

The Analysis of Complex Social Systems: Foundations, Origins and Simulations

Claudio Cioffi-Revilla, D.Sc.Pol, Ph.D.

Professor of Computational Social Sciences

Director, Center for Social Complexity, Krasnow Institute for Advanced Study, George Mason University

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OUTLINE:

1. Foundations: Basic Concepts and Principles

Introduction

Structural archetypes

Boolean logic formalization

Probabilistic interpretation

Levels of representation: High/low

Advanced structural topics

Human Artifacts

Computational human foundations

Summary

2. Origins of Social Complexity

Introduction

Methodology

Empirical analysis

Pleogenic regions

Canonical theory

The fast process: collective action

The slow process: norms and institutions

Future of social complexity

Summary

3. Computational Models

Introduction

Historical overview

Systems dynamics

Queing models

Dear colleagues,

These are the main topics of my lectures, but i may still do a few small adjustments in the content and organization.

i very much look forward to meeting you in a few weeks.

Claudio

Microsimulation models

Cellular automata

UML notation

Agent-based models

Evolutionary models

Summary