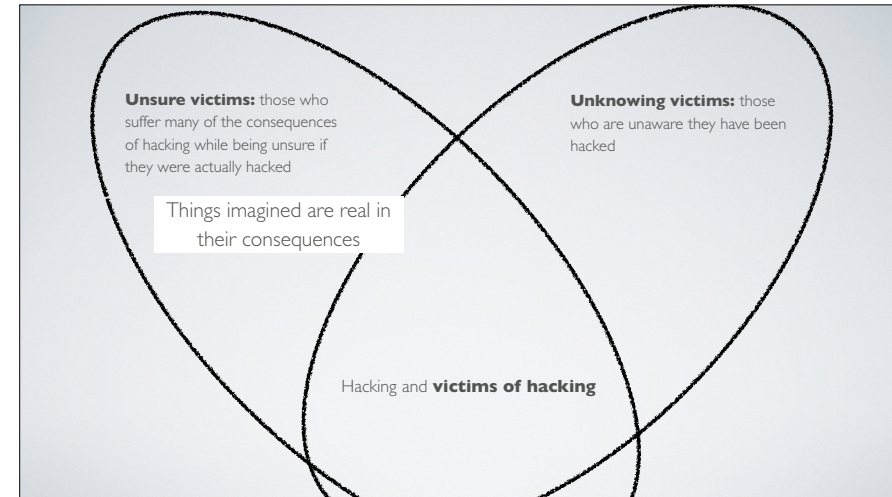**Slide 1**

Being Hacked:
Understanding Victims' Experiences of IoT Hacking

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Slide 2

Unsure victims: those who suffer many of the consequences of hacking while being unsure if they were actually hacked

Unknowing victims: those who are unaware they have been hacked

Things imagined are real in their consequences
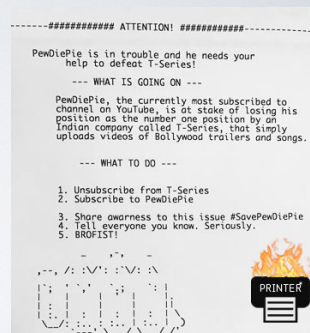
Hacking and **victims of hacking**

2

Slide 3

Users Experiences of Being Hacked

- Data from online postings self-reports of hacks

- Focusing on Internet of things/smart home technology

- Look at cases where users themselves thought they were hacked

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Slide 4

Data

- 210 hack reports

  - Reddit discussions of being hacked (114)

  - Amazon product reviews that talk about being hacked (12)

  - Product support forums where users discuss being hacked (84)
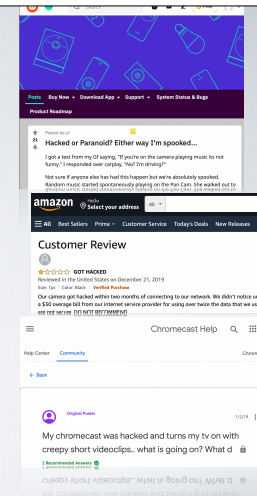
4

Hack Reports

- The Hack

  - Descriptions of technology, story of what happened

  - Actions taken to deal with the hack

- The exceptional event

  - Was I hacked?

    "Cat, ghost or hack"

Types of Report

- Warnings

- Calls for help

- Initiating discussion

It was the best camera till it was compromised. BUT sure enough last night at about 9pm, I WATCHED IT MOVE 5 DEGREES TO THE LEFT AND THEN BACK TO THE RIGHT! I strongly urge you not to buy this camera

My Chromecast was hacked and turns my tv on with creepy short videoclips.. what is going

10 minutes ago my Arlo camera in the kitchen started making pornography sounds through it speaker, it lasted around 30 seconds. Just before the event my google home speaker made the blimp noise as if someone had said the trigger words. I guessing something has been hacked! This is not a joke and is freaking me out. During the sounds the lights was on as if someone was watching. Did anyone else experience thus, surly I wasn't the only one

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Making Sense of Hacks

- Have I been hacked?

  - Unusual behavior - flashing light

- Who hacked me?

  - Anonymous or personal?

- Why was I hacked?

  - The hack relationship

Because I have a stalker, I purchased and installed a security camera. I am terrified, and needed some sort of security. It could be other individuals too, but I think it is my ex-partner and it is him who is messing with my life. I think he is monitoring me on a camera and he has hacked our network. the other night I got a notification on my phone because camera shifted between the night and day mode over and over, and the blue frame in the app showed it is trying to detect something, but it couldn't. Our room was bright enough and not dark at all. I want to check with you folks here, is it possible to hack this security camera?

The 'Non-Hack' Hack

- For users hacks are sites of uncertainty and doubt

- Discovering a hack is a partial discovery but one that leads to further unanswered questions

- Doubt, trauma, blame - those who are vulnerable

Dealing With the Hack

- Getting technical support

- Getting social and legal support

  - Dealing with neighbors

- Dealing with harm and hurt

> I just unplugged the camera in my child's room. This morning she came back in to wake me up and said "Mom why did you talk on my speaker?" What? "You talked on my speaker." When? "Right now. You said hey go to sleep." Right now? "Yeah and I didn't like it. You said stop playing and go to sleep."
>
> I asked her if it was a mommy voice or a daddy voice, and she said mommy voice and then imitated it, whispering. And she said, "and I didn't like it so I covered my ears and came in here. I am FREAKED out and promptly went in her room and unplugged it".

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Discussion

- Designing for being hacked - "have I been hacked?"

- Cybernoia

- Hacks as technical and social objects - the lifeworld of the hack

Check out our forthcoming CSCW paper from the same project "Why Users Hack: Conflicting Interests and the Political Economy of Software," (barrybrown.se/recent-publications)

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