

Symmetric-Key Cryptography

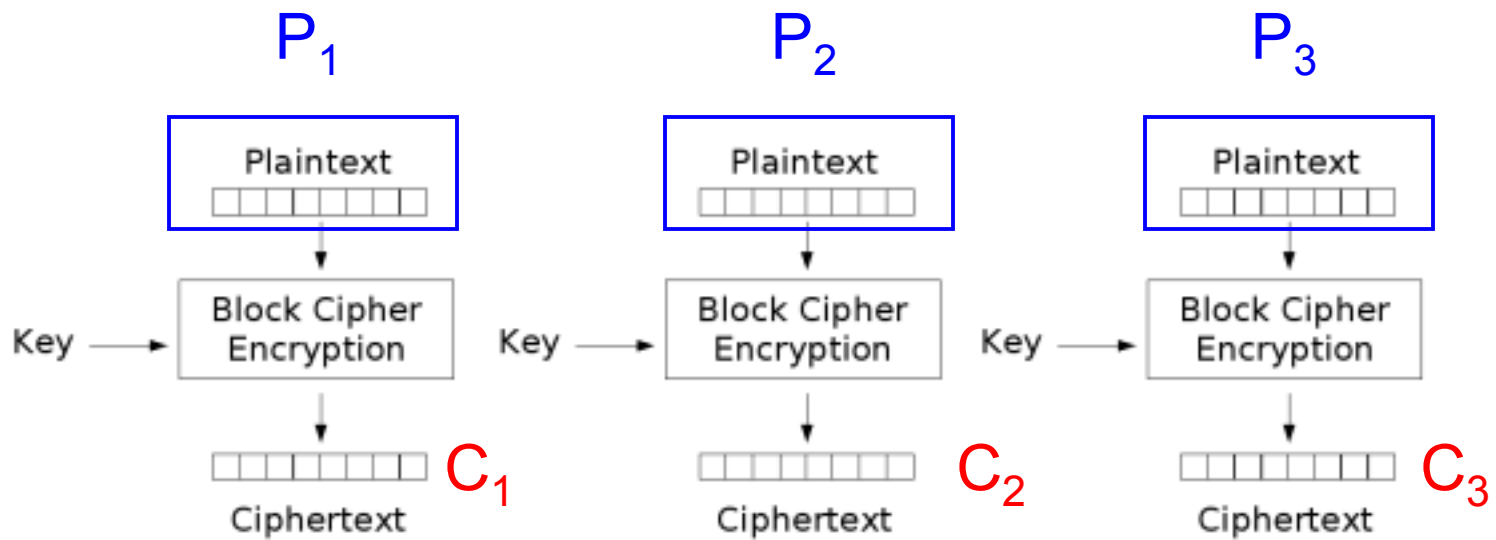
CS 161: Computer Security

Prof. Vern Paxson

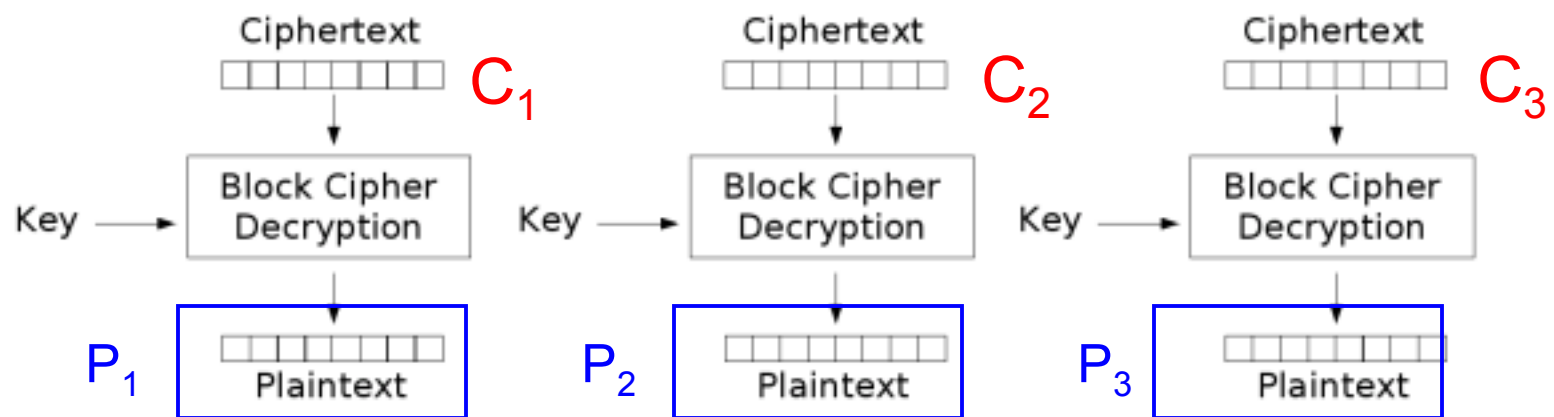
**TAs: Jethro Beekman, Mobin Javed,
Antonio Lupher, Paul Pearce
& Matthias Vallentin**

<http://inst.eecs.berkeley.edu/~cs161/>

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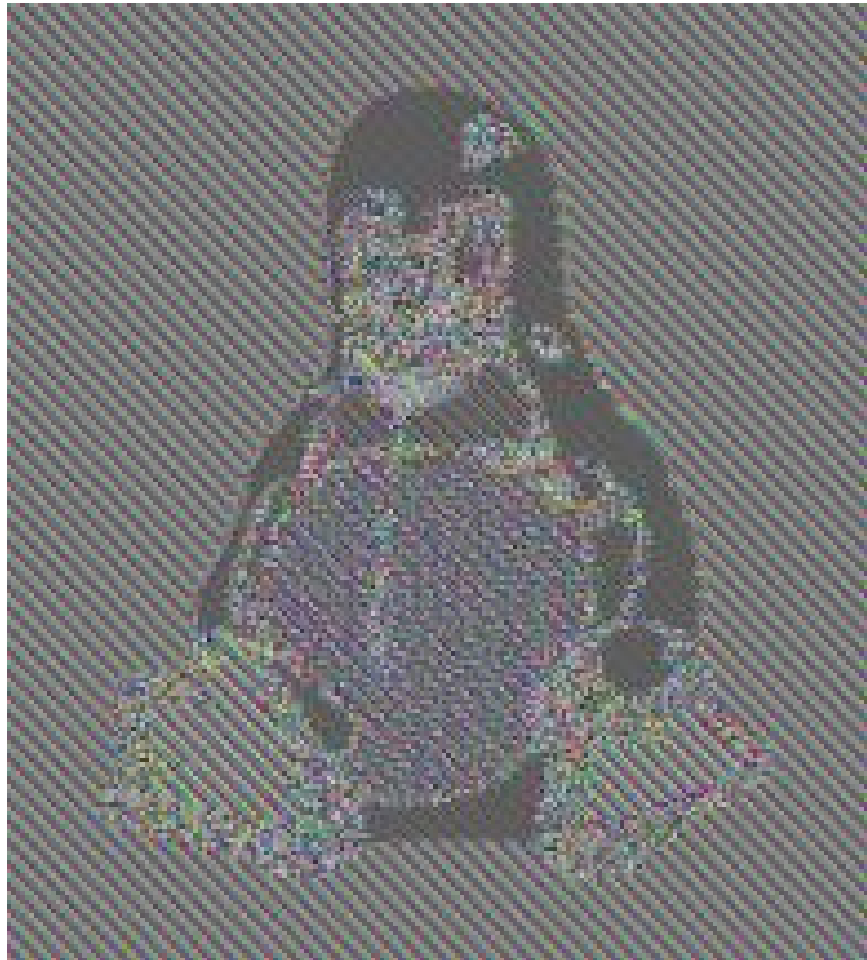
Electronic Codebook (ECB) mode encryption



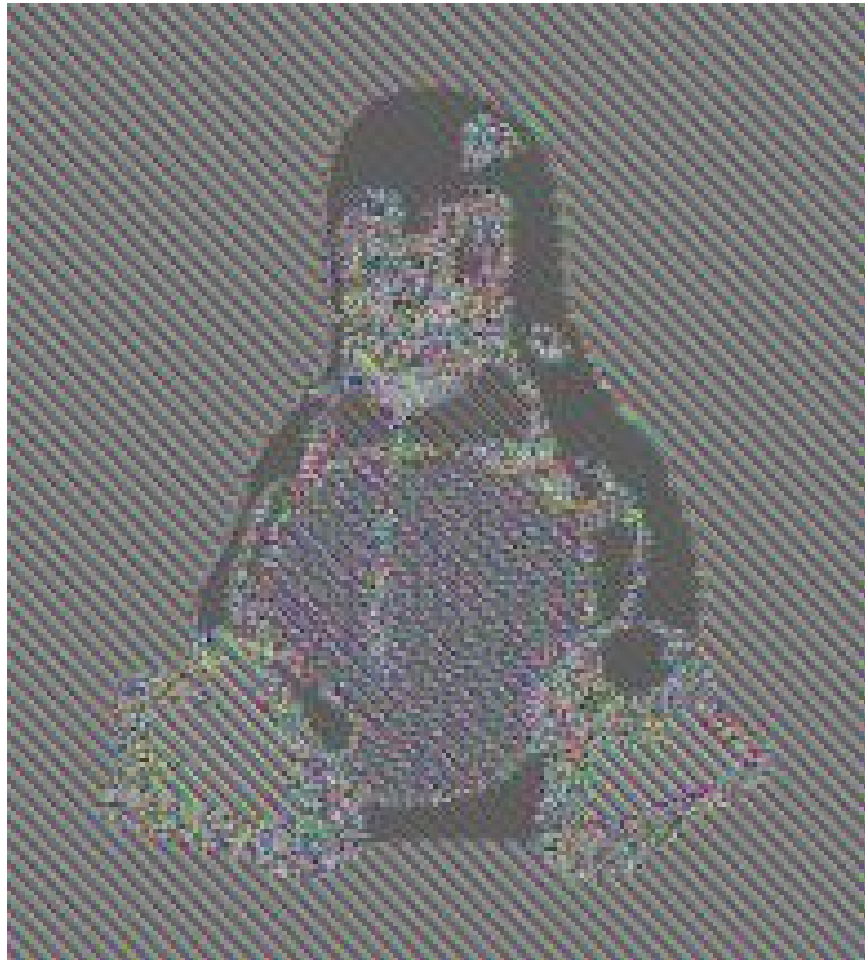
Electronic Codebook (ECB) mode decryption



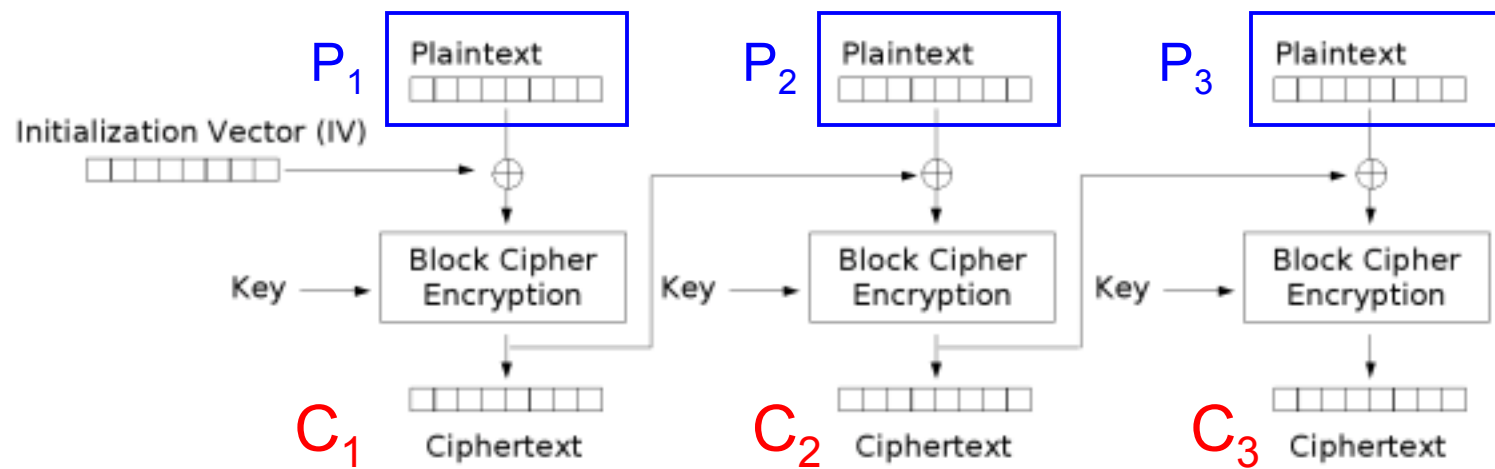
Original image



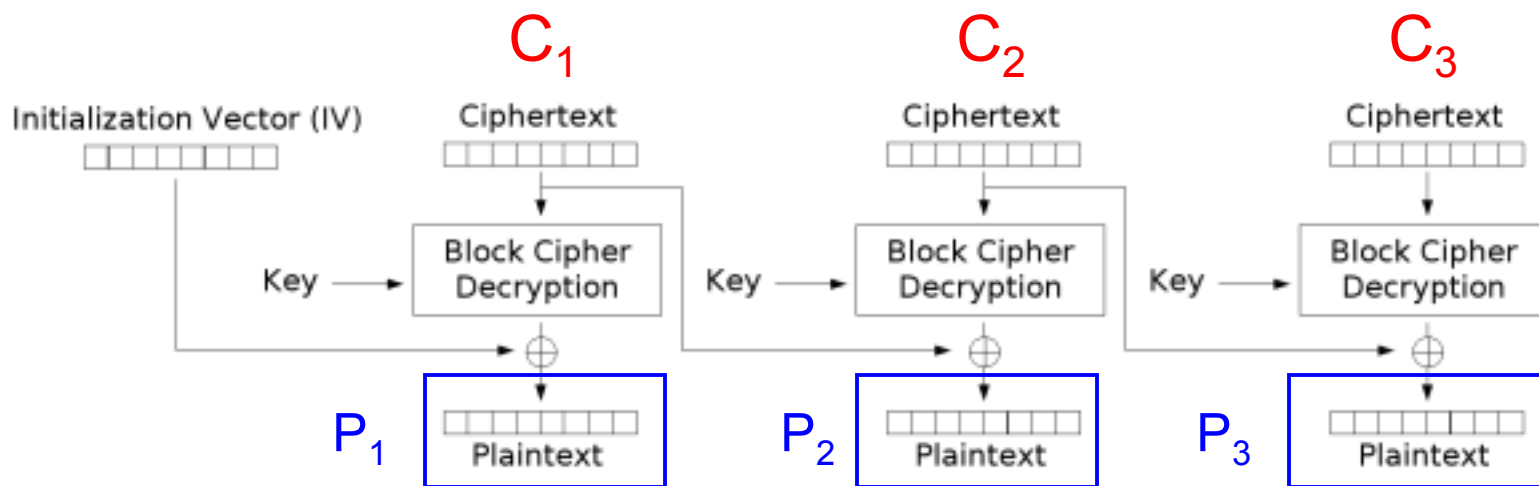
Encrypted with ECB



Later (identical) message again encrypted with ECB



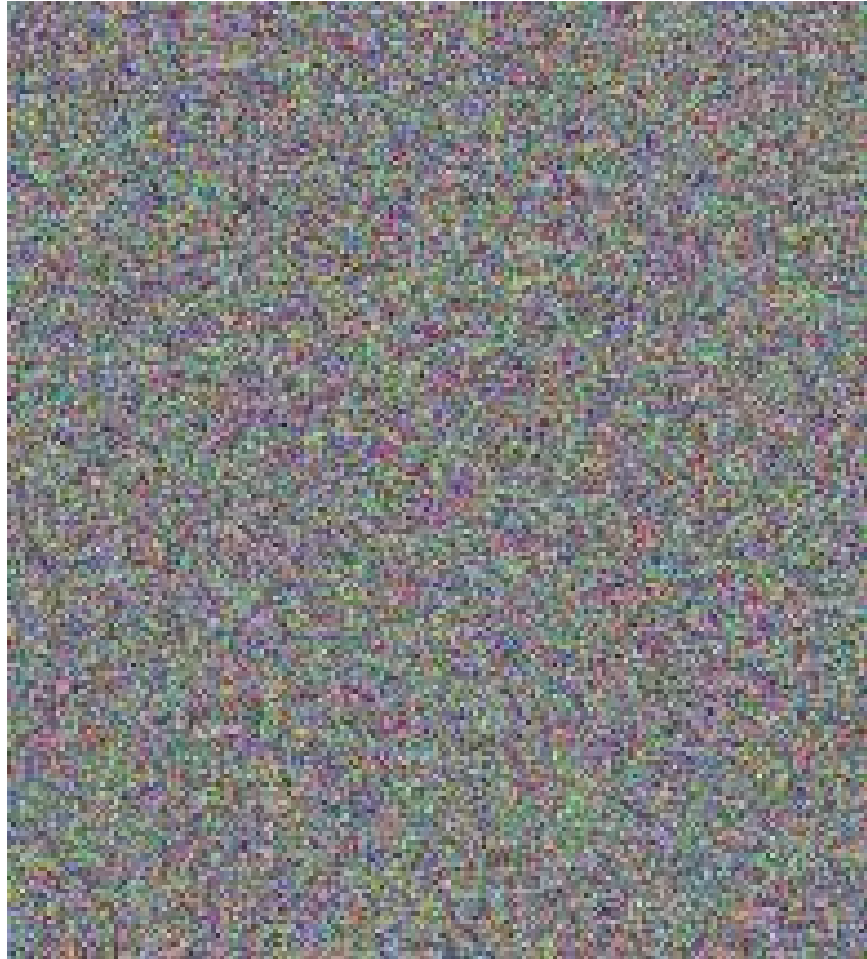
Cipher Block Chaining (CBC) mode encryption



Cipher Block Chaining (CBC) mode decryption



Original image



Encrypted with CBC