



AOSD and
System
Correctness

Does AOSD make it difficult to reason about correctness of a system?

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Main Thesis:

System Correctness



AOSD

AOSD is a step towards improved
system modularisation

AOSD \Rightarrow

System has a higher probability to be correct

AOSD \Rightarrow

System has a lower probability to be correct

\Rightarrow **AOSD and system correctness seem to be somehow
orthogonal to each other**



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The theorem of the conservation of misery.



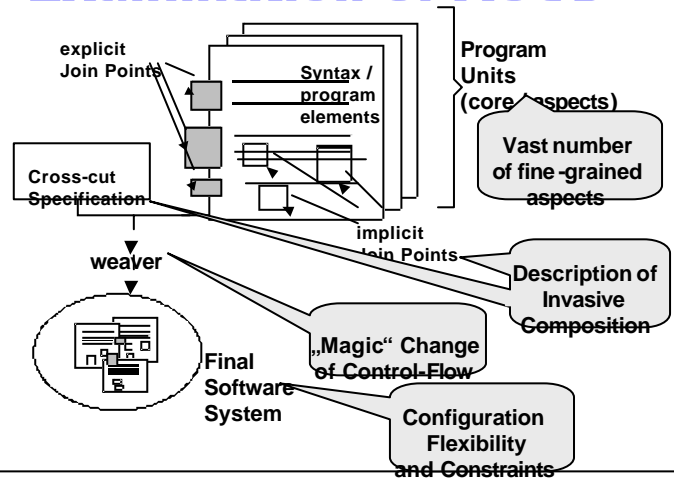
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Examination of AOSD

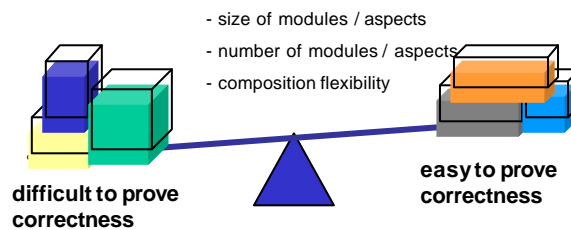


Examination of AOSD

- **AOSD realisations are diverse, however ...**
... we have typical characteristics in AOSD
- **The constellation of AOSD characteristics is unique for ...**
... the individual characteristics are not!

AOSD is a step towards improved system modularisation on a more fine-grained gray-box level

Conclusion



⇒ **Challenges are not new in principle but are general correctness questions for a specific kind of invasively composed system (® WS#11: CMC)**