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**Fundamental Concepts and Theories**
This section introduces this work with a discussion of some background considerations of Computational Linguistics. Understanding how languages evolve and how individuals derive meaning from written and spoken discourse is the first step to understanding how to best make use of language. In particular, this section discusses topics of language, learning, international discourse, and machine language processing. In the opening 14 chapters of this extensive reference source, readers will obtain a clear understanding of the fundamental concepts and theories integral to the field of Computational Linguistics.

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This section continues from the first section to explore some of the ways in which the principles of Computational Linguistics can be utilized in a real-world context. By identifying the best methods for utilizing and processing language, researchers and professionals can best manipulate language to suit their needs, and frameworks for teaching new languages to both machines and people are equally valuable in today’s digital society. The 14 chapters that make up this section explore the development and design methodologies that bridge the gap between fundamental concepts and real-world applications of Computational Linguistics.

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This section draws on information and concepts presented in the previous sections to identify the best uses for these principles of Computational Linguistics. Communication is a pervasive and persistent need in a global information age, and to succeed in such an interconnected society, stakeholders must learn to
express themselves and their ideas in the best way possible. Concepts such as data mining, computational intelligence, language learning, and even music and art are important tools in communication and knowledge sharing. The 14 chapters in this section provide an in-depth examination of the utilization and application of the fundamental principles of Computational Linguistics.

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to assist and enhance human lives. Understanding how humans think and express themselves, and why,
can improve the ability of all individuals to communicate more effectively. This section helps to enhance linguistic competencies through the topics of intercultural collaboration, second-language acquisition, and human/computer interaction, among others. In these 13 chapters, readers will find an in-depth discussion of some of the most pressing organizational and social implications of Computational Linguistics.

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