

## **Part VII: Ant research**

- This is the most crucial part of the course. Please read very carefully!!

# RECENT ADVANCES IN ANT RESEARCH

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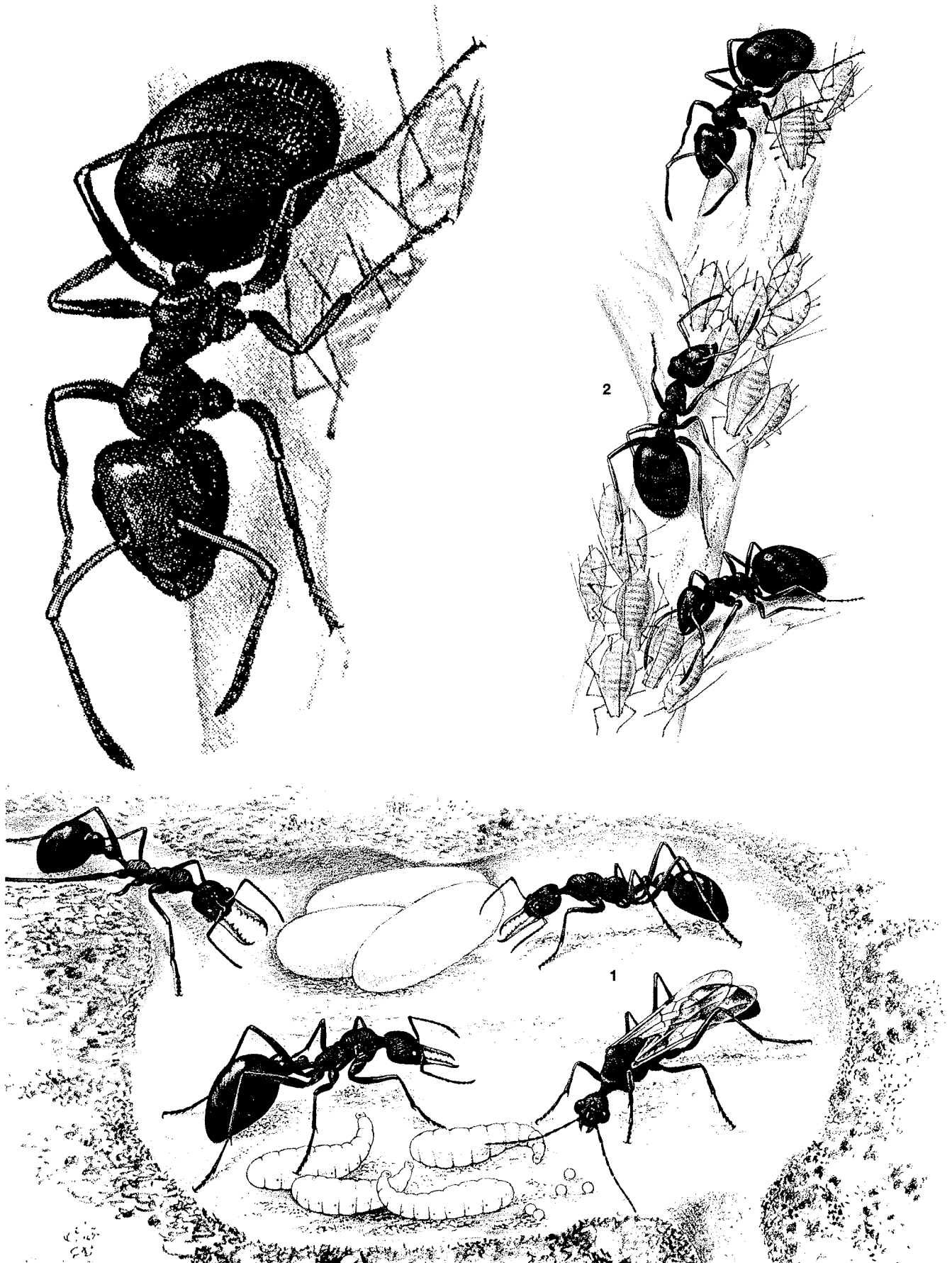
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- What is an ant?
- Experiments with Finnish forest ants
- Experiment I with tiny California ants
- Experiment II with tiny California ants
- Experiment III with tiny California ants

# WHAT IS AN ANT?

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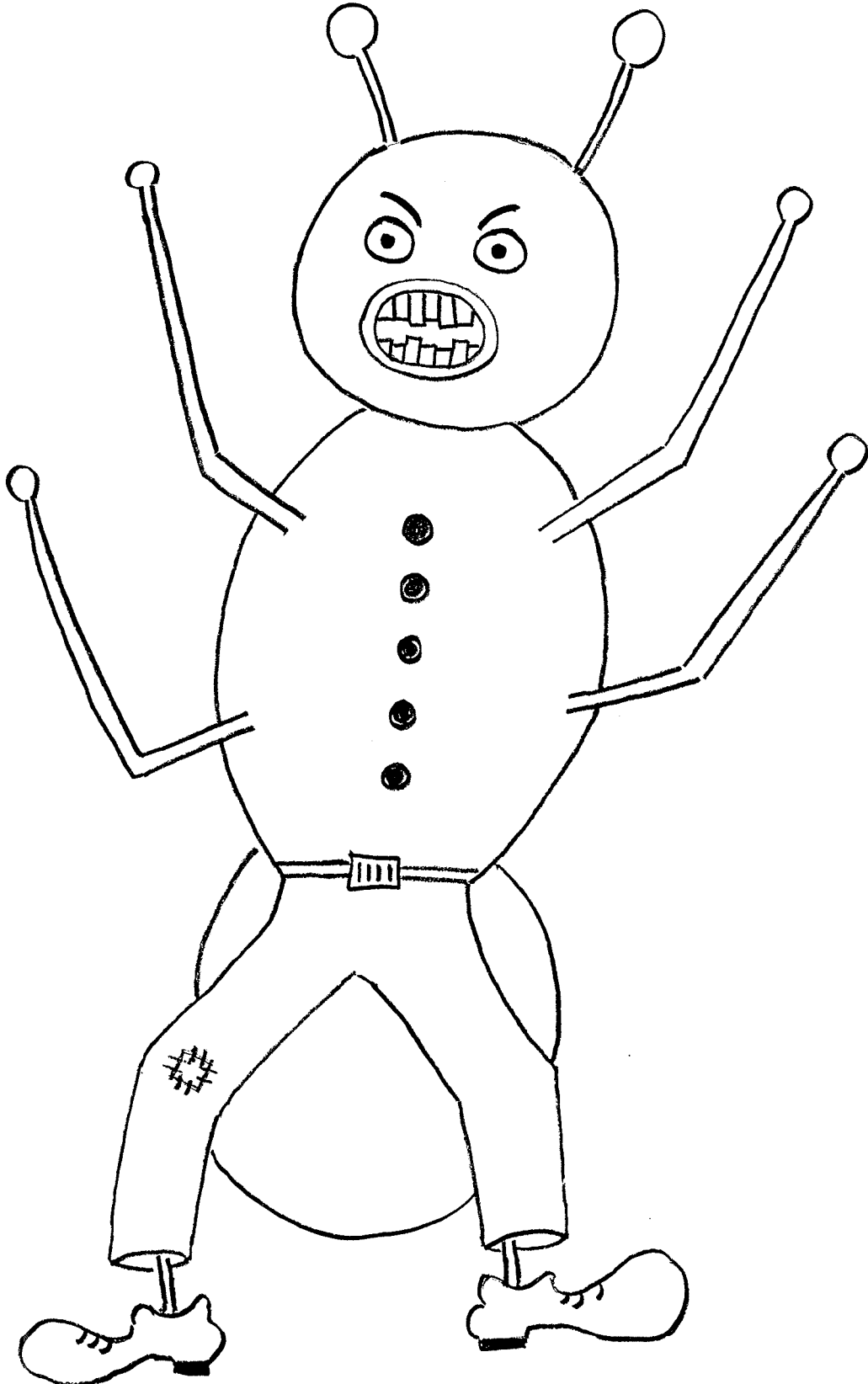
## EXPERIMENTS WITH FINNISH FOREST ANTS

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- **Test I:** When an ant is walking on a path, put your finger close to it for the first time: What is the effect?
- **Test II:** Put your finger close to the same ant for the second time: What is the effect?

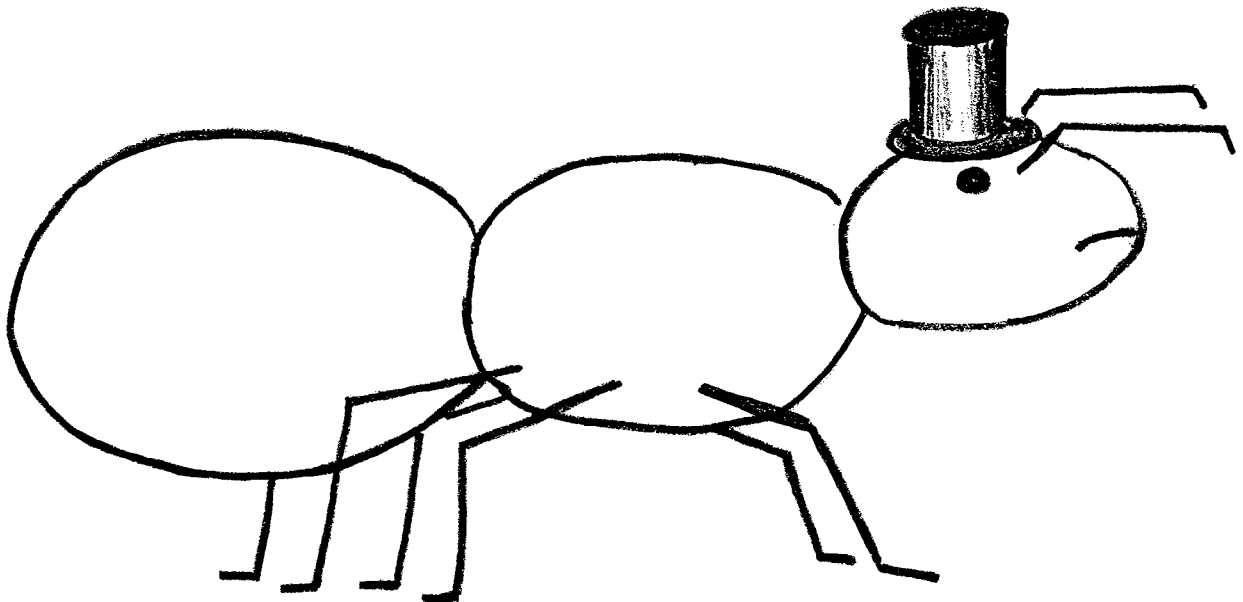
## RESULTS OF TEST I

- The ant becomes extremely angry and tries to attack your finger.



## RESULTS OF TEST II

- The ant shows no more interest in exploring your finger and tries to say what a stupid human being.
- **Conclusion:** The estimated I.Q. for these ants is rather high, higher than for ants in general.



## EXPERIMENT I WITH TINY CALIFORNIA ANTS

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- **Test I:** The same test as for the forest ants has been performed for the tiny California ants.
- **Results:** Instead of showing any interest in exploring the finger, these ants just panic and run away.

## EXPERIMENT II WITH TINY CALIFORNIA ANTS

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- **Test I:** Put an object in the path of ants.
- **Test II:** Remove the object.
- **Result of Test I:** This test brings out some rudimentary learning process – Instead of trying to climb over the object, the ants do go around it.
- **Result of Test II:** The ants still try to go around instead of using the shortcut.
- **Conclusion:** The estimated I.Q. for the California ants is not so high, much lower than for their Finnish cousins.

## EXPERIMENT III WITH TINY CALIFORNIA ANTS

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- **Test:** Eating habits of the ants around Thanksgiving.
- **Result of Test:** Honey roasted turkey is the favourite food. Jack cheese is also OK for snack.
- Bread is not so popular, perhaps because humans don't like American bread either.
- **Future research:** The preference of the ants to rye bread, French bread, and toothpaste.