OleF: an Inverse-Free Online Cipher

FSE 2017, Tokyo, Japan

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Indian Statistical Institute, Kolkata

8 March 2017

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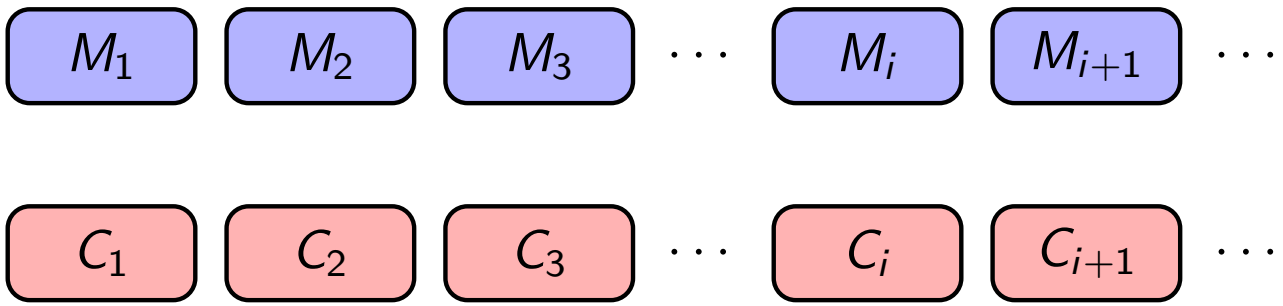

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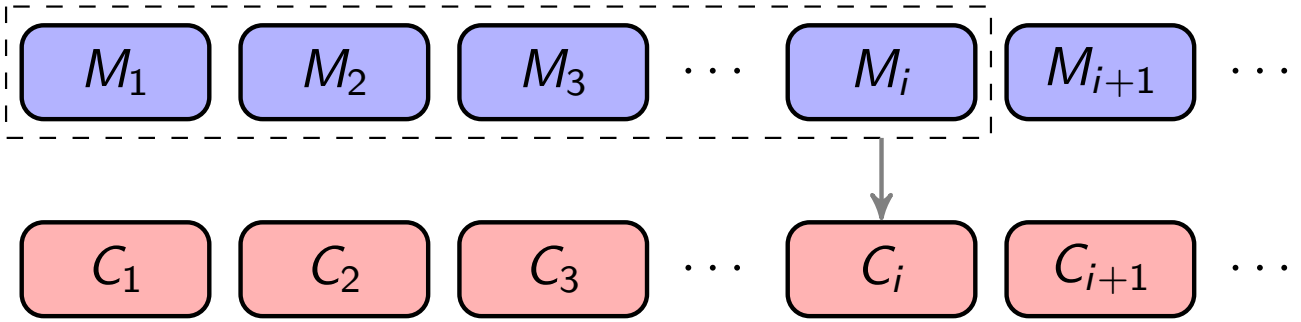

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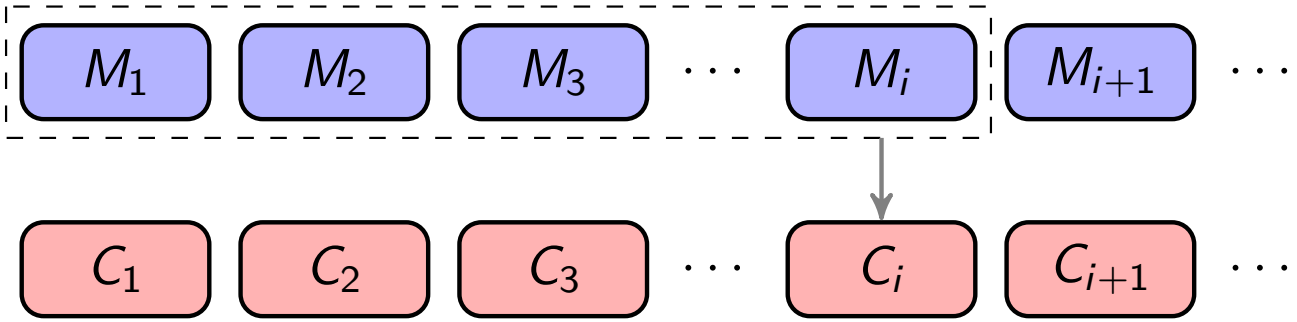

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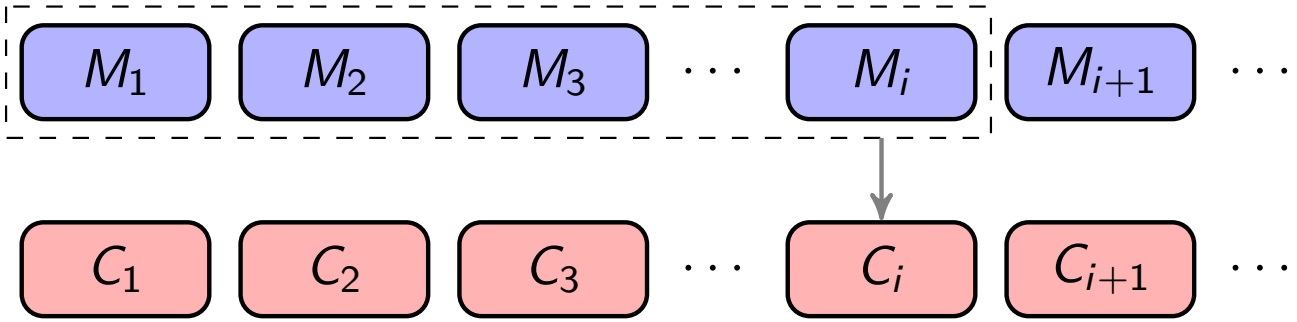

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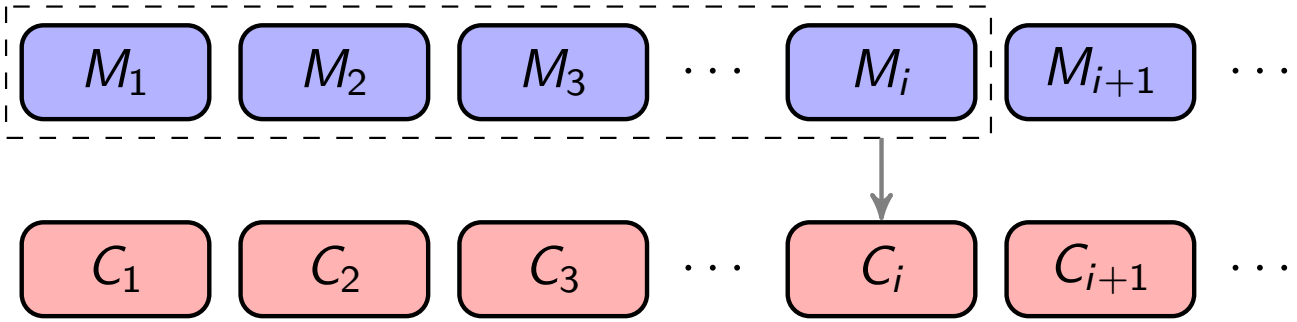

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  - central idea: single-pass computation
  - frequently low-memory as well

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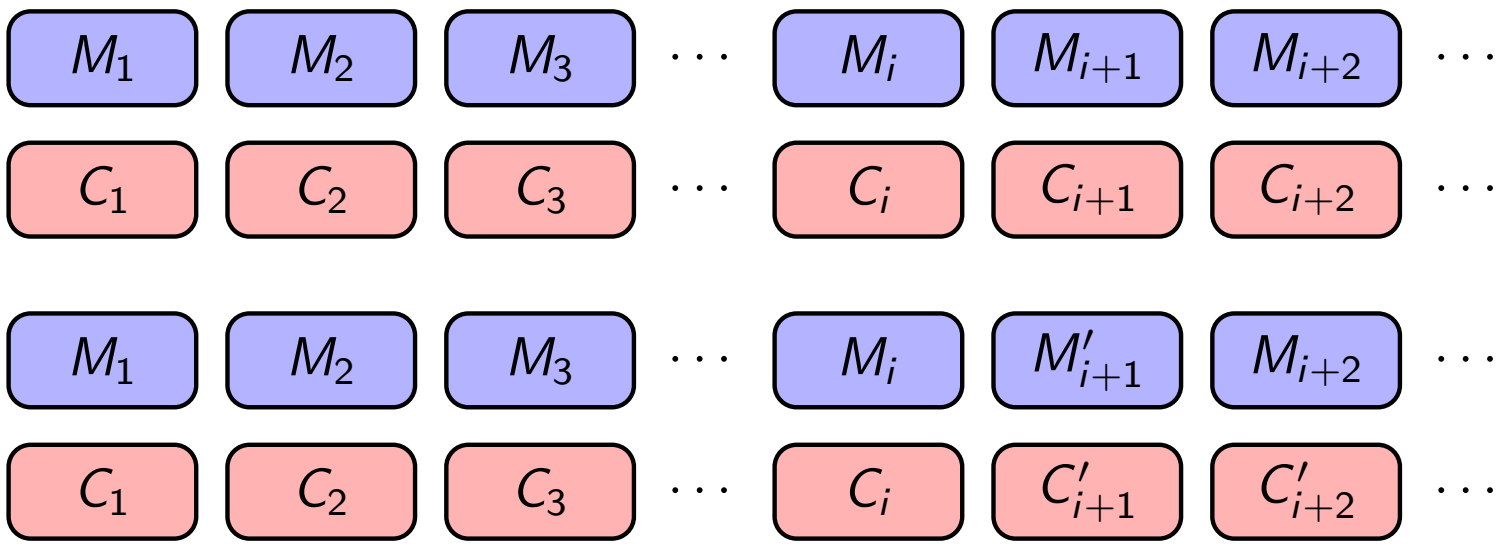

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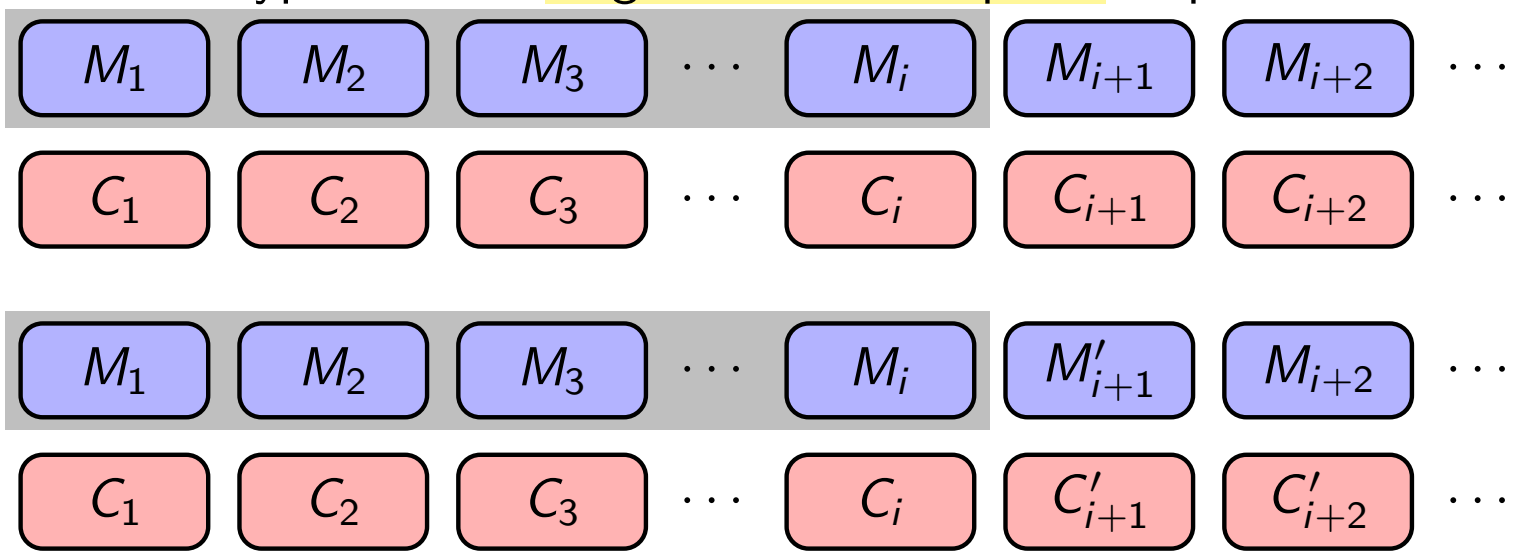

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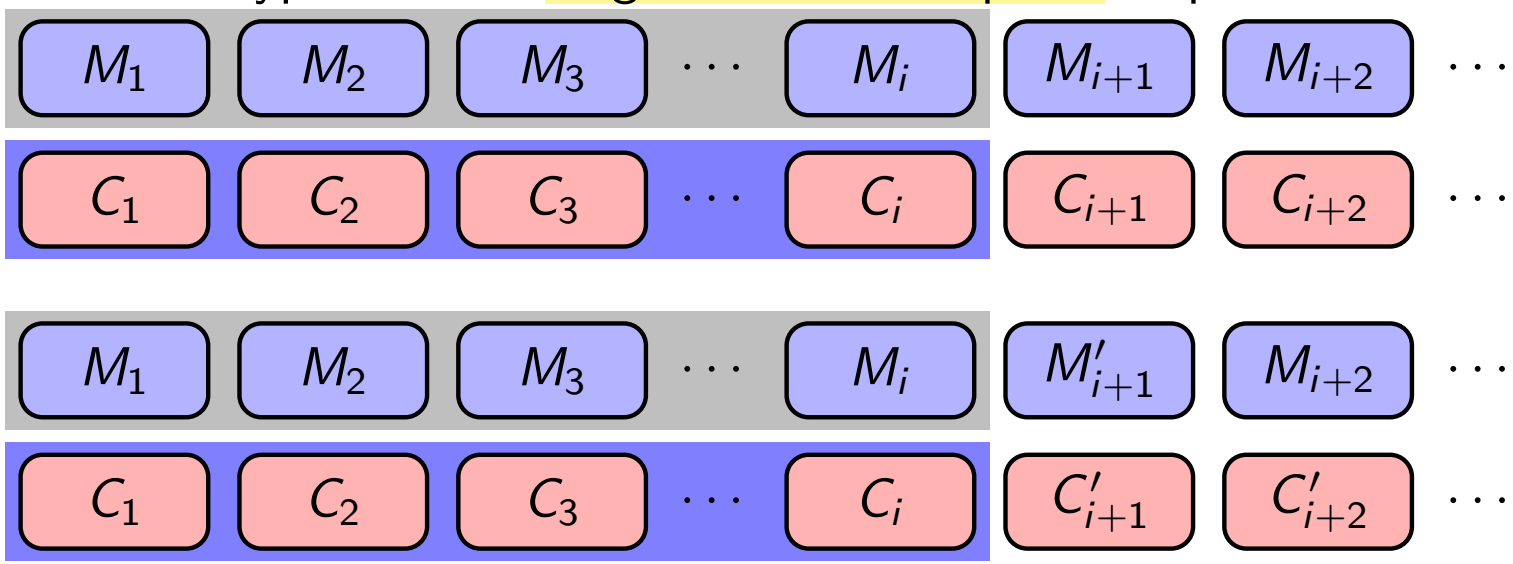

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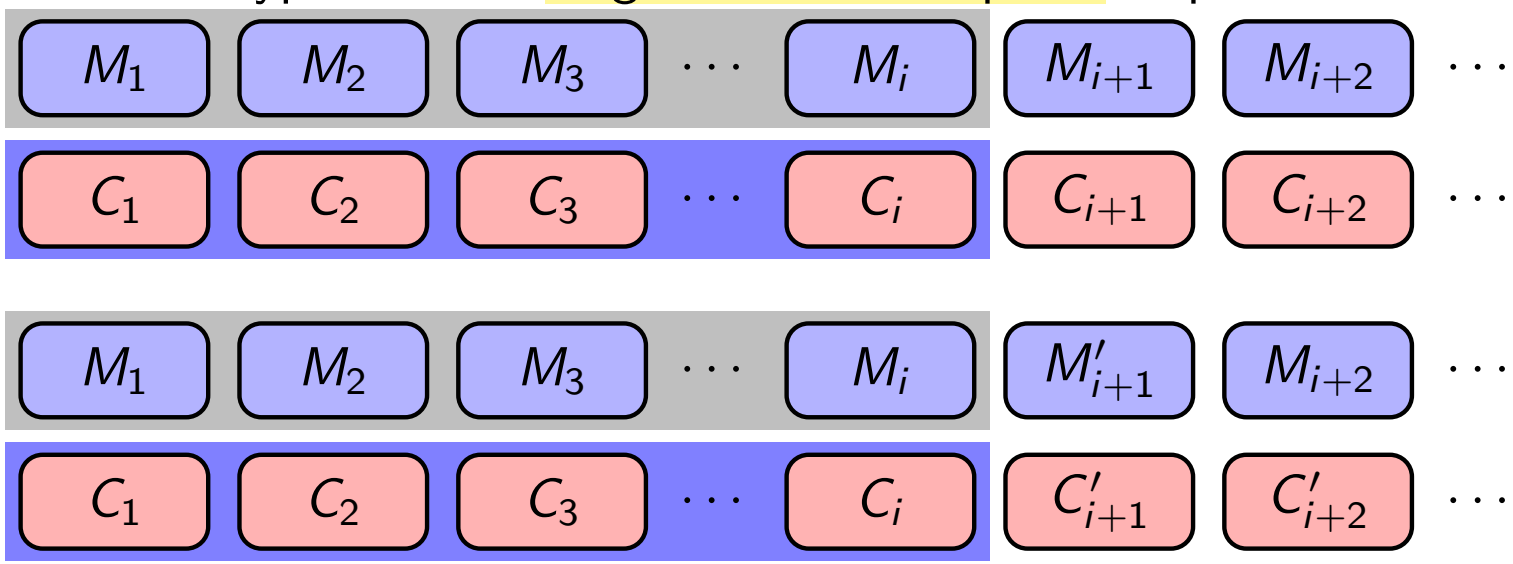

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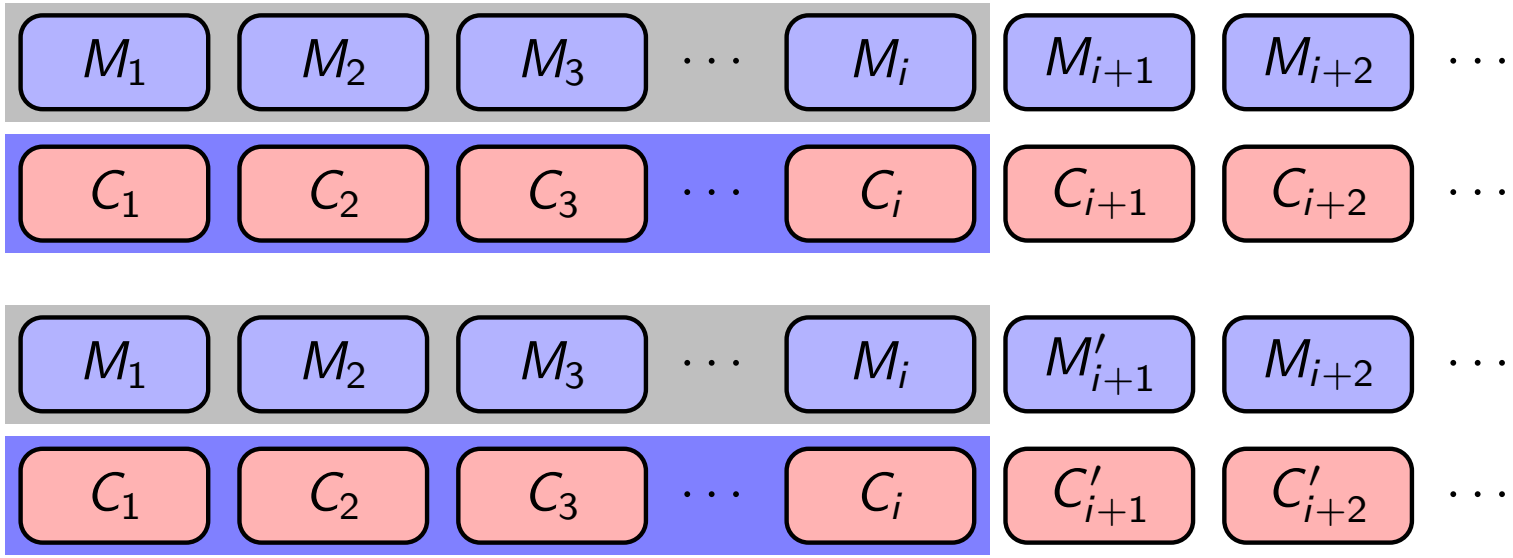

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  - performance often outweighs this degradation

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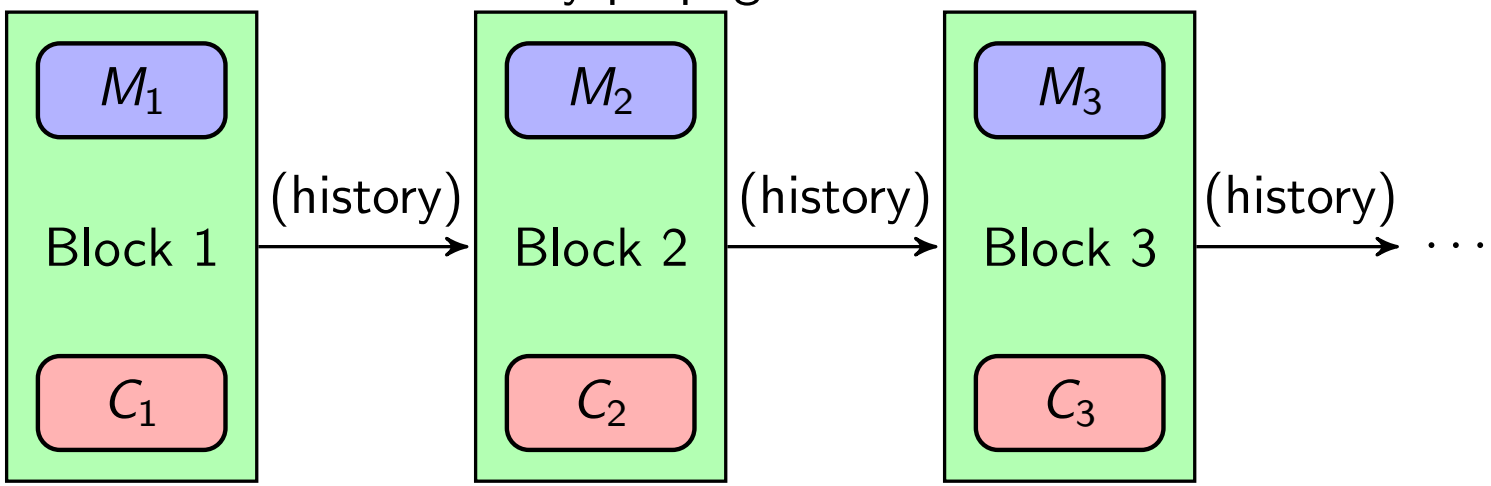

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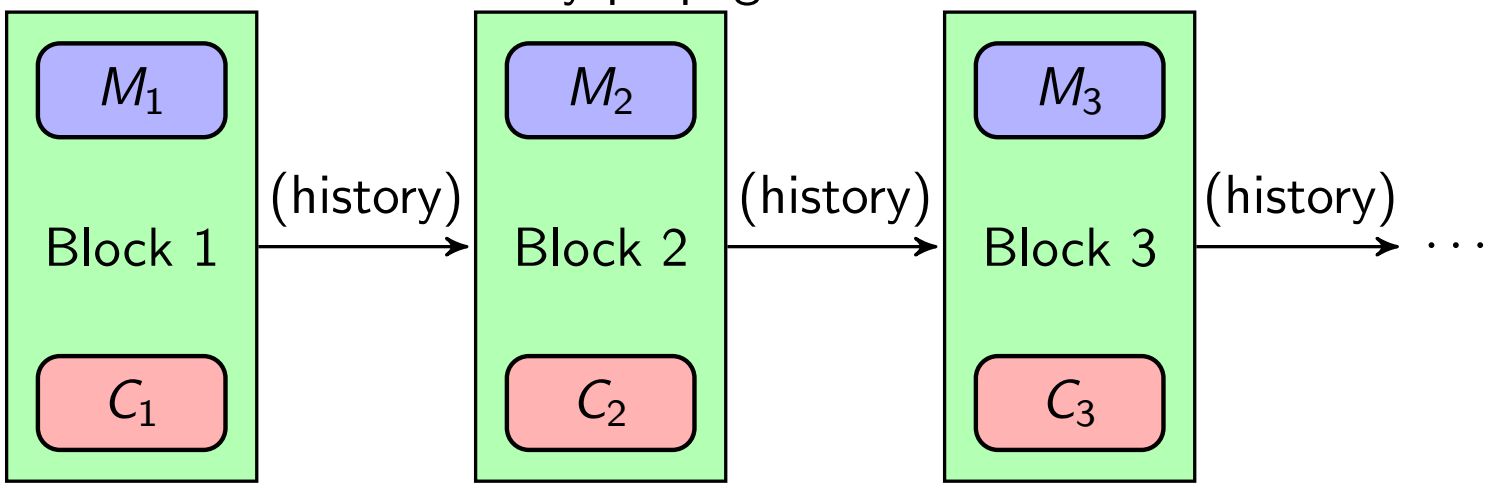

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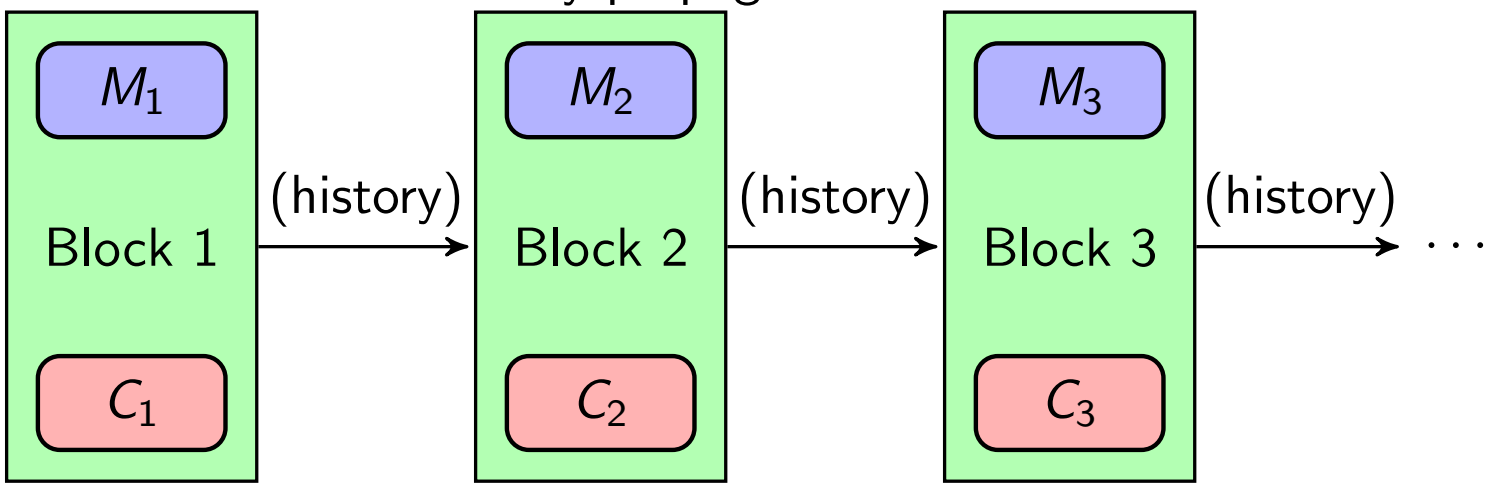

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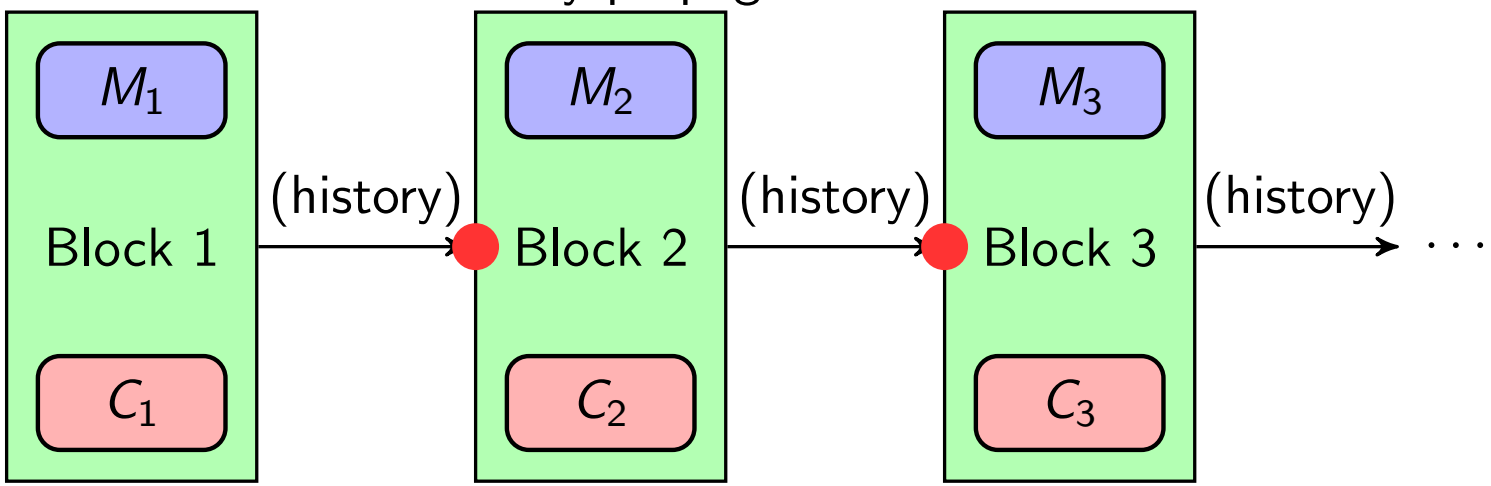

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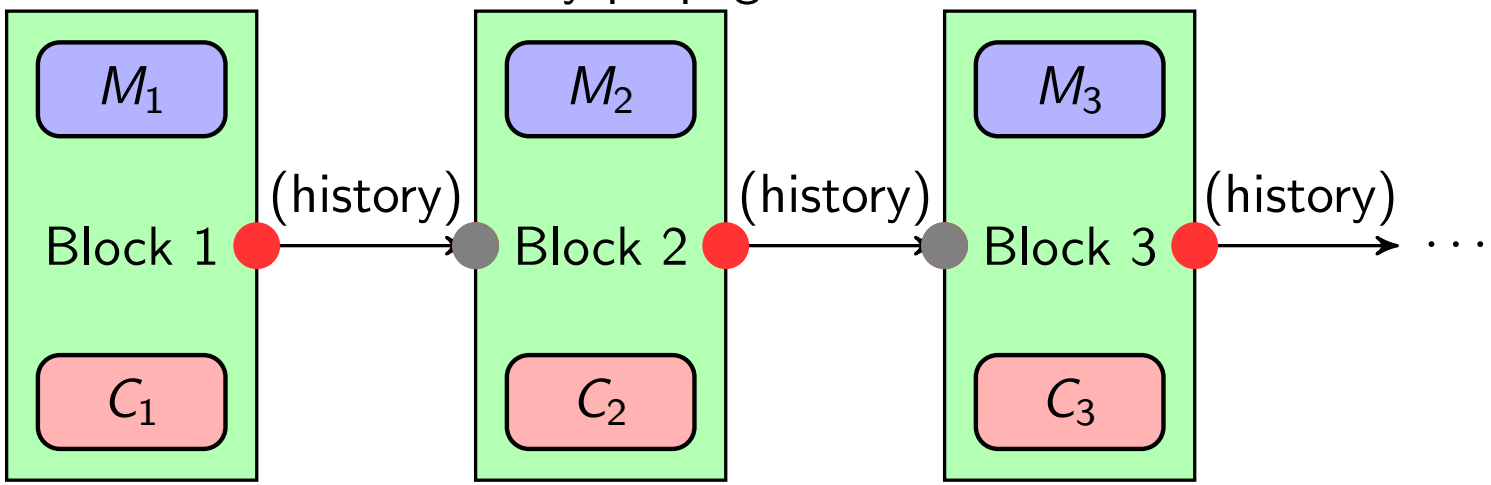

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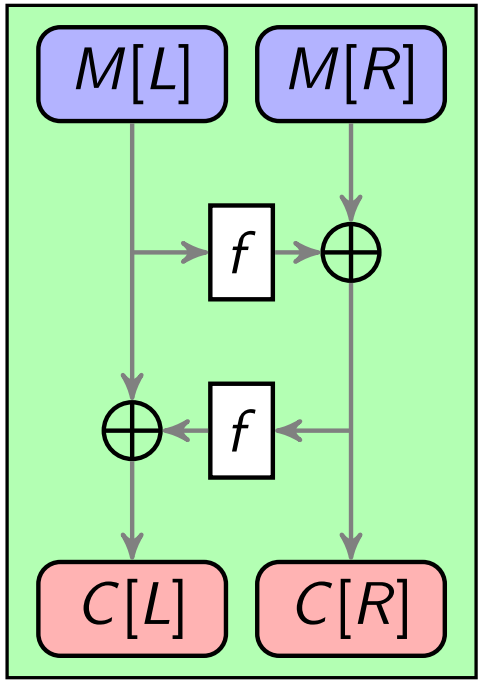

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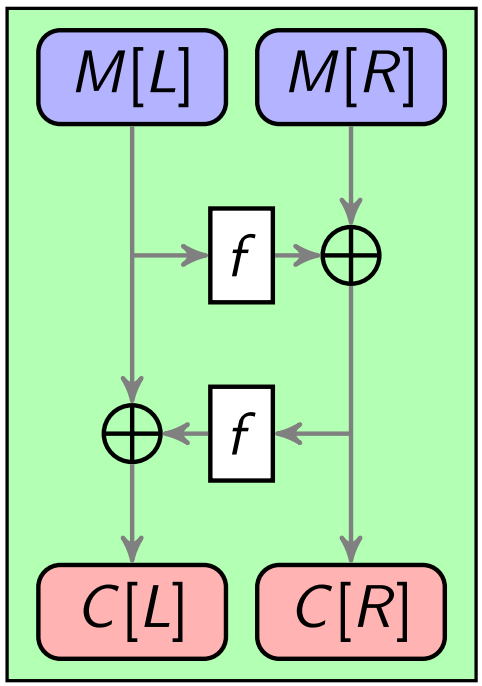

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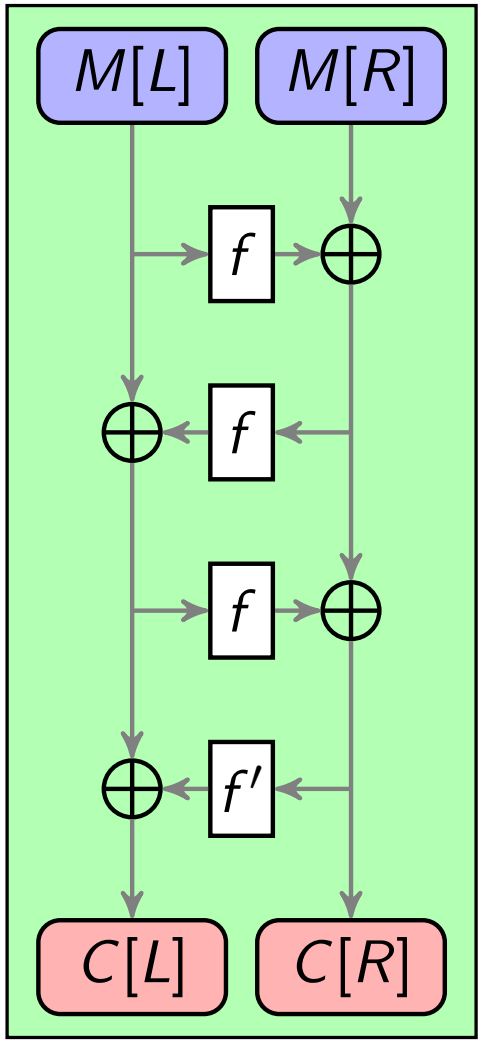
  - So we go instead for two full rounds of Feistel



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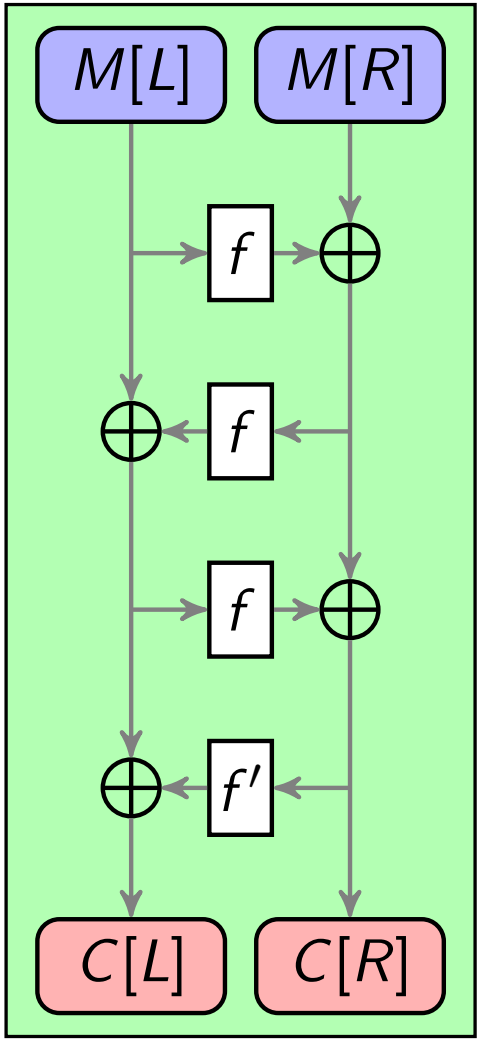

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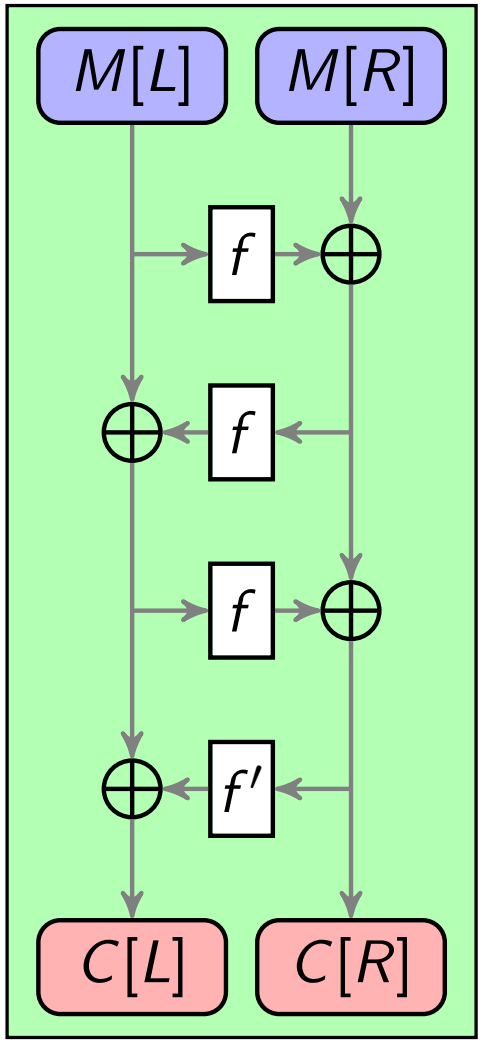

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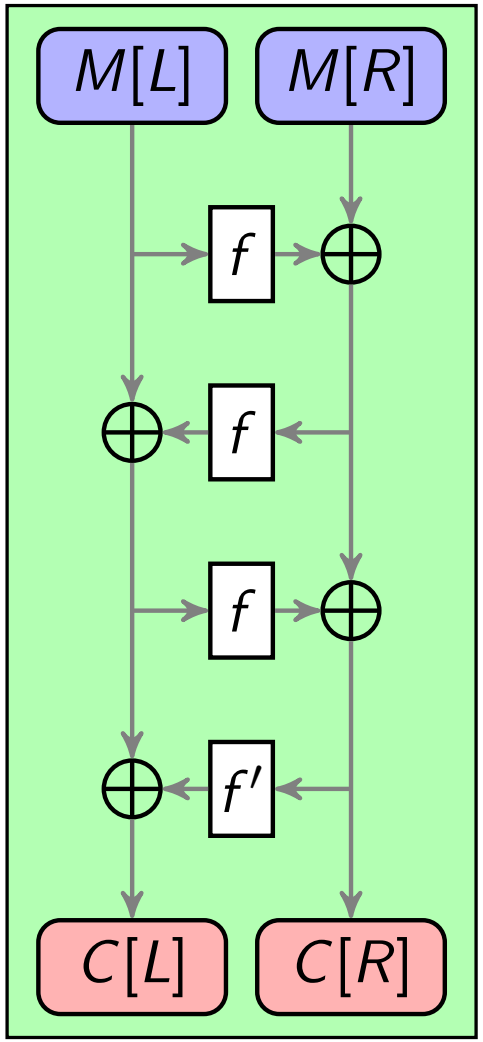

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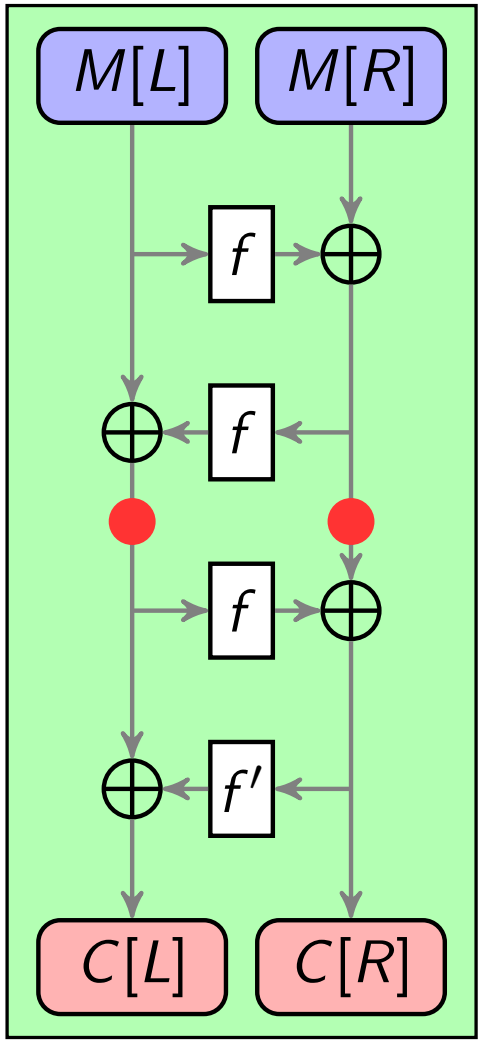

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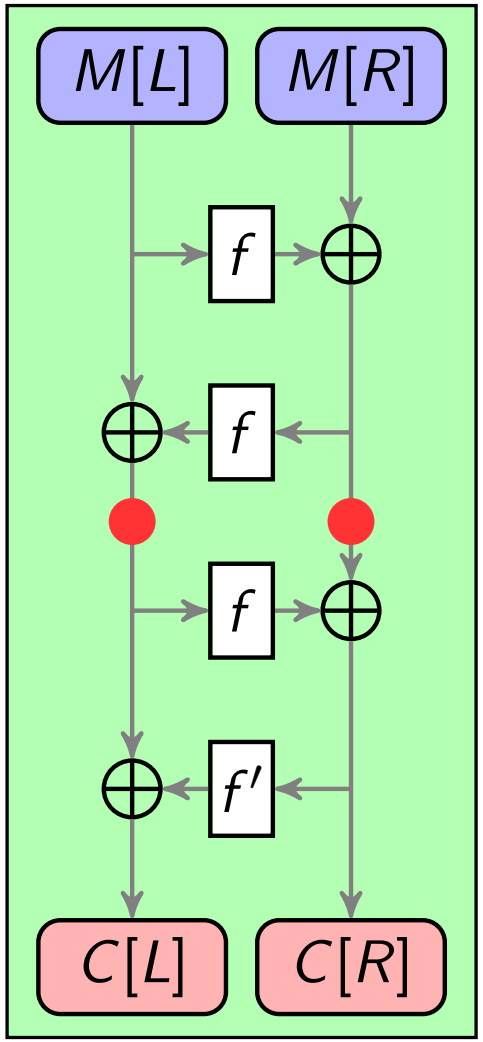

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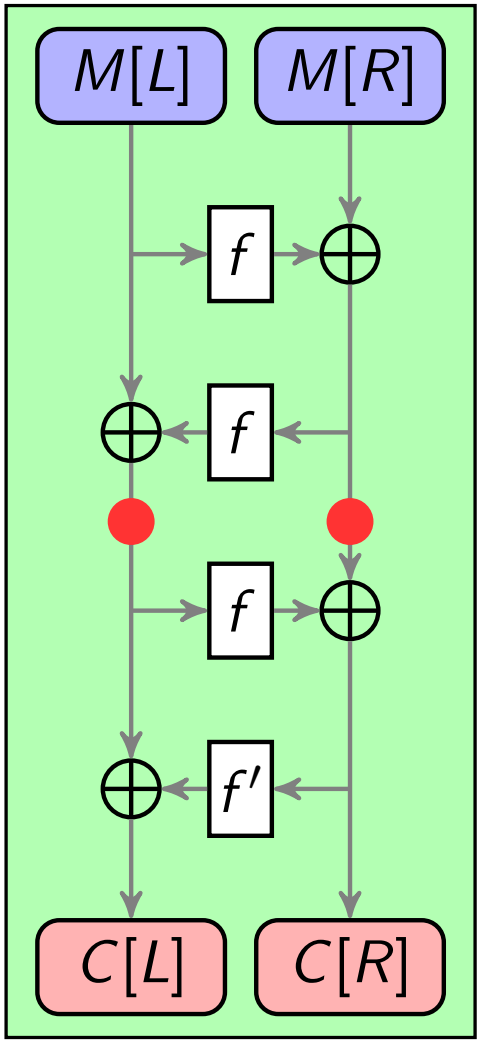

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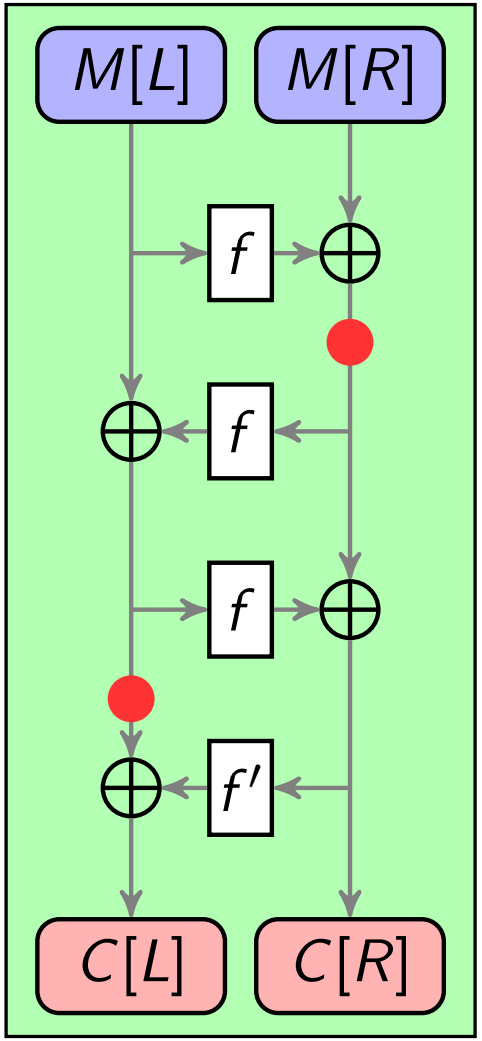

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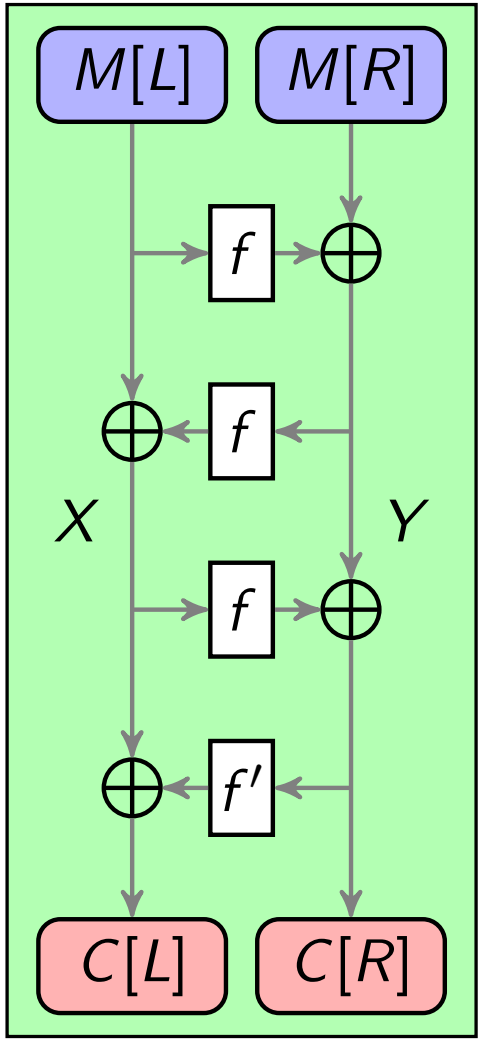

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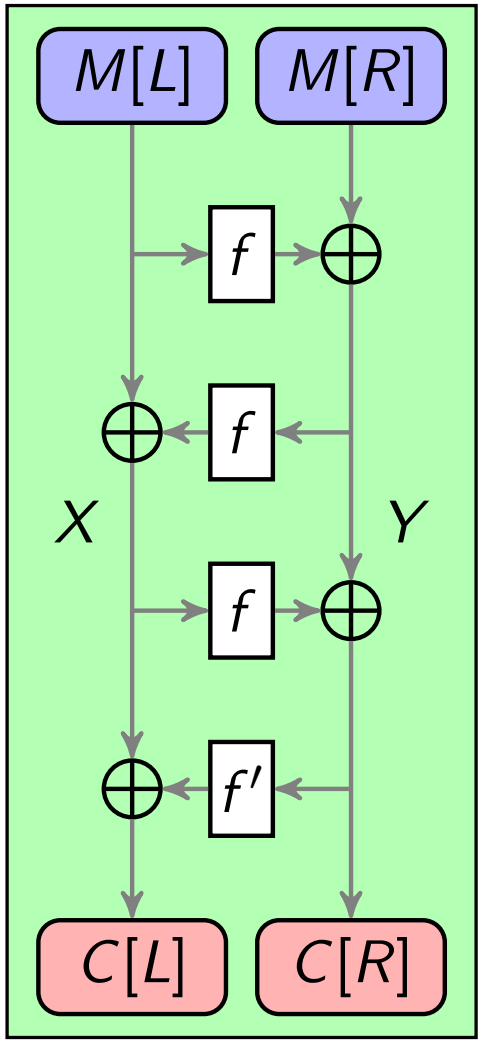

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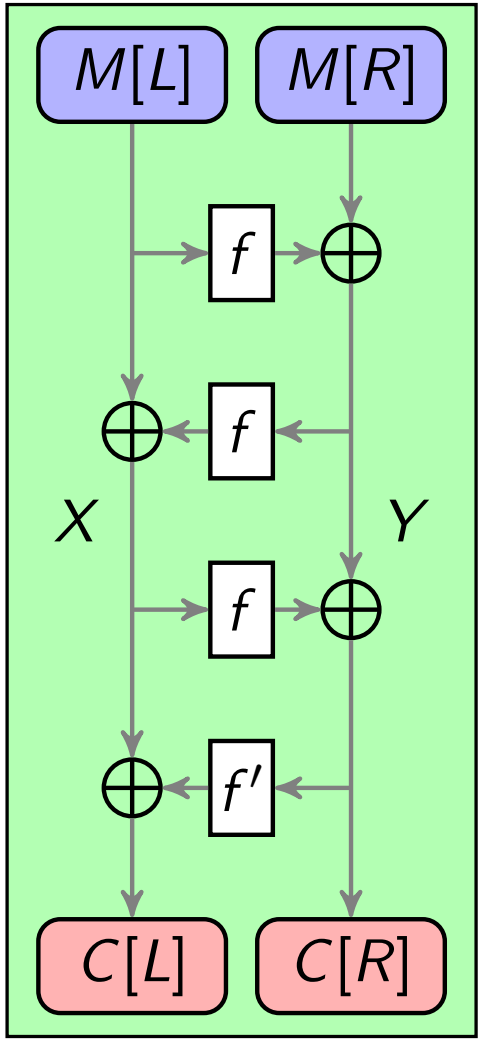

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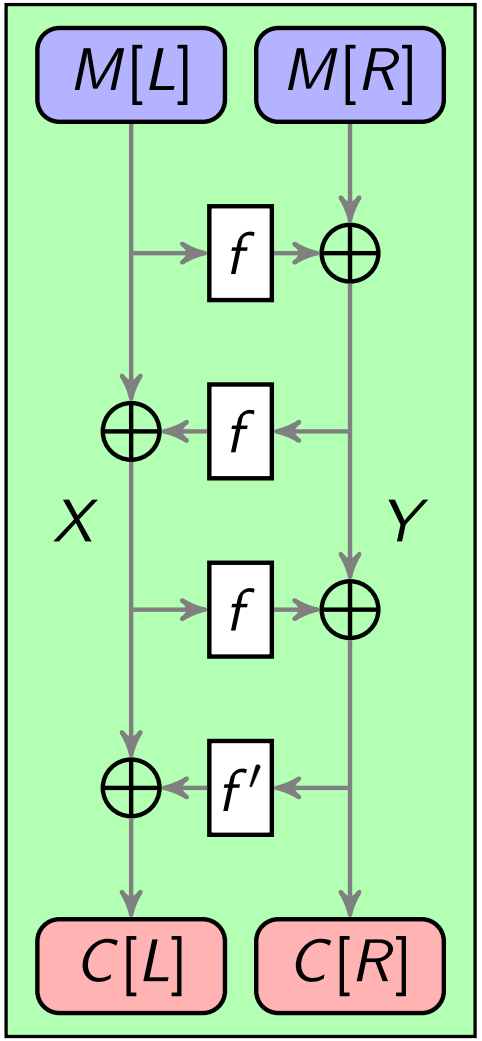

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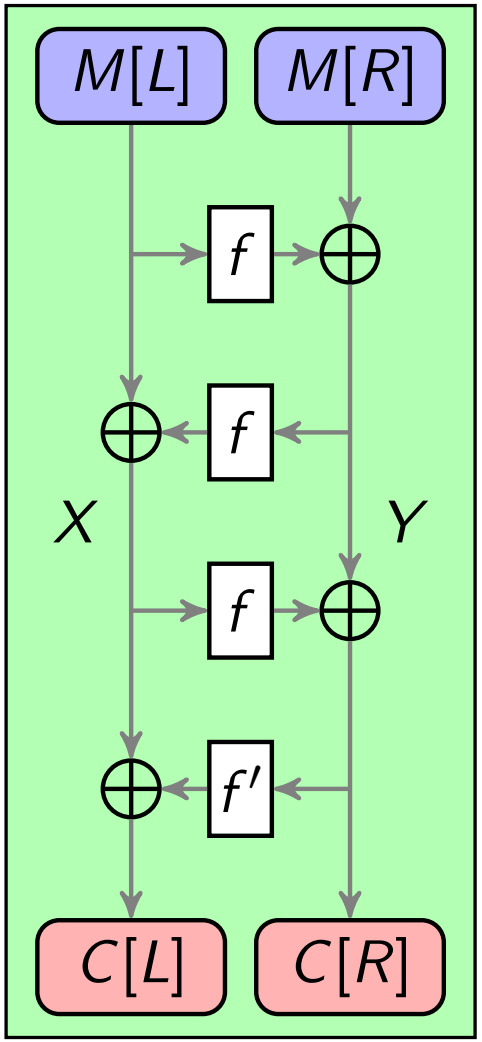

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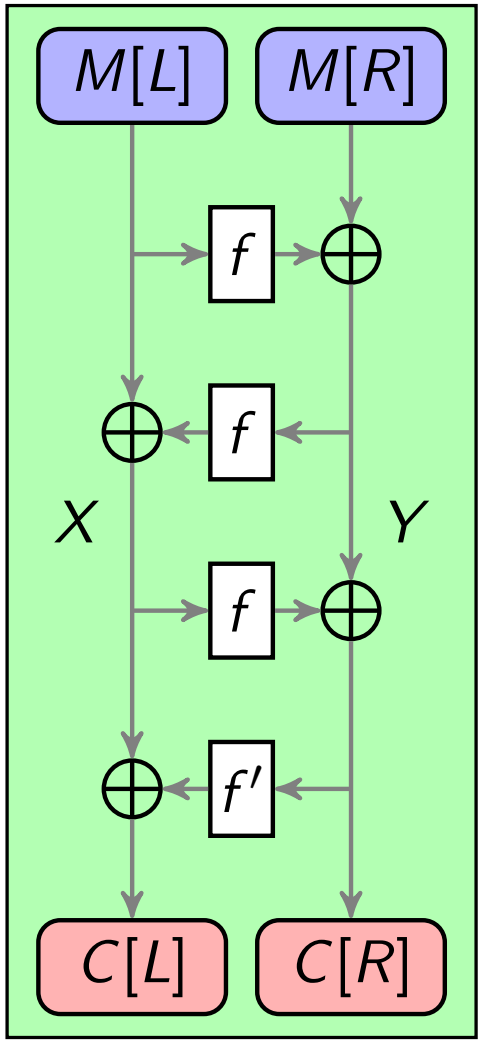

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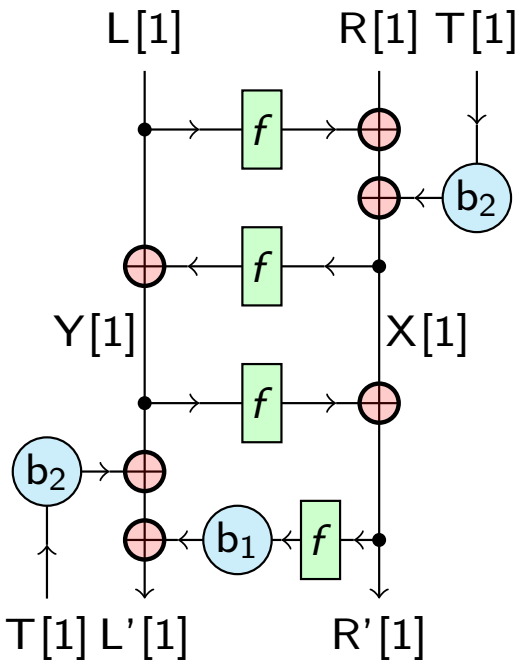

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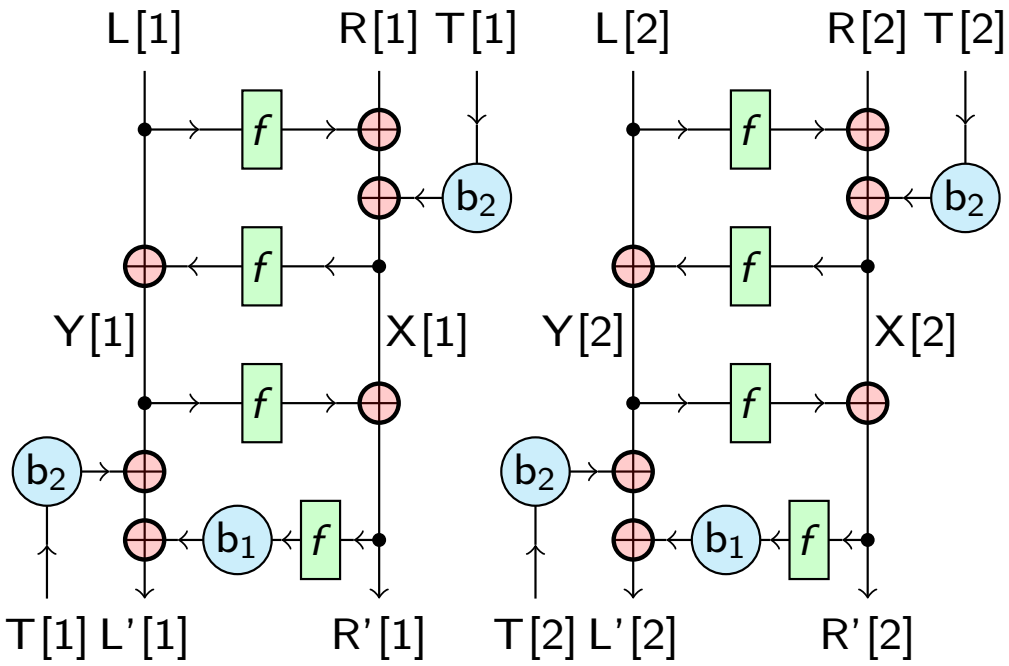

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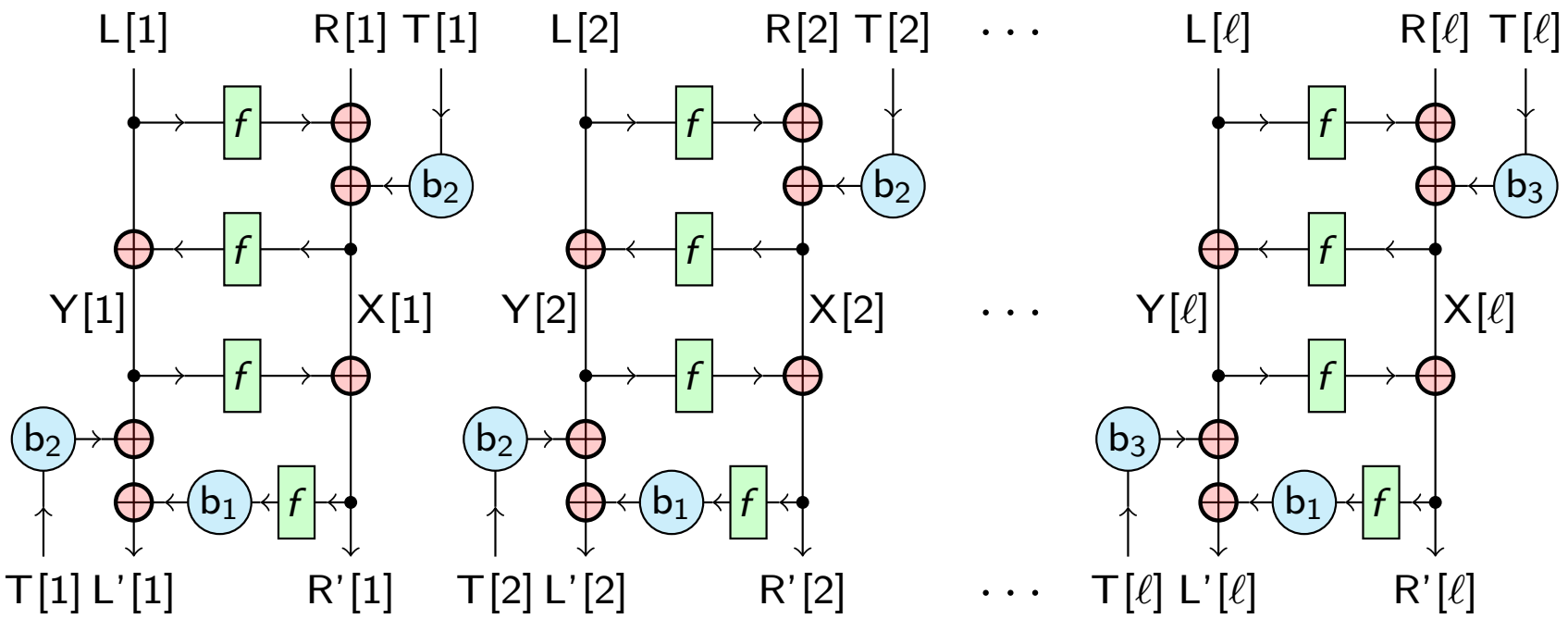

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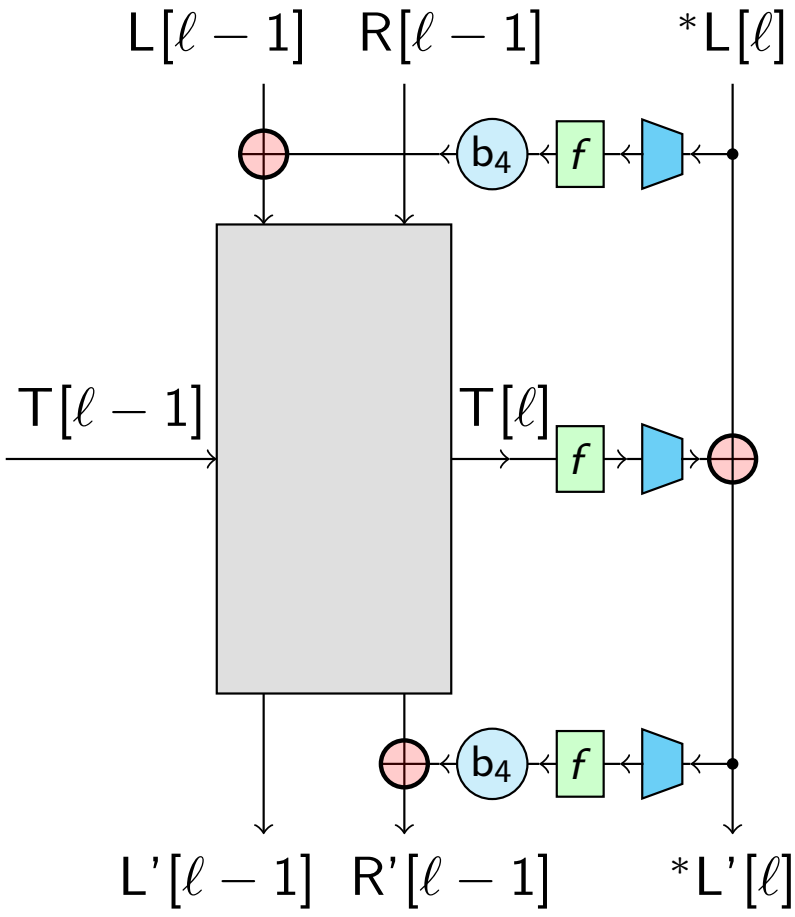

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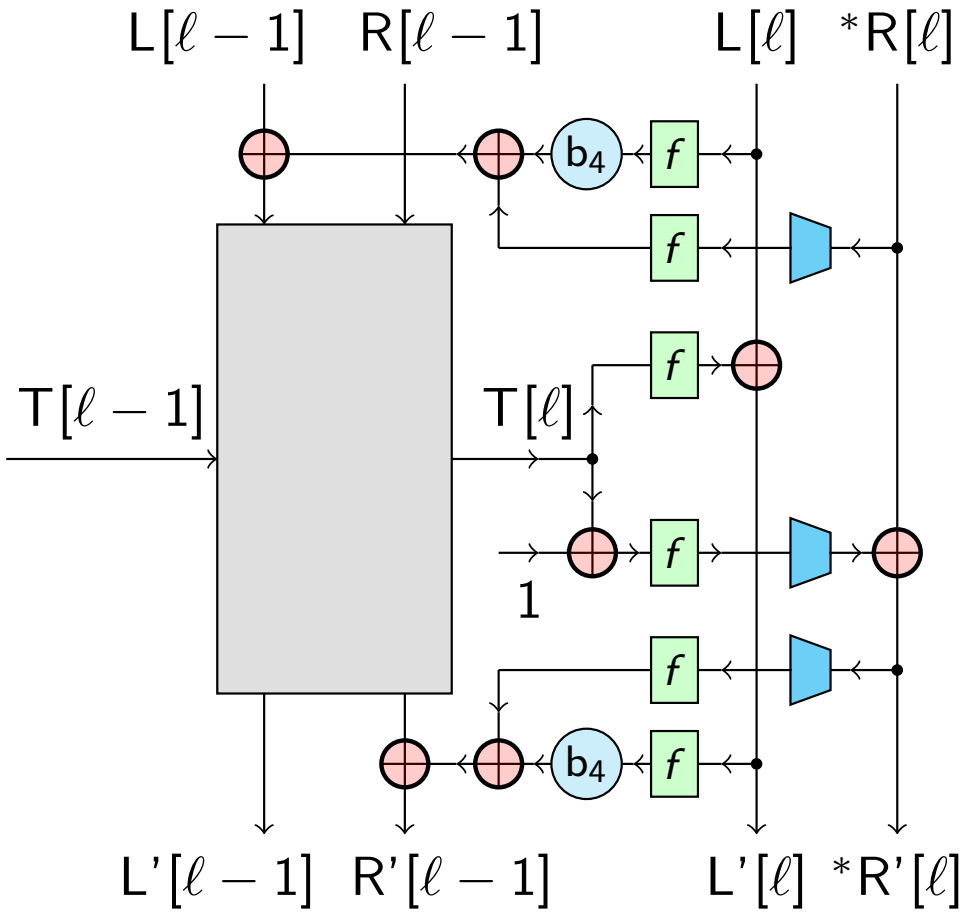

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Thank you for your attention.

Judge a man by his questions rather than his answers. [Voltaire]