

Travaux du 19ème CIL | 19th ICL papers

Congrès International des Linguistes, Genève 20-27 Juillet 2013
International Congress of Linguists, Geneva 20-27 July 2013



Shahin NEMATZADEH

Institute for Cognitive Science Studies (IRISS)
snematzad@yahoo.com

Perspectives on Complexity

oral presentation in workshop: 121 Perspectives on Complexity (Shahin NEMATZADEH)

Published and distributed by: Département de Linguistique de l'Université de Genève, Rue de Candolle 2, CH-1205 Genève, Switzerland
Editor: Département de Linguistique de l'Université de Genève, Switzerland
ISBN: 978-2-8399-1580-9

19th International Congress of Linguists
CIL 19, 21-27 July 2013, Geneva
University of Geneva

Workshop 121

Perspectives on Complexity

Introduction

Shahin Nematzadeh

Institute for Cognitive Science Studies
(IRISS)

25 July 2013

10:30-11:00

Room: M1193

In the Name of God

Complexity: definitions

- Intuitive definition
- Technical definition?
- Linguistic definition?

Complexity: some general claims

- The more marked, the more complex
- The more irregular, the more complex
- The more parts a system has, the more complex it is
- The more capacity memory a task requires, the more complex it is

Complexity

Some background: non-linguists

- Shannon (1948, 1951)

A mathematical theory of communication

- Simon (1962)

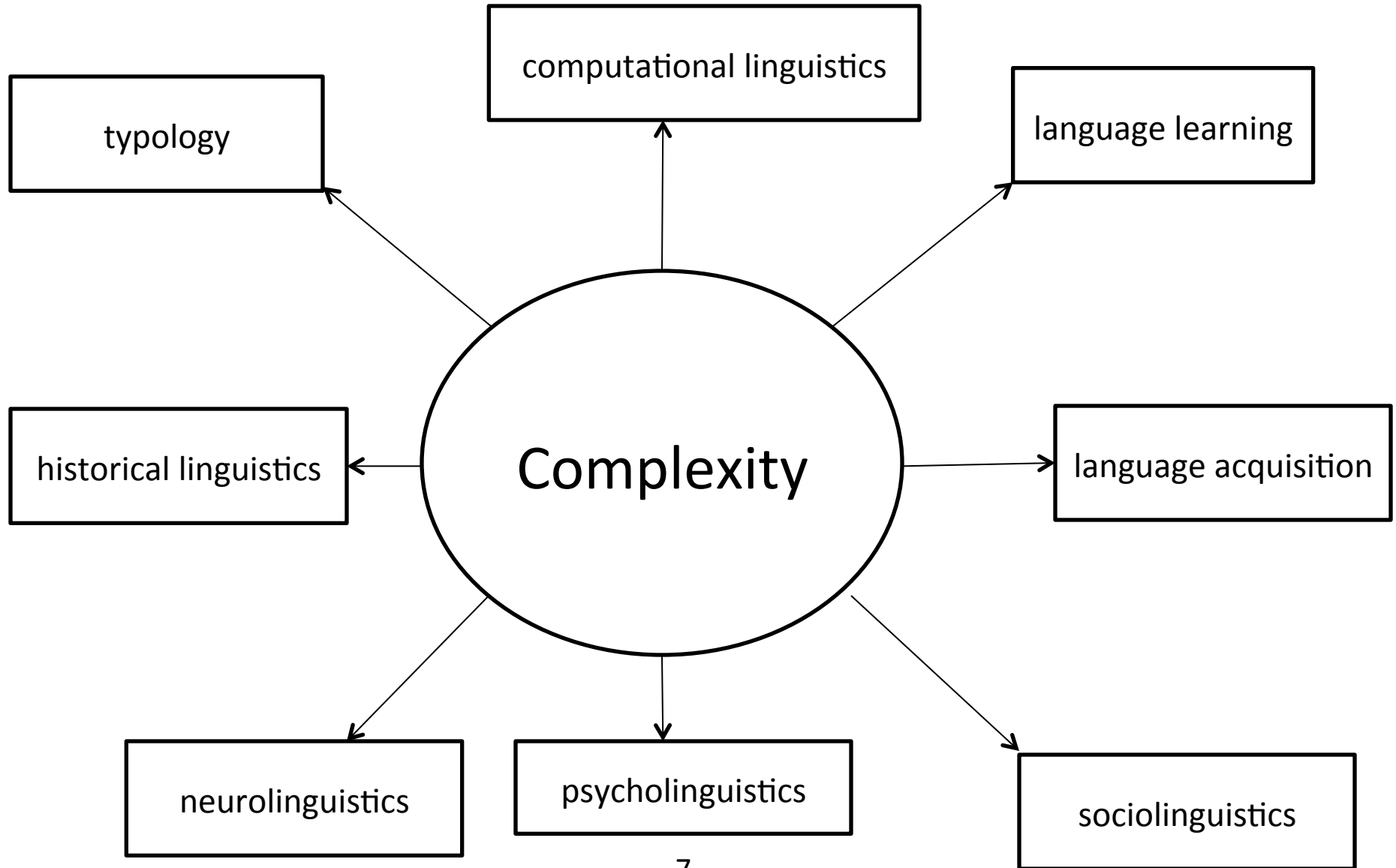
The architecture of complexity

Complexity

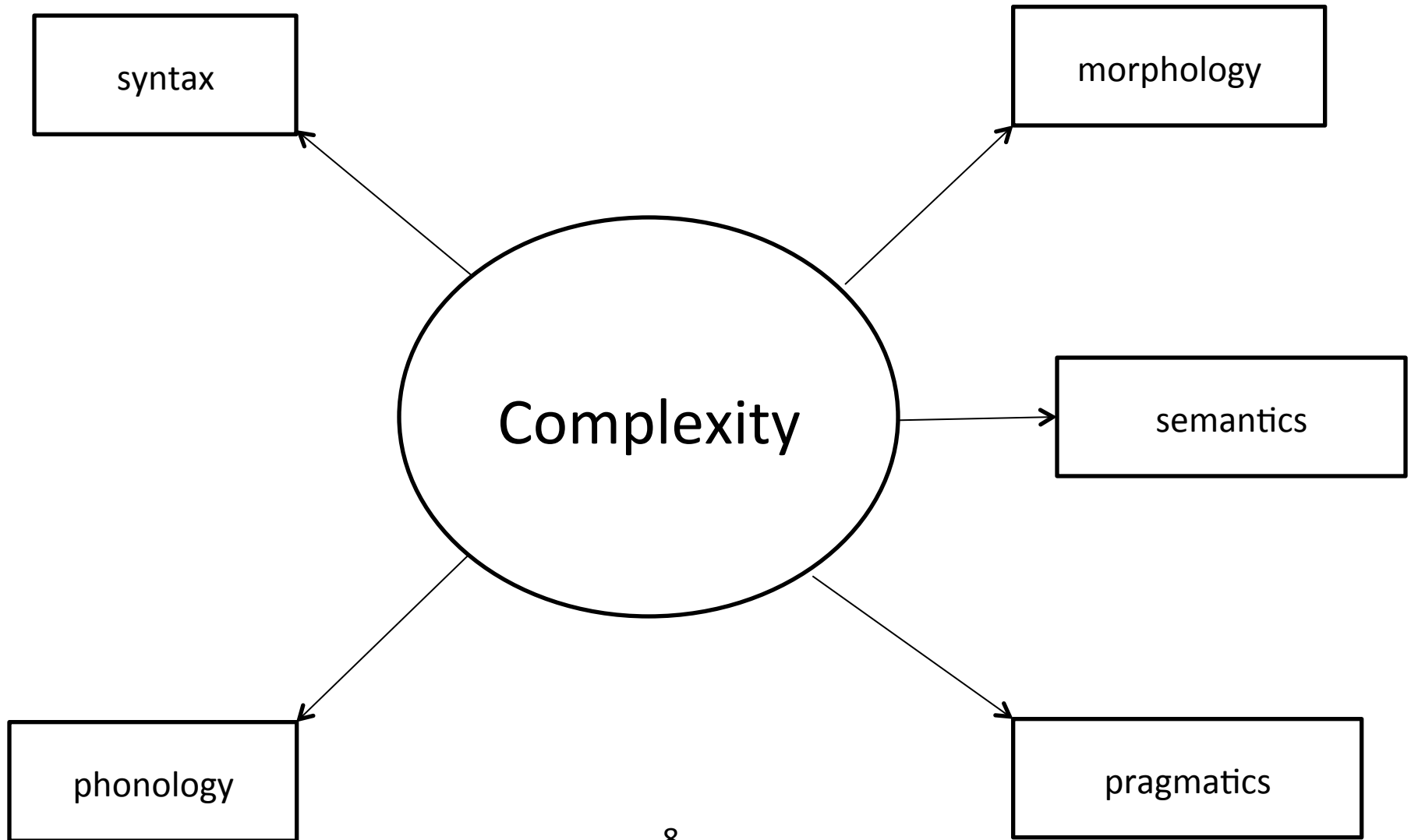
Some background: linguists

- Thurston: 1982, 1987, 1992
- Branmüller: 1984, 1990
- Trudgill: 1986, 1992, 1996, 1997, 2000, 2013
- Anderson: 1988
- Klein & Perdue: 1997
- Mc Whorter: 2001
- Kusters: 2003, 2008
- Dahl: 2004
- Miestamo: 2008
- Fenk & Fenk: 2008
- Juola: 2008
- Givon & Shibatani: 2009

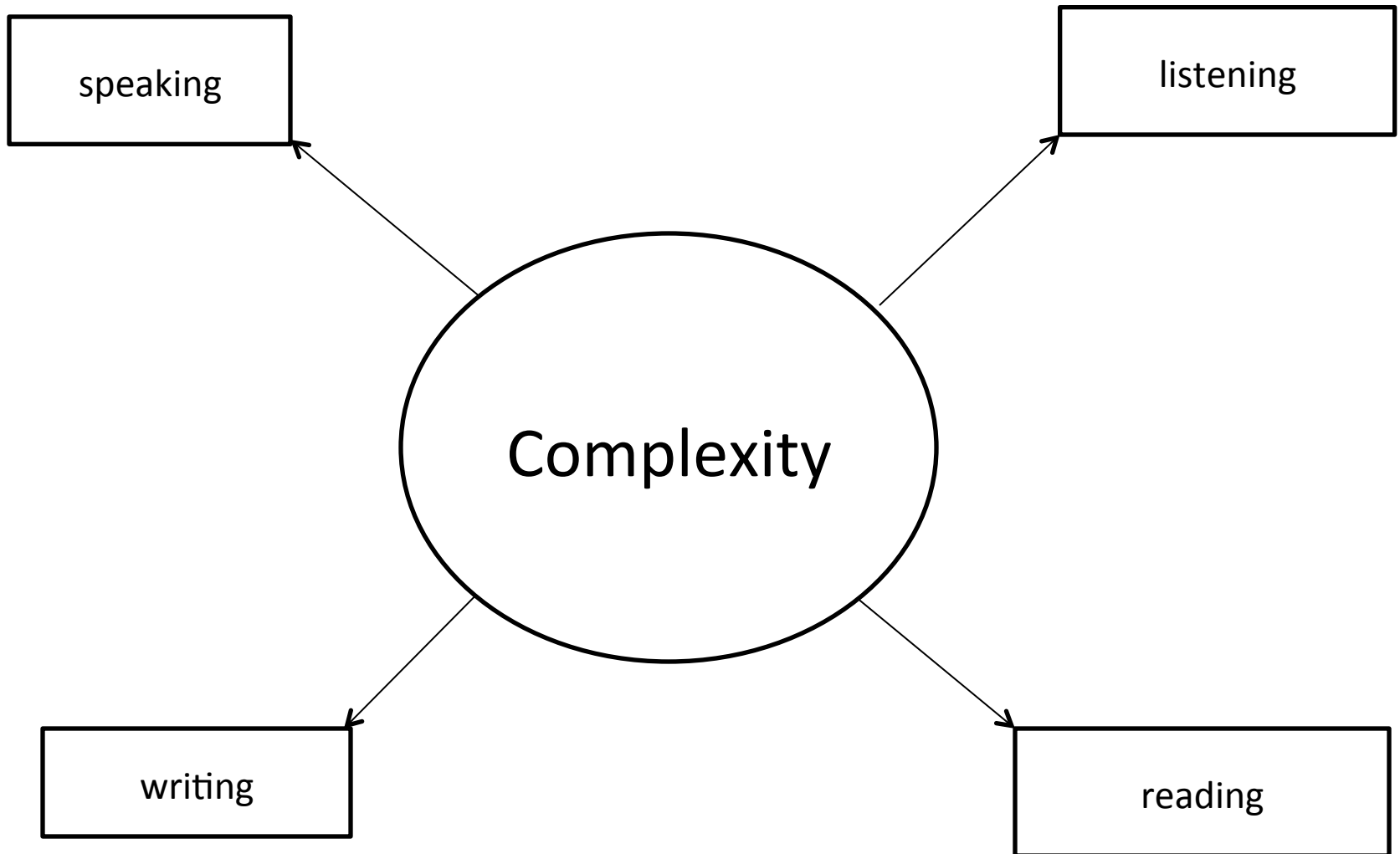
Complexity in linguistic fields



Complexity in linguistic subsystems



Complexity workshop and linguistic skills



Complexity

Some new approaches 1

- Givon (2008, 2009)

The genesis of syntactic complexity and indeed of human language, may be probed in three developmental domains:

1. Diachrony (historical change)
2. Ontogeny (language acquisition)
3. Phylogeny (evolution)

(2009, 5)

Complexity

Some new approaches 2

- Miestamo: 2008

Two different approaches:

1. absolute: complexity as an objective property of the system
2. relative: complexity as cost/difficulty to language users

(p.23)

Complexity

Some new approaches 3

- Aitchison: 1991

Many of the arguments are a priori, and boil down to the claim that all languages are necessarily equally complex, because complexities in one domain of language are balanced by simplicity in another domain.

- Fenk & Fenk: 2008

Complexity trade-offs between the subsystems of language

Complexity

Some new approaches 4

- Anderson: 1988

length of sentences and left branching

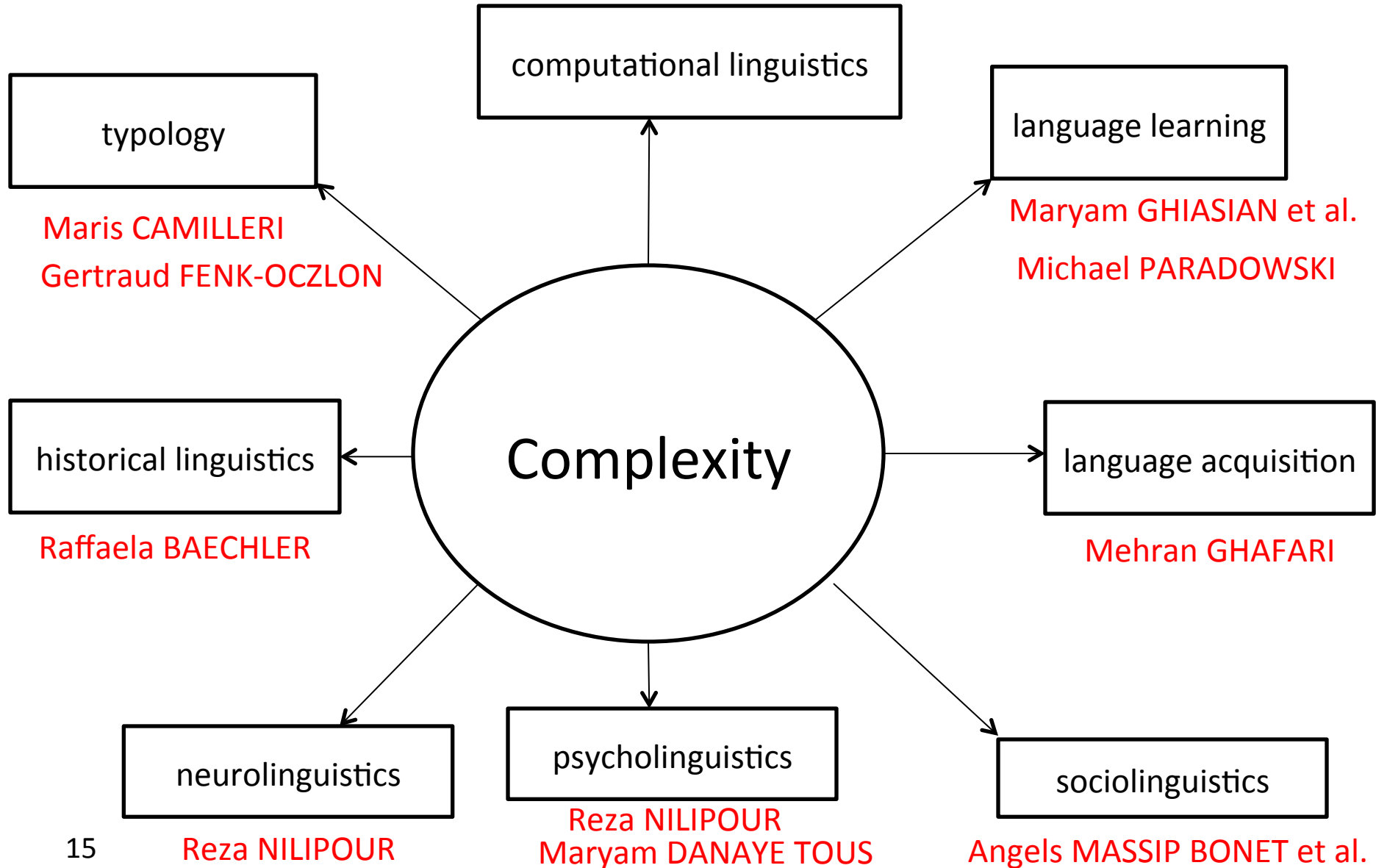
- a. Because Mexico allowed slavery, many Americans and their slaves moved to Mexico during that time.
- b. Many Americans and their slaves moved to Mexico during that time because Mexico allowed slavery.

Complexity

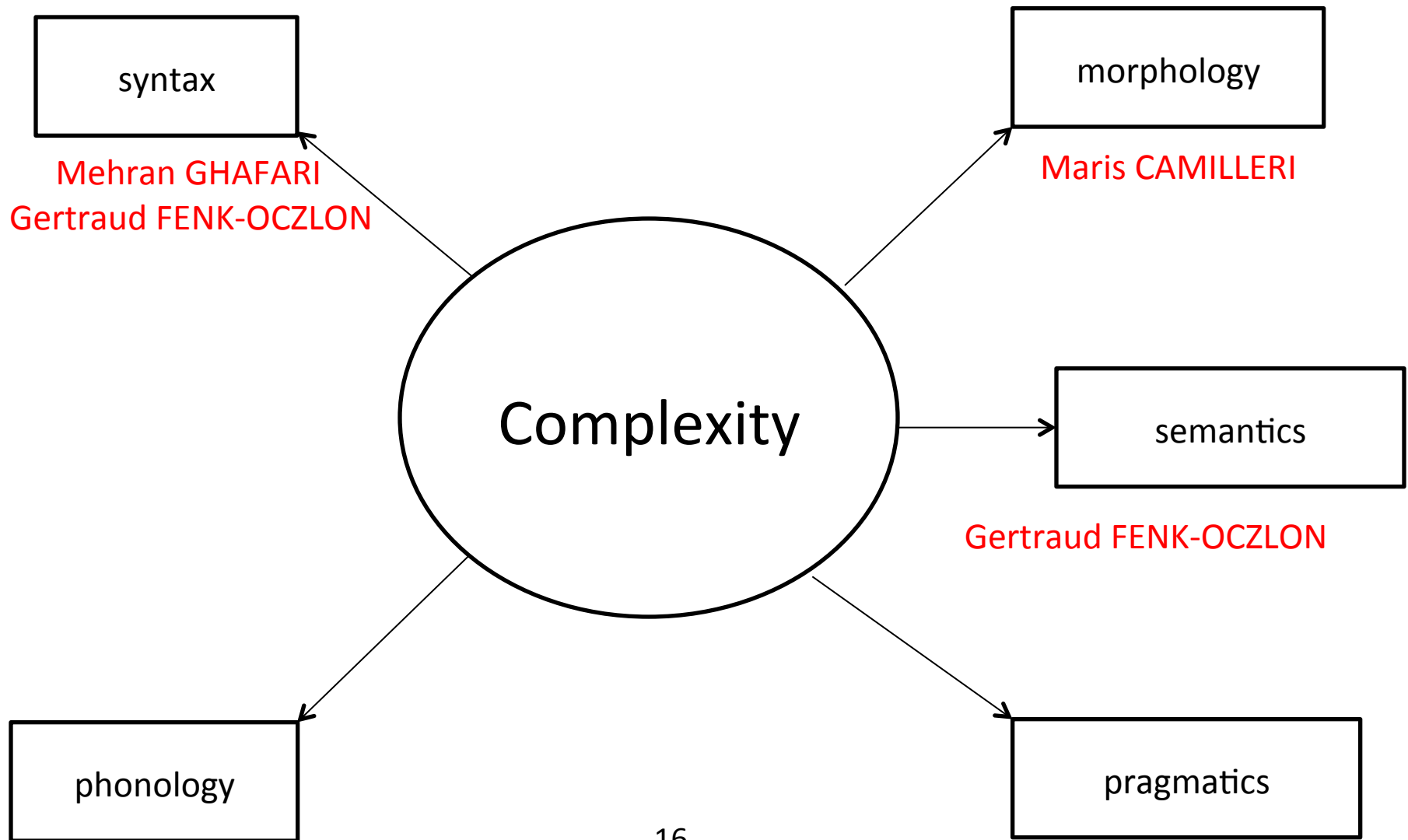
Some new approaches 5

- Juola: 1997
- Information and language
- Information relevant to text can be broken down into four major categories:
 1. the complexity of the idea(s) conveyed
 2. the complexity of the author's style
 3. the complexity mandated by the language in which the author writes
 4. the shared information omitted between the author and her audience (2005, 12)
- third aspect is named traditionally linguistic complexity

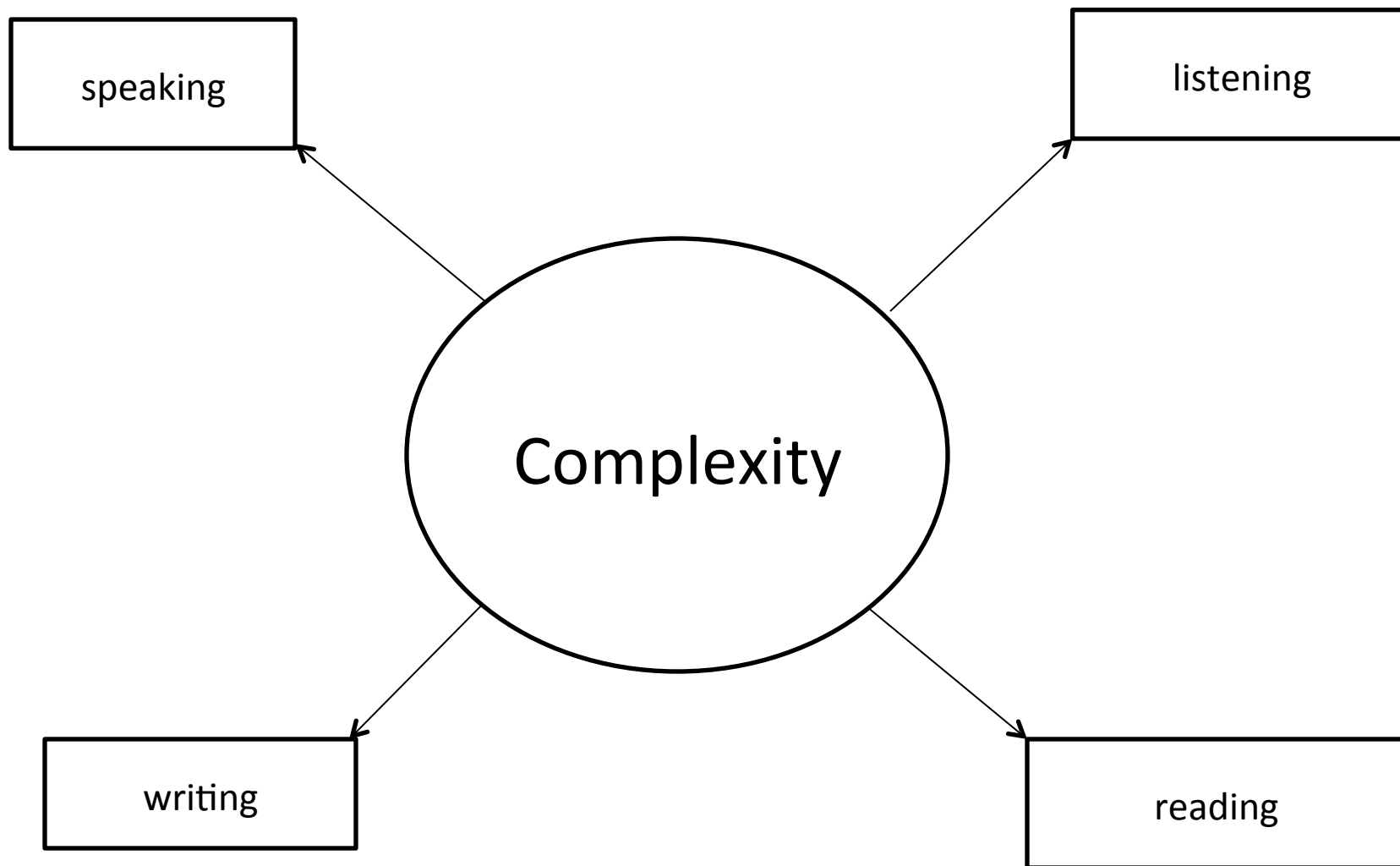
Complexity in linguistic fields



Complexity workshop and linguistic subsystem



Complexity workshop and linguistic skills



Thank You