§9 Conclusion

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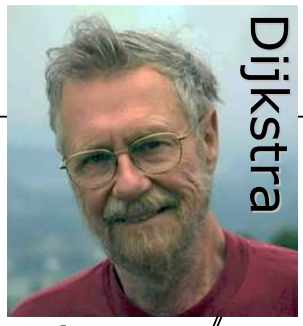
Design and Analysis of Algorithms

Theoretical Computer Science

"***Virtues***":

- problem specification
- formal semantics
- algorithm design
- and analysis (correctness, efficiency)
- proof of optimality

The Ethos of Science



Robert K. Merton (1942):

- ***C**ommunalism*: common 'ownership' of scientific goods and findings, collaboration
- ***U**niversalism*: regardless of race, nationality, status, beliefs, culture, or gender
- ***D**isinterestedness*: act for benefit of whole scientific
- ***O**riginality*: progress in science by *new* findings
- ***S**kepticism*: claims must be independently verified

patents?
publisher pricing?
affirmative action?
hierarchy?
degrees, awards, career?
송유근, 改善?

"It is not the task of a University to offer what society asks for, but to give what society needs."

Jan Hendrik Schön, 小保方 晴子, 황우석?

Levels of Understanding

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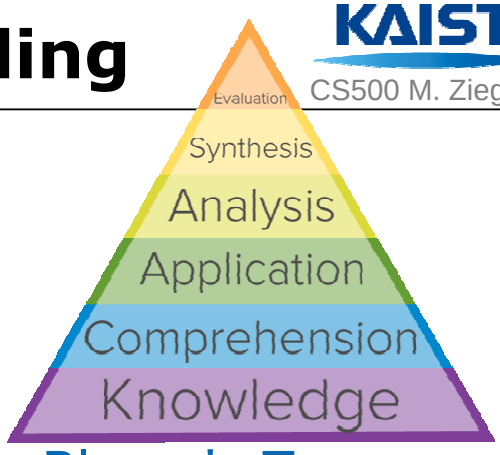
1. reproduce
2. apply
3. transfer
4. extend



Bloom's Taxonomy

- *What is thought is not said*
- *What is said is not heard*
- *What is heard is not understood*
- *What is understood is not believed*
- *What is believed is not yet advocated*
- *What is advocated is not yet acted on*
- *What is acted on is not yet completed*

Konrad Lorenz (Nobel Prize 1973)