

# THE CHINESE WALL SECURITY POLICY

Dr. David F.C. Brewer and Dr. Michael J. Nash, 1989

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Mikael Elkiær Christensen  
michri11@student.aau.dk

Department of Computer Science  
Aalborg University  
Denmark



AALBORG UNIVERSITY  
DENMARK



# Who is the enemy?

## CHINESE WALL

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Christensen

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# Who is the enemy?

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- ▶ Coined in 1929 following the Wall Street crash
- ▶ Chinese Wall policies are already in use
  - ▶ Not necessarily digital
  - ▶ Can have authority of law
- ▶ Other terms, as some find the original offensive
  - ▶ "Screen", "firewall", "cone of silence", and "ethical wall"



# Relevance

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- ▶ Before 1989, most security policies were military
  - ▶ E.g. Bell-LaPadula (more about this later)
- ▶ Need of something that holds up in court
- ▶ Relevant anywhere conflicts of interest can exist

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- ▶ Proposed by Bell and LaPadula in 1973
- ▶ Security policy model
- ▶ Designed for military use

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- ▶ **Security Label**
- ▶ **Object** – Data or program
  - ▶ **Classification** – Minimum security level
  - ▶ **Category** – Security group(s)
- ▶ **Subject** – Person or program
  - ▶ **Clearance** – Maximum security level
  - ▶ **Need-to-know** – Security group(s)

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# Access rules

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**Simple security:** access is granted only if the subject's clearance is *greater* than the object's classification and the subject's need-to-know *includes* the object's category(ies)

**\*-property:** write access is granted only if the output object's classification is *greater* than the classification of all input objects, and its category *includes* the category(ies) of all input objects.

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# Example

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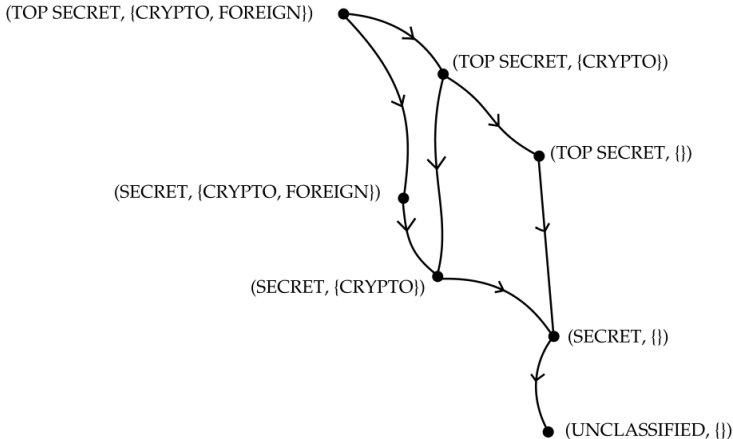
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## Example (2)

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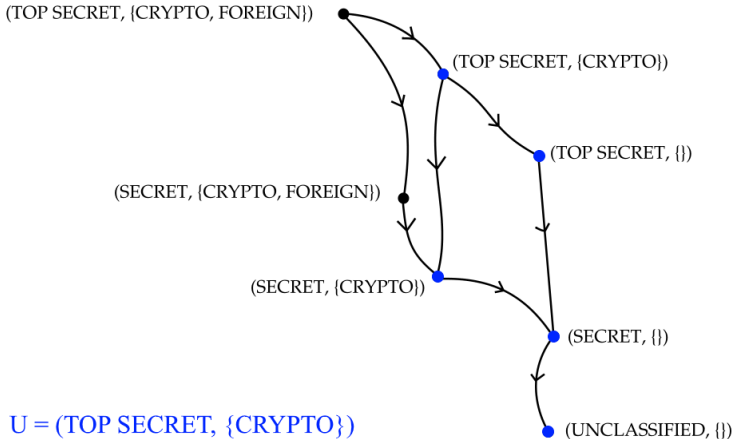
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Questions?



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