

3D Printing



RJ 12: **Wednesday 5pm**
Topic: **Wednesday 11:59pm**



Bookkeeping

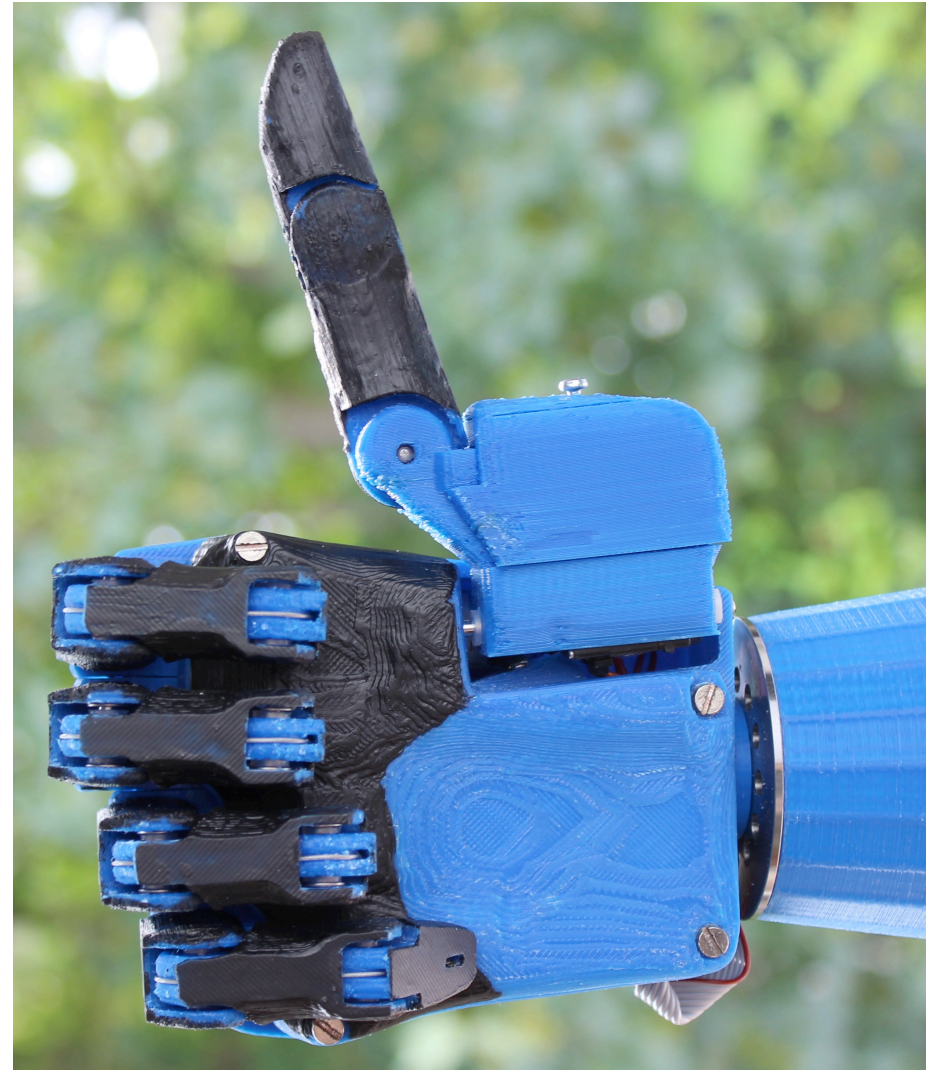
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- ◆ Assignments posted
- ◆ RJs due at midnight the day before class
- ◆ Next RJ due before class at 5pm
- ◆ Final project:
 - ◆ First stab at topic due Wednesday at 9
 - ◆ Seriously consider finding a partner!
 - ◆ Piazza thread up now

Positives

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- ◆ For individuals:
 - ◆ Make what you want!
 - ◆ Obtain otherwise unavailable items
 - ◆ Minimize waste
- ◆ For companies:
 - ◆ Fast, inexpensive prototyping
 - ◆ Small-scale production
- ◆ For humanity
 - ◆ Printed organs





Negatives (for whom?)

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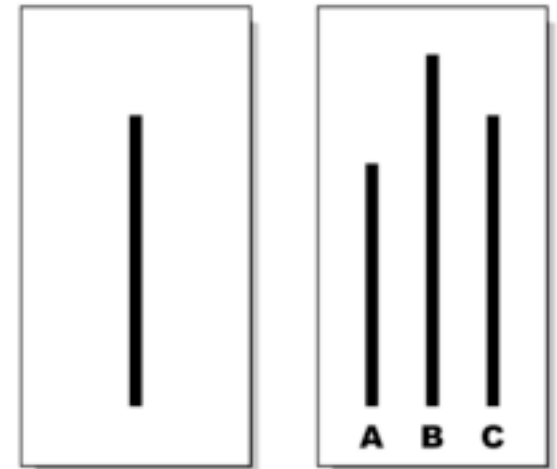
- ◆ Intellectual property of things
 - ◆ Current patent law depends on limited manufacturing
 - ◆ Toys, etc. can be made at home
 - ◆ Other things that people have worried about?
 - ◆ The printing press (nope), copiers (nope)
 - ◆ Shareable music, video files (yes)
- ◆ High cost of entry
- ◆ Standards failures
- ◆ Artisanship vs. Industrial Revolution



Asch Conformity Experiments

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- ◆ Look at card 1
- ◆ Which line on card 2 matches card 1?
- ◆ What if everyone disagrees?
 - ◆ Almost everyone (70%-90% will give the wrong answer if everyone else does.
 - ◆ It only takes a few other people to change that
- ◆ Why do people conform?
 - ◆ Self-doubt: they think they must be wrong
 - ◆ Conformity: they don't wish to be "peculiar"





Dangerous Printouts

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- ◆ Guns
- ◆ Knives
- ◆ Food-unsafe items
- ◆ Car parts?
- ◆ Badly-made prosthetics? Kidneys?



Discussion

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- ◆ Should 3D printing be regulated?
- ◆ How? Who should be controlled? What should?
- ◆ Which of the items on your list call for regulation?
- ◆ What kind? By whom?