

# Smart Things – Dumb Law?

Challenges Smart Things pose to Criminal Law

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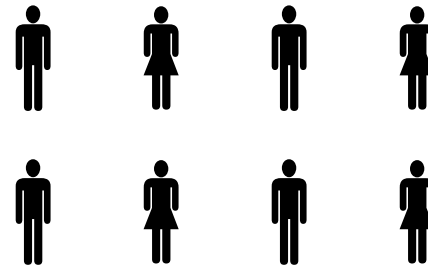
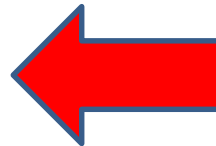
Research Training Group 2475: Cybercrime and Forensic Computing



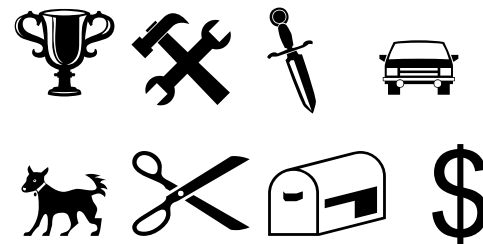
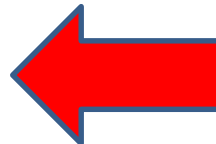
## A. Introduction: What criminal law tells us – and what (sometimes) not



... what people do –  
not: what Artificial  
 Intelligences do



... with things –  
mostly not: with data



## A. Introduction: What criminal law tells us – and what (sometimes) not

### General challenges to the law

- Traditional basing of laws on physical objects and on historical ideas of causality.
- Anchoring of large parts of the legal system in the mechanical-objective world.
- Examination of applicability to new phenomena.

### Specific challenges to criminal law

- Even stronger anchoring in the mechanical-objective world than many other areas of the legal system.
- Special principle of legality in Art. 103 (2) GG (with strict wording limit, prohibition of the analogous application of law).

## B. Smart Home



## C. Open Sesame!



### Possible Scenarios of Attack:

- Hacking into the system and intercepting the door code
- Hacking into the smart phone, initiating the door to open
- Hacking into the WiFi-Router, manipulating the mailbox to play messages live; calling the number and telling the smart home voice control to open the door
- Etc.

## D. Fighting and Punishing Burglary in the German Criminal Code (*StGB*)

(Completion of actus reus dependent on particular modus operandi)

### General Offences

- § 242 StGB: Theft → imprisonment up to **five years or fine**
- § 303 StGB: Criminal Damage → imprisonment up to **two years or fine**
- § 123 StGB: Trespass → imprisonment up to **one year or fine**

### Specific offences of Burglary

- § 243 (1) No 1: Aggravated Theft → imprisonment from **three months up to ten years**  
(presumptive example for assesment of penalty)
- § 244 (1) No 3: Theft by Burglary of Dwellings → imprisonment from **six months up to ten years**
- § 244 (1) No 3, (4): Theft by Burglary of Private Premises → imprisonment from **one year to ten years** → Serious Criminal Offence (§ 12 StGB)

## D. Fighting and Punishing Burglary in the German Criminal Code (*StGB*)

### § 244 – Theft by Burglary of Dwellings

(1) Whoever

[...] 3. commits theft for the commission of which they **break into** or **enter private premises** or **intrude using a false key** or **other tool not typically used for gaining access** or hide in the private premises incurs a penalty of imprisonment for a term of between six months and 10 years.

[...] (4) If theft by burglary of private premises under subsection (1) nos. 1 to 3 concerns residential accommodation which is used permanently as private living space, the penalty is imprisonment for a term of between one year and ten years.

### § 243 – Aggravated Theft

(1) In especially serious cases of theft, the penalty is imprisonment for a term of between three months and 10 years. An especially serious case **typically** occurs where the offender [...]

1. **breaks into** or **enters** a building, official or business premises or another enclosed space, or **intrudes by using a false key** or **other tool not typically used for gaining access** or hides in the room for the purpose of committing the offence [...]



Due to the specific course of action during burglaries of *Smart Homes*, neither § 244 nor § 243 can be applied in many scenarios

## D. Fighting and Punishing Burglary in the German Criminal Code (*StGB*)

### § 244 / § 243

#### Breaking into

- Does not necessarily have to be accompanied by damage of the substance
- But: Removal of obstacle has to be violent, at least with the use of physical force; given the *modi operandi*: no violence, no use of physical force

#### Enter

- Invading the dwelling via an opening, that is not meant to be for accessing the house
- Given the *modi operandi*, two possibilities:
  - Access through the door: § 244 (-)
  - Access through other openings, e.g. window: § 244 possibly (+)

#### Intruding

- Using a false key
  - Intercepted code (-), no physical key
  - Counterfeit key card/ transponder (+)
- Using another tool not typically used for gaining access
  - „Jammers“ that interfere with the lock and open it (+)
  - „Jammers“ that block the lock from being locked (-)



## D. Fighting and Punishing Burglary in the German Criminal Code (*StGB*)

In many Smart Home Burglary Scenarios, including the given examples



§ 244 / § 243 are not complete

- Degree of wrongdoing seems to be the same, given the intrusion into the victims' private sphere, psychological consequences as well as massive damage of the feeling of security
- However, no possibility of application by analogy of § 244 → Art. 103 (2) GG\*
- Courts tend to apply an unnamed aggravated case (wording: „typically“)
  - Grave concerns in the view of legal doctrine and Art. 103 (2) GG, if the scenario is very similar to the scenarios listed in § 243 (1) No. 1-7
  - Even if § 243 might be applied: less severe sentence and non-attainment of goals of making burglary of private premises a serious crime

\*Basic Law = German Constitution

## D. Fighting and Punishing Burglary in the German Criminal Code (*StGB*)

Many of the „Smart Burglarys“ can thereby (only) be punished according to:

- § 242 StGB
- § 123 StGB
- Depending on the particular modus operandi: data offences (e.g. § 202 a StGB, imprisonment up to 2 years / fine)
- Assessment of (concurrent) sentence according to §§ 52 et seqq. StGB

That means:

- Sentence for „Smart Burglary“ will most probably not depict the degree of wrongdoing
- Consequences of not being punishable as a serious offence, e.g. less efficient criminal procedural possibilities
- Making burglary of private premises a serious criminal offence with all of its motivations come to nothing

## E. Conclusion

- Shown Example: „Smart Burglary“ might not be punished like „mechanical“ Burglary, although the degree of wrongdoing is (at least) as equal



Big Picture:

- Connected devices pose a challenge on criminal (procedural) law
- As shown for the example of Smart Home Systems, criminal law does not yet have all the answers to those new challenges
- Law Makers have to keep those challenges in mind and face them by a modern criminal law that give adequate possibilities to react

**Thank you very much.**

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