

Public-key cryptography

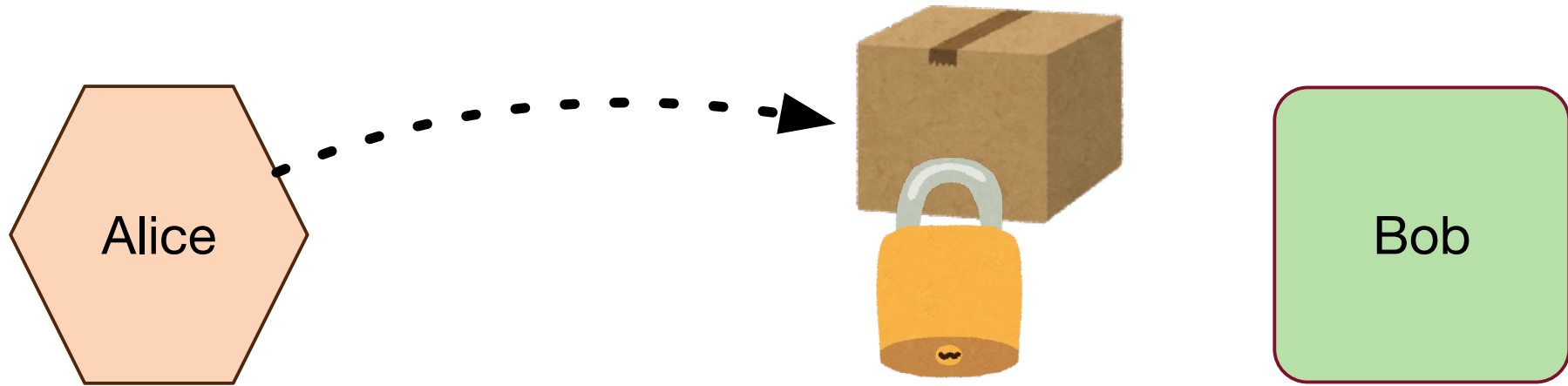
公開鍵暗号

計算科学演習

陰山

2017.04.13

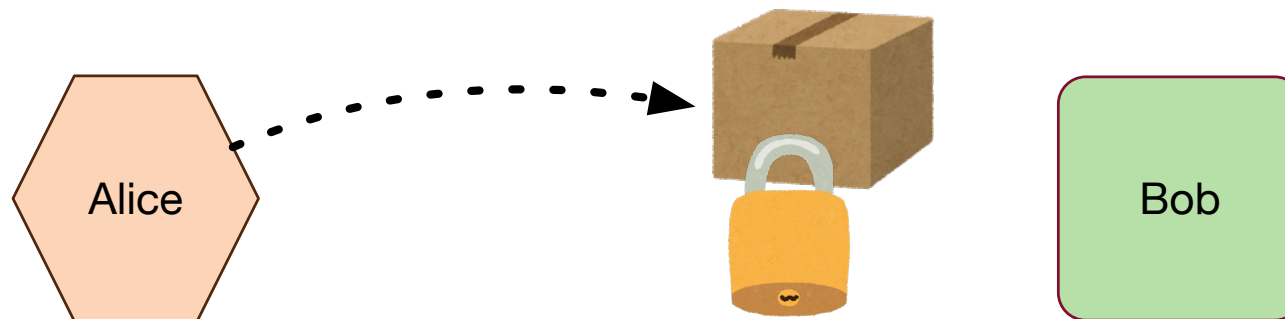
Encrypted message



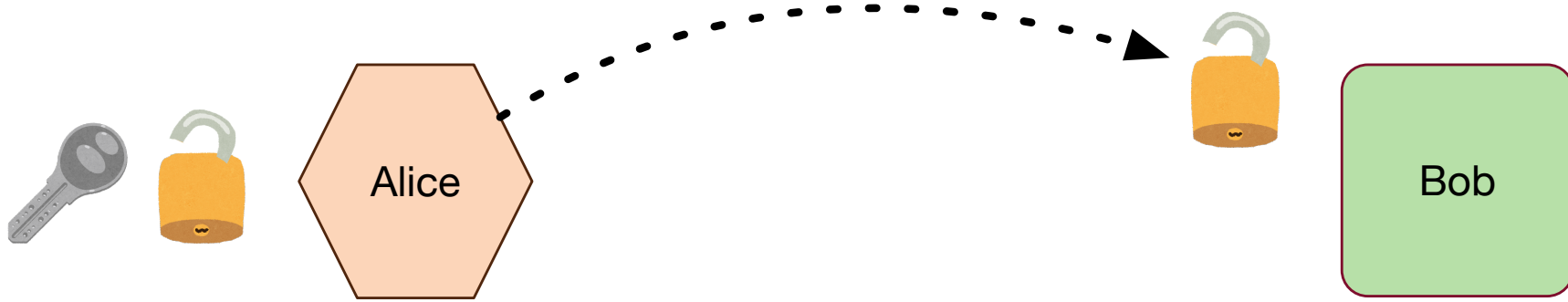
Symmetric-key encryption 共通鍵暗号

- E.g., Caesar's cipher
- **k**obe \Rightarrow **p**tgj (shift for 5 letters in alphabet)

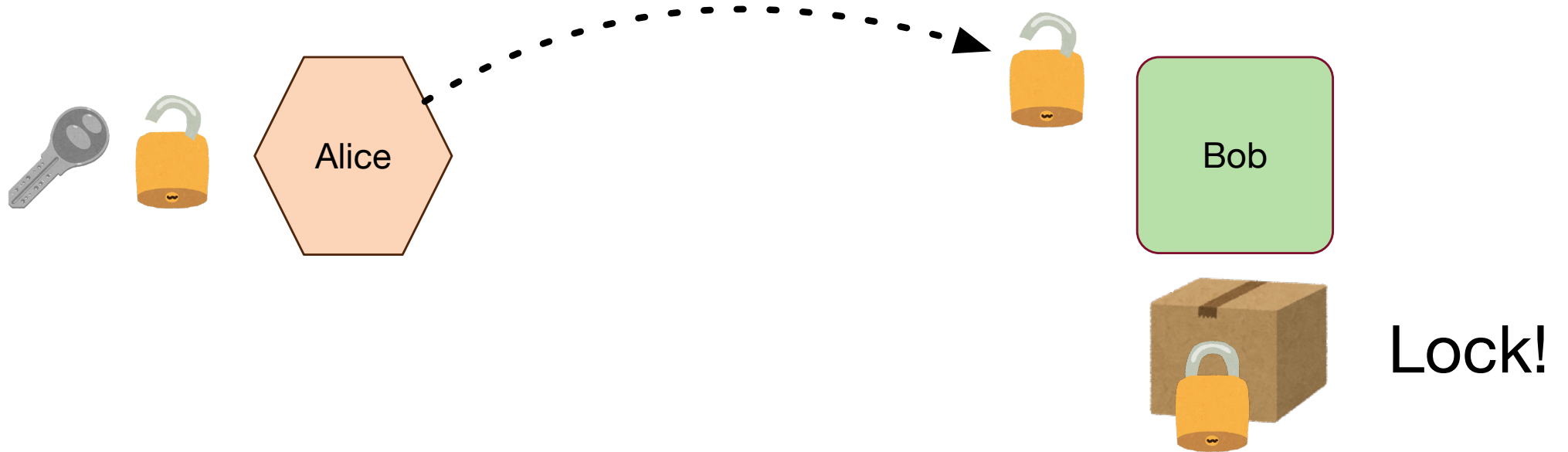
- abcdefghijklmnopqrstuvwxyz



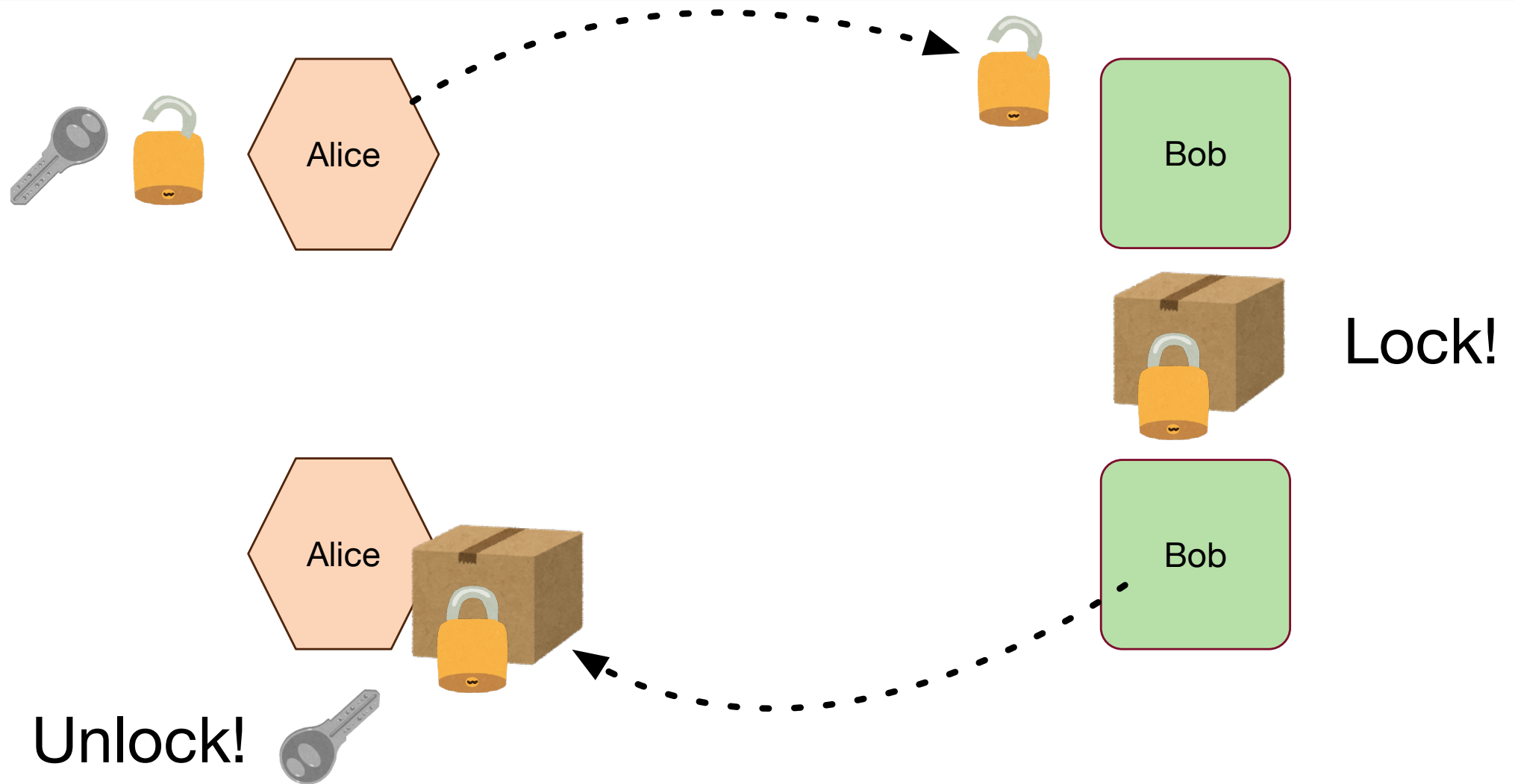
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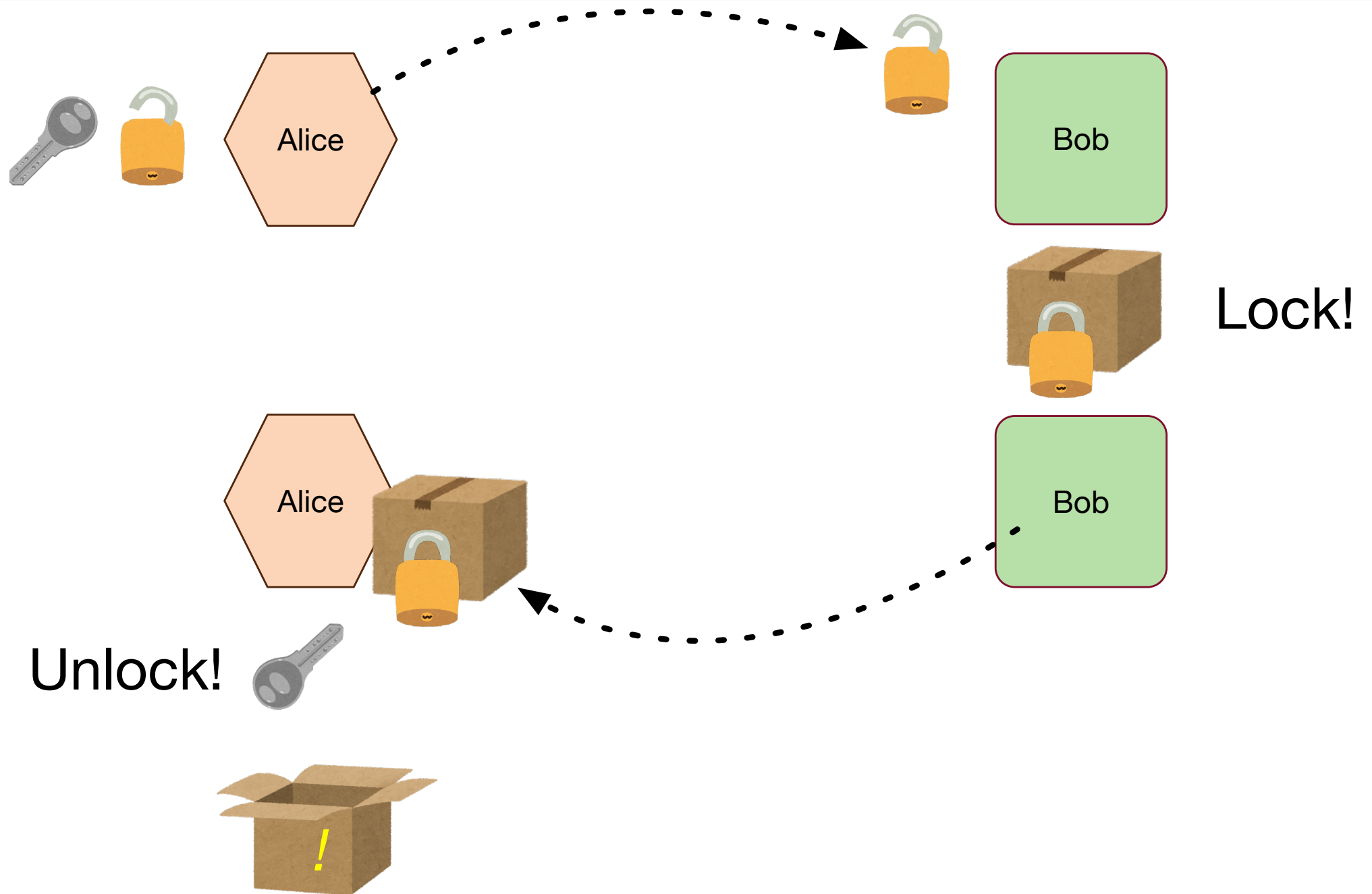
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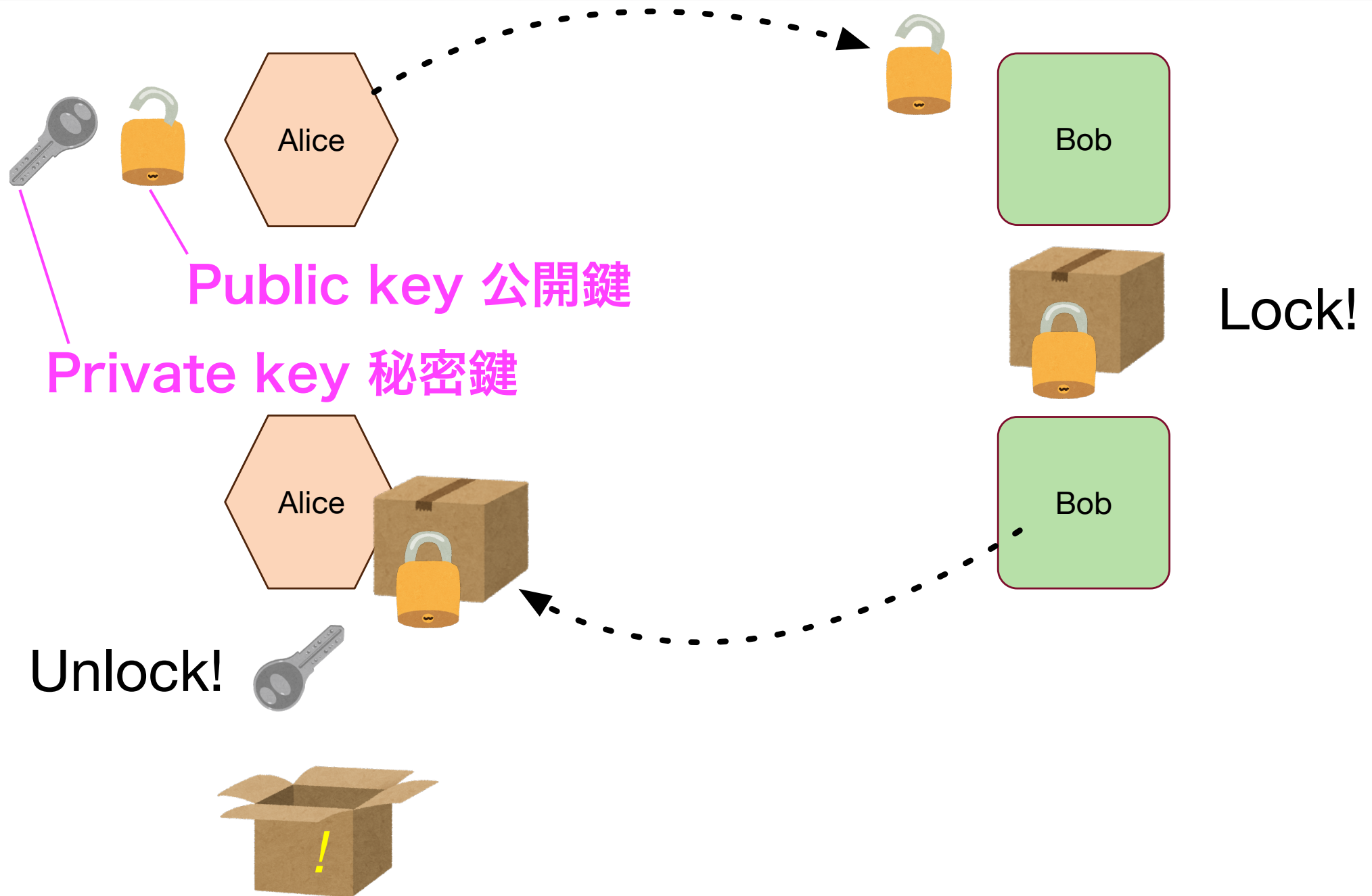
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Note

- You can release your public key, but you must not release your private key.
 - 公開鍵は公開可。しかし、秘密鍵を公開してはいけない。
- You must not send your private key by email.
 - 秘密鍵をメール等で送ってはいけない。