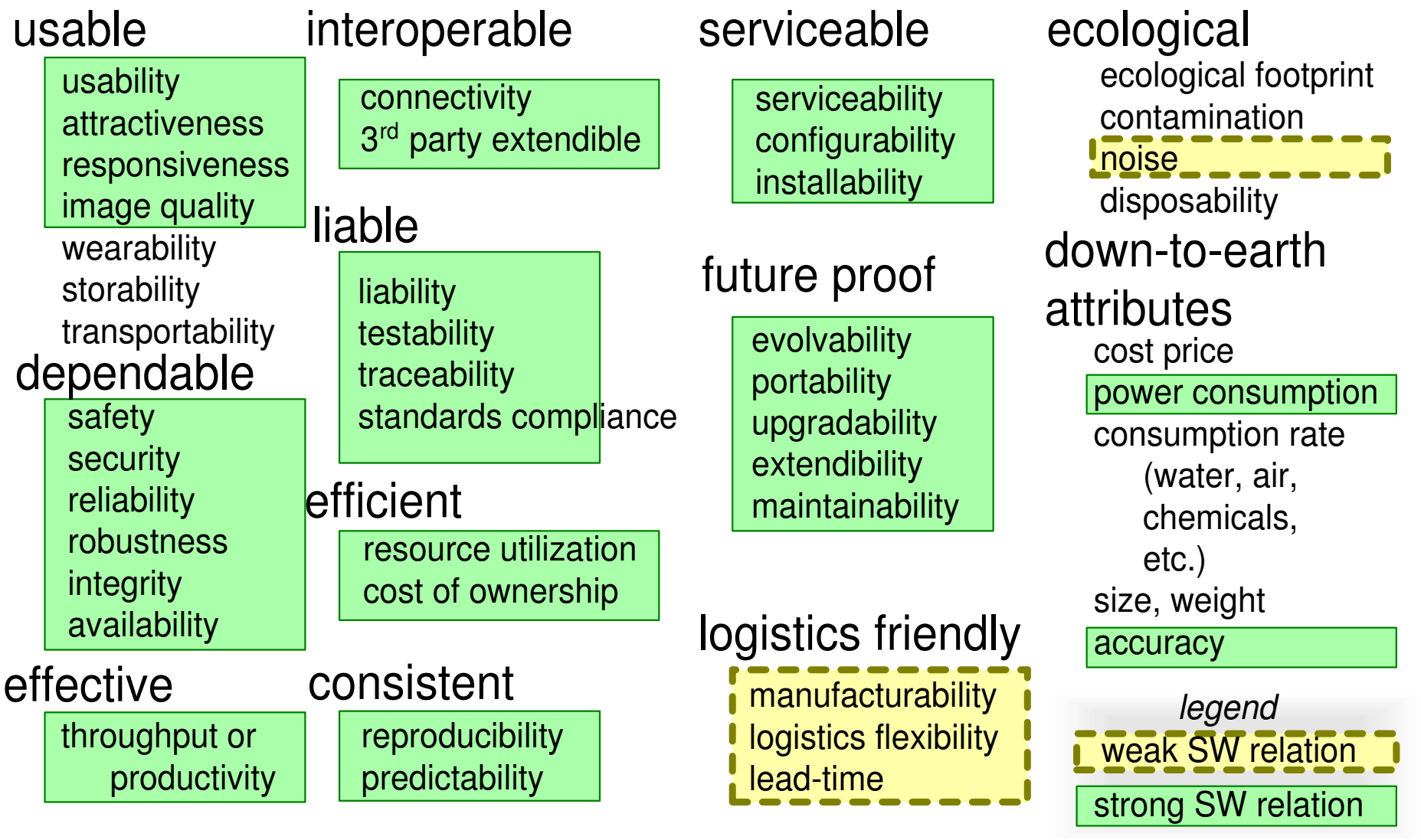
Control Hierarchy along Technology axis



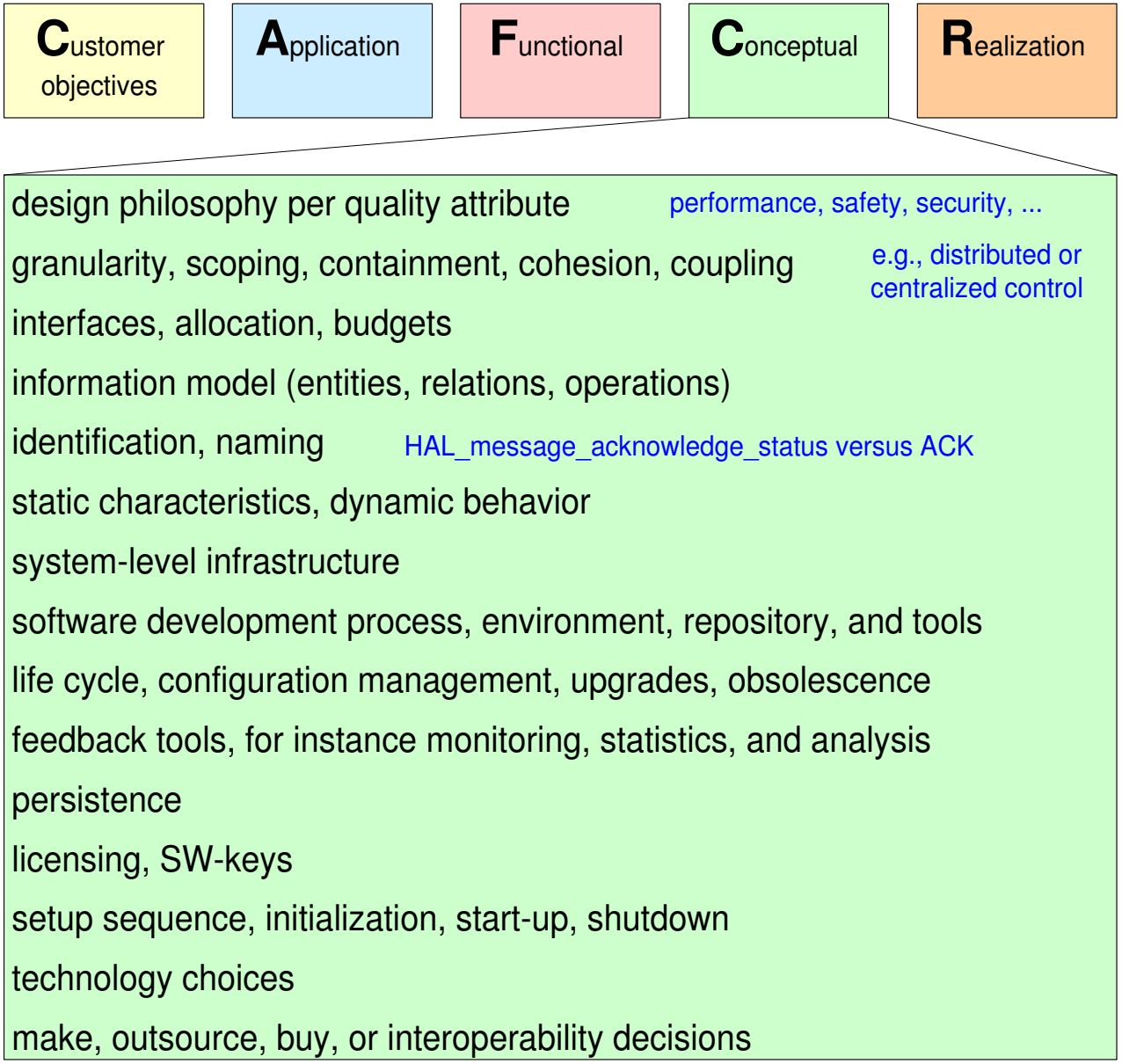
Characterization of disciplines



Quality Attributes annotated with SW relation



Design Aspects related to SW



SW Mechanisms