Hacking Hearing Devices

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Lightning Talk

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Features of Hearing Devices

- small and (nearly) invisible
- microphones and speakers
- powerful signal processing
  (recognize accoustic settings, direction, filter)
- talk to each other
- talk to other hardware (phone, tv etc.)

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Why hack them?

- If you can't open it, you don't own it.
- Free the information
- Technical interesting.
- Just because we can :)

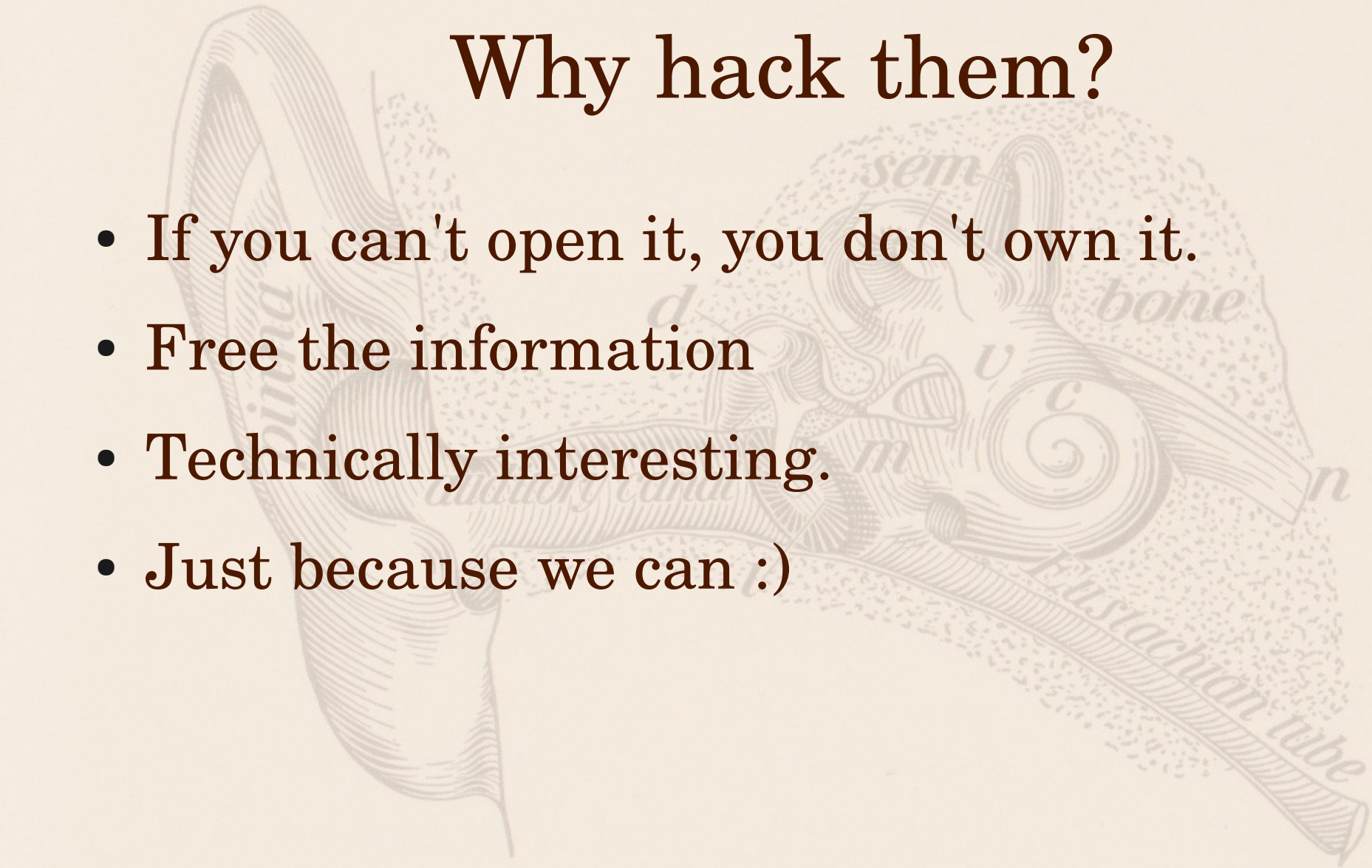

FIG. 157.—Temporal bone cut open to show the bony internal ear. *c*, cochlea; *v*, vestibule; *sem*, semicircular canals; *m*, [illegible]us; *t*, tympanic membrane; *n*, auditory nerve. The internal and middle ear are shown about double natural size.

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Obstacles

- proprietary and closed market
- hard to get information
- hardware is expensive
- not allowed to sell them on ebay
- risk of injury
- warranty, dependence on devices

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Visions

- adjust the parameters by yourself
- affordable bluetooth support
- write your own signal processing
- hear more than normal people do
- use devices to spy / record

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Wanted

people – information – hardware – software

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