Machine Translation (MT)

History, Theory, Problems and Usage

Introduction

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- Please translate the following sentence into English:
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- Now try to imagine how a computer would do this translation without knowing its meaning.

Translation Process

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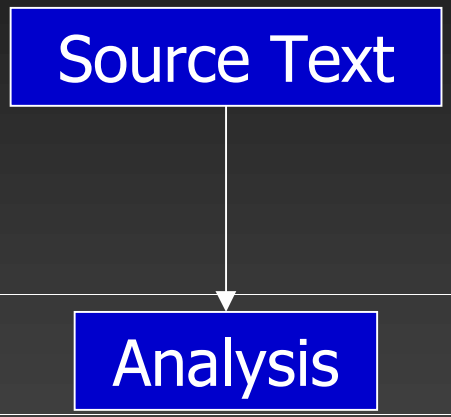
Source Text

Translation Process



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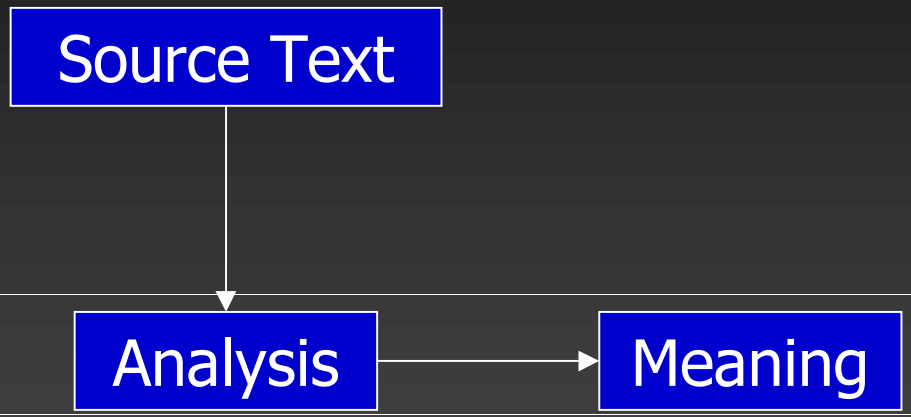

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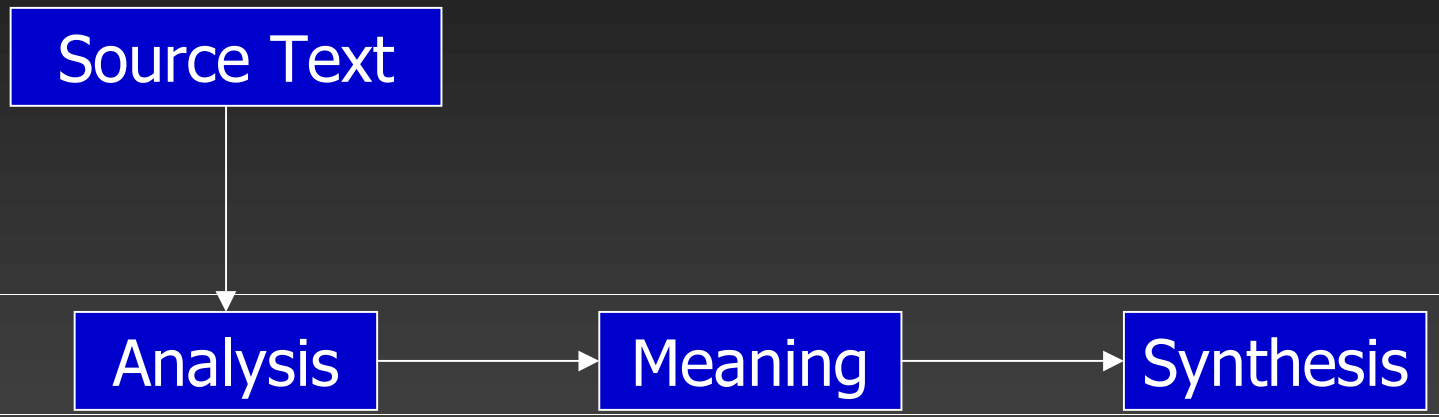

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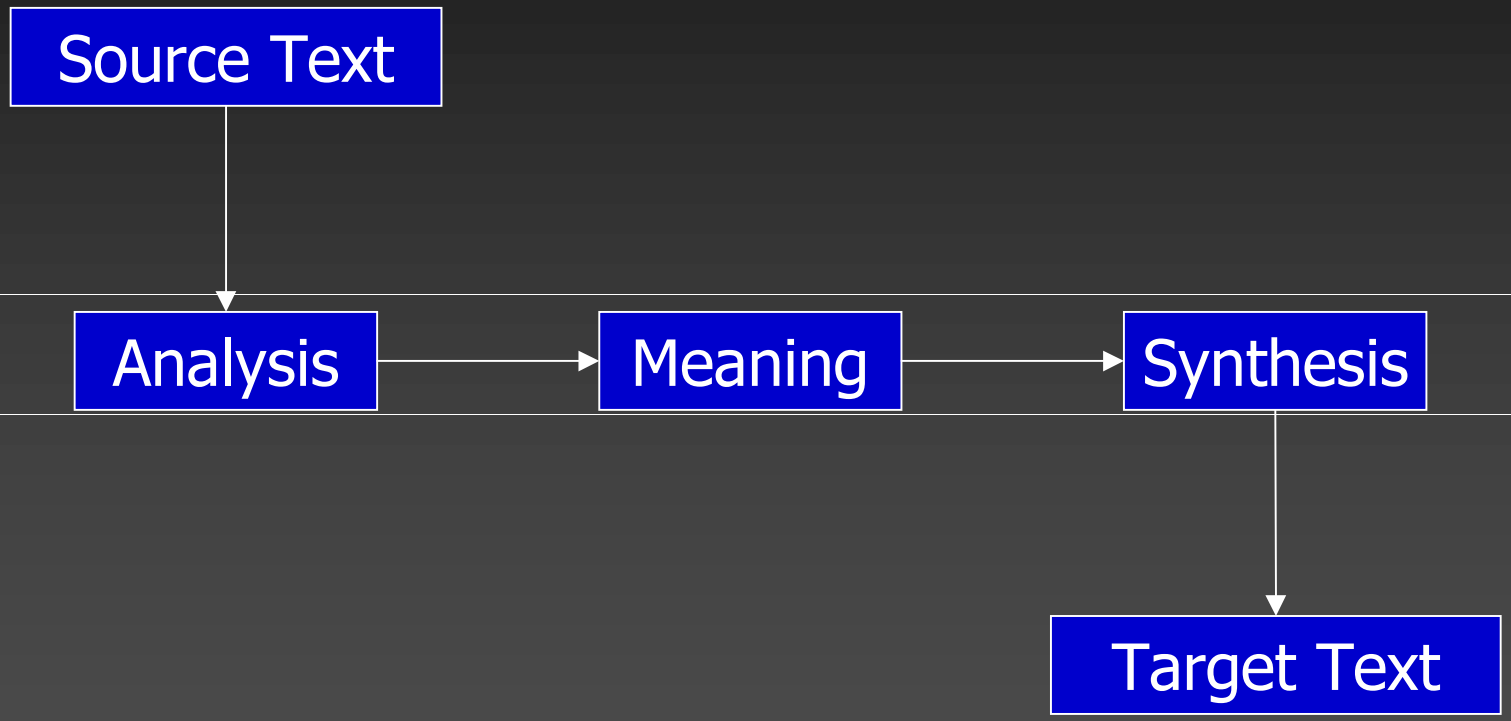

Historical Overview

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- four periods:
  - optimistic beginnings
  - disillusion
  - 70ies: partial successes
  - commercial application

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- generations of translation techniques

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- 1954 Georgetown Experiment -> enormous success, research intensified

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Problems of Machine Translation

- polysemy, homonymy
- syntactial ambiguities
- referential ambiguity
- Fuzzy Hedges
- synonyms
- metaphors and symbols
- new vocabulary developments

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  - corresponding English idiom: "with a stony expression"

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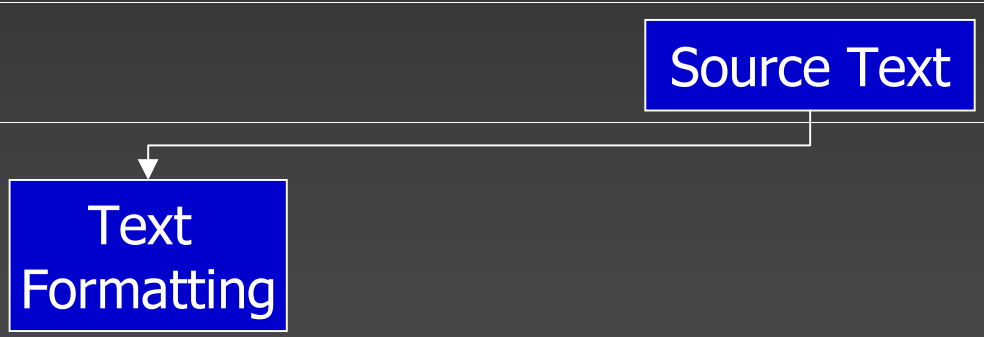

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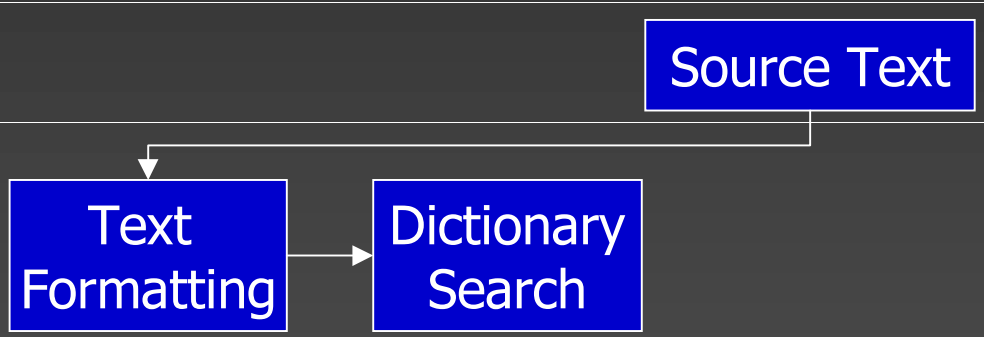

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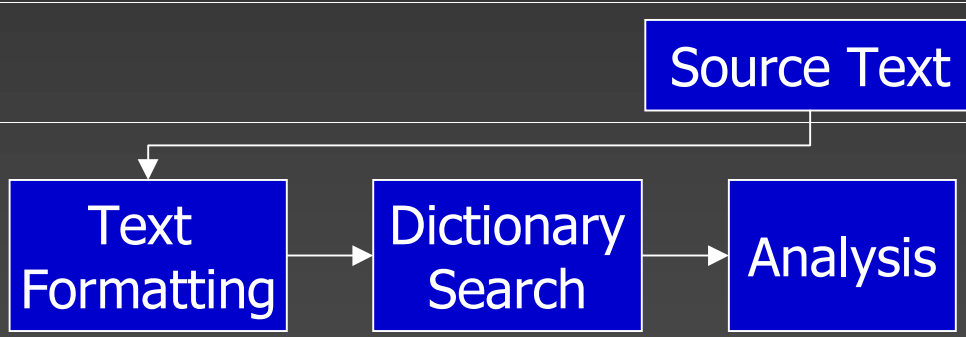

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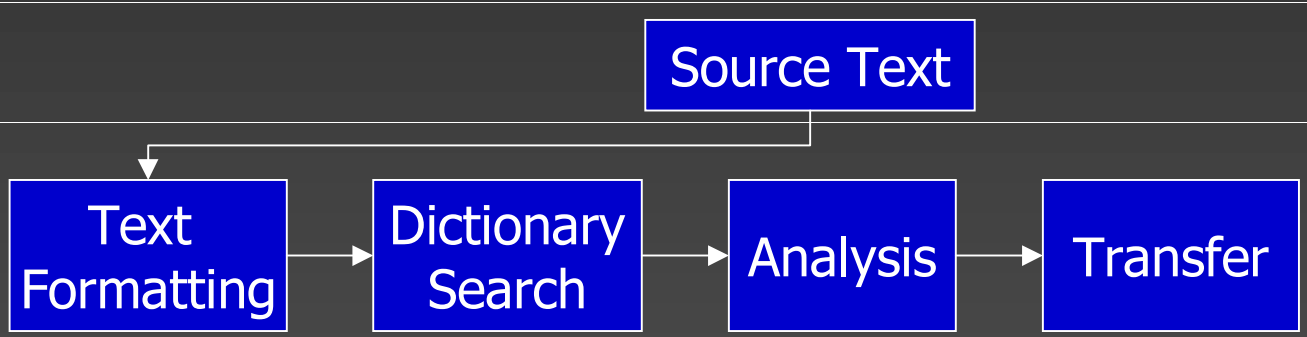

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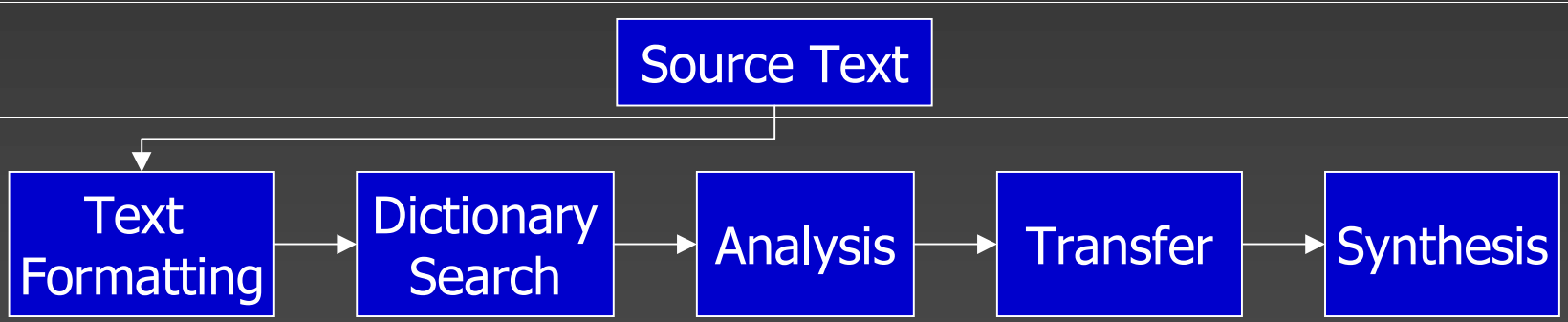

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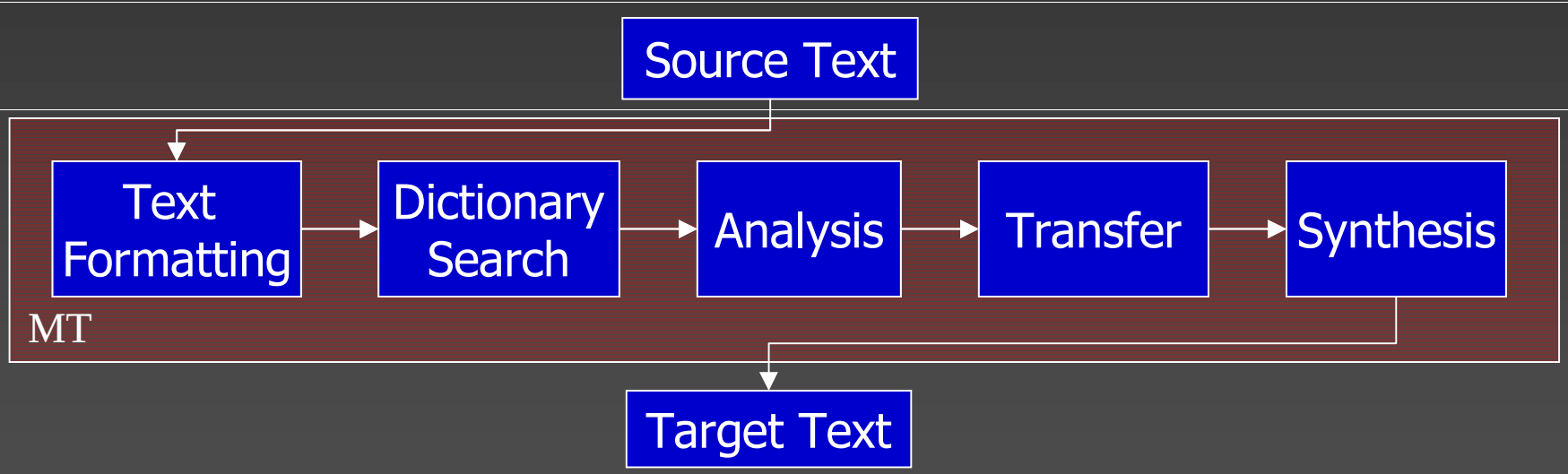

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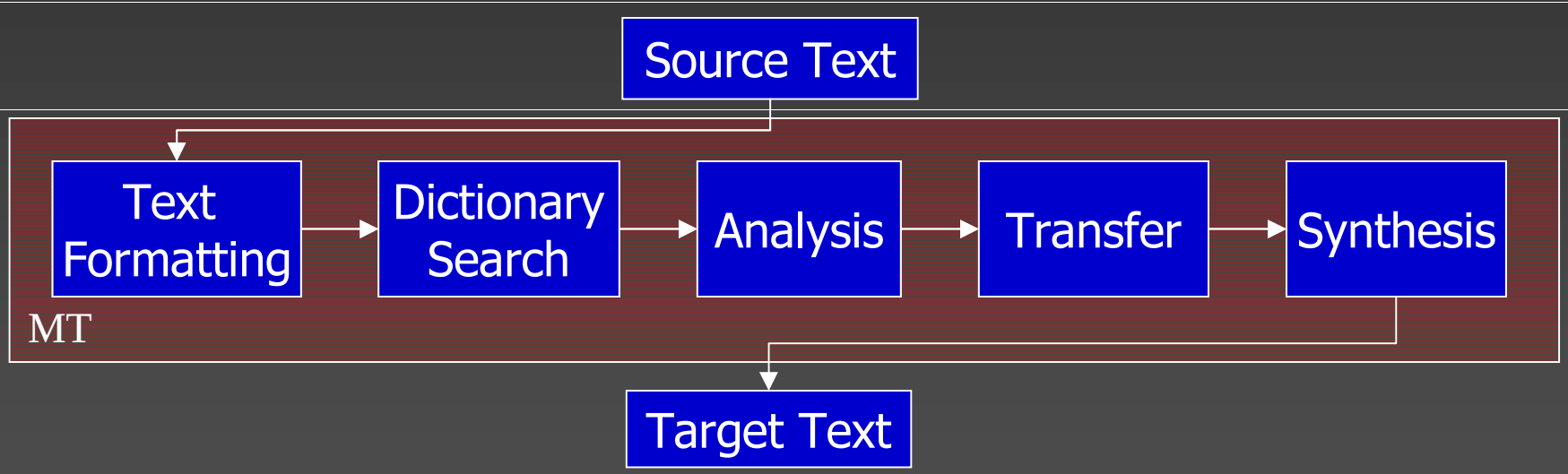

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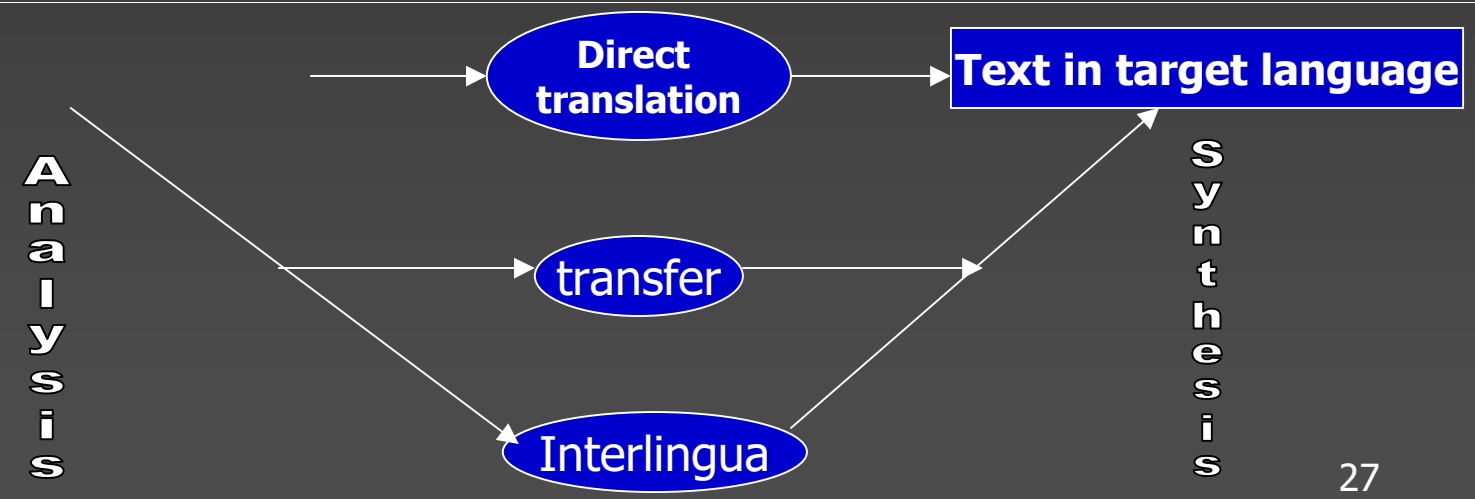
Architectures: Rule Based Paradigm



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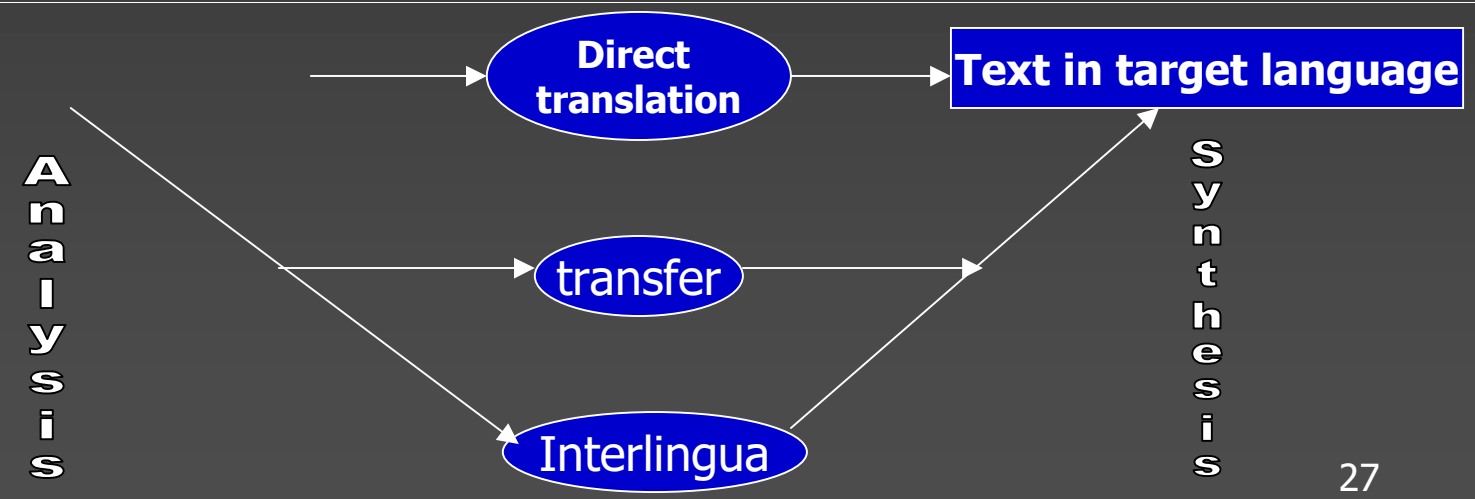

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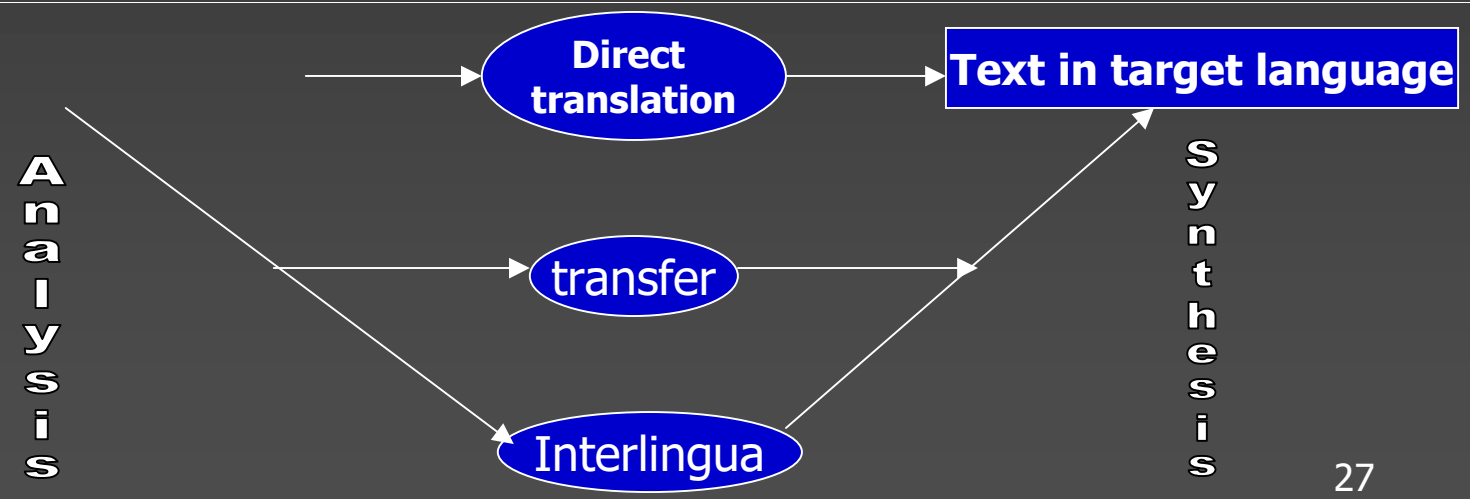

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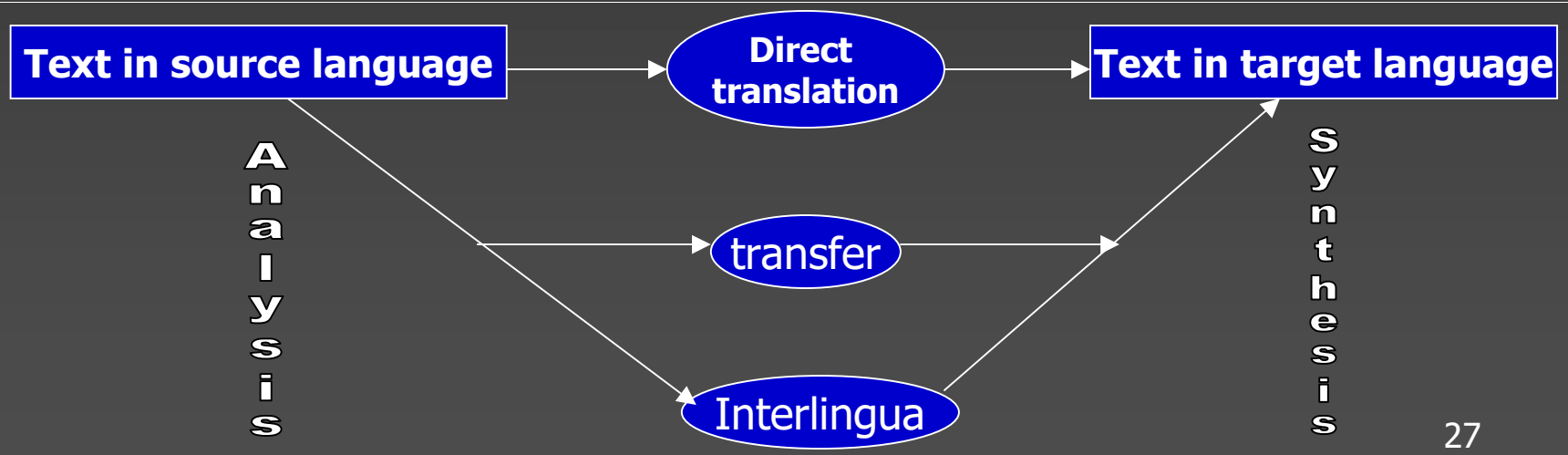

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