



HaPoC
2021

6th International Conference on the
History and Philosophy of Computing

27-29 Oct 2021 Zurich (Switzerland)

Computing Systems as Social Institutions

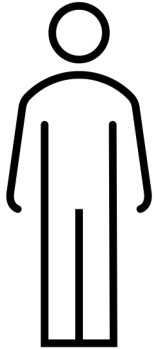
Edith Gerster Schmid, ETH

**WHAT ARE THE EFFECTS
OF INFORMATION TECHNOLOGY (IT)
ON OUR CULTURAL HABITATS?**



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SOCIAL SCIENTISTS



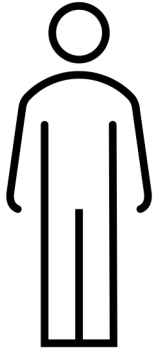
COMPUTER SCIENTISTS



WHAT ARE THE EFFECTS OF INFORMATION TECHNOLOGY (IT) ON OUR CULTURAL HABITATS?

SOCIAL SCIENTISTS

I INVITE YOU TO LOOK AT
COMPUTING SYSTEMS
AS SOCIAL INSTITUTIONS



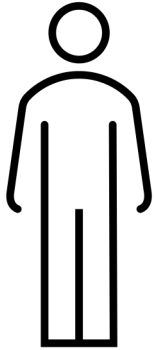
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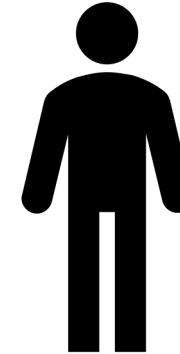
SOCIAL SCIENTISTS

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COMPUTER SCIENTISTS

I INVITE YOU TO LOOK AT
SOCIAL INSTITUTIONS AS
PROGRAMS





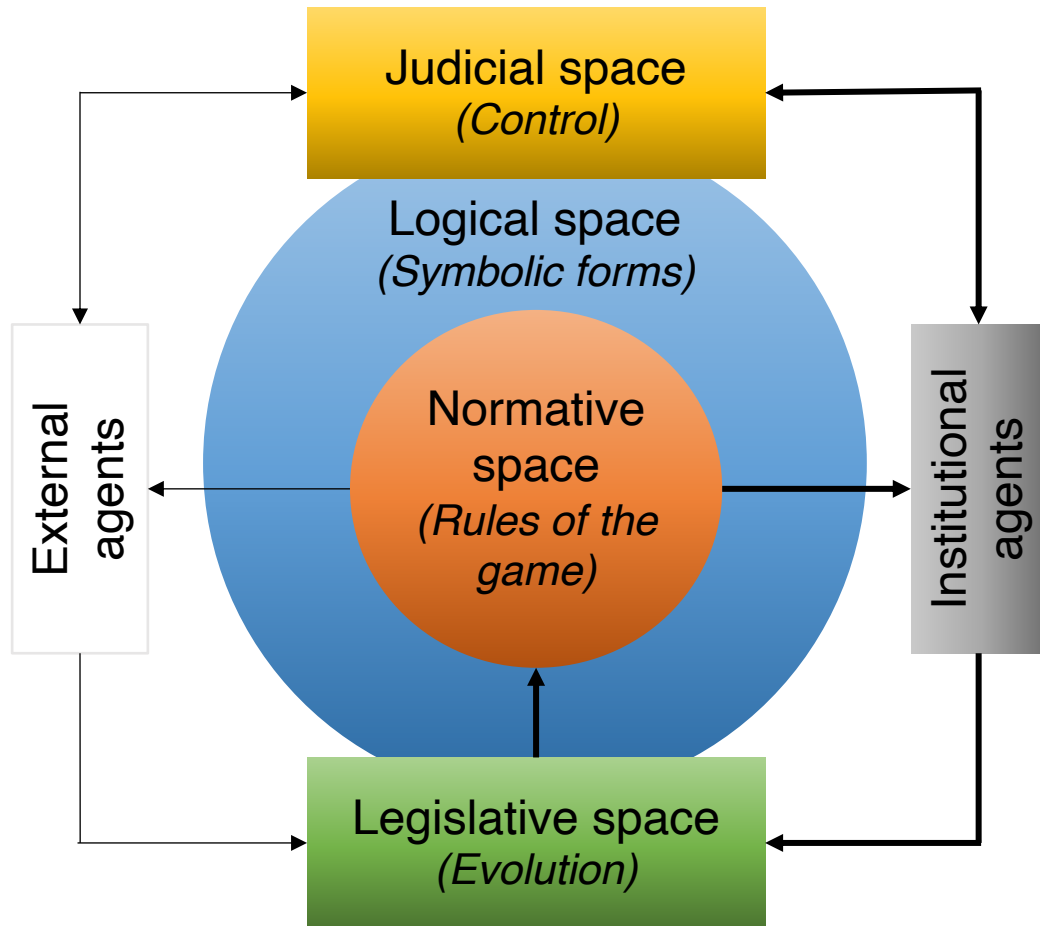
**SOCIAL INSTITUTIONS
=
CORE ELEMENT OF CULTURES**



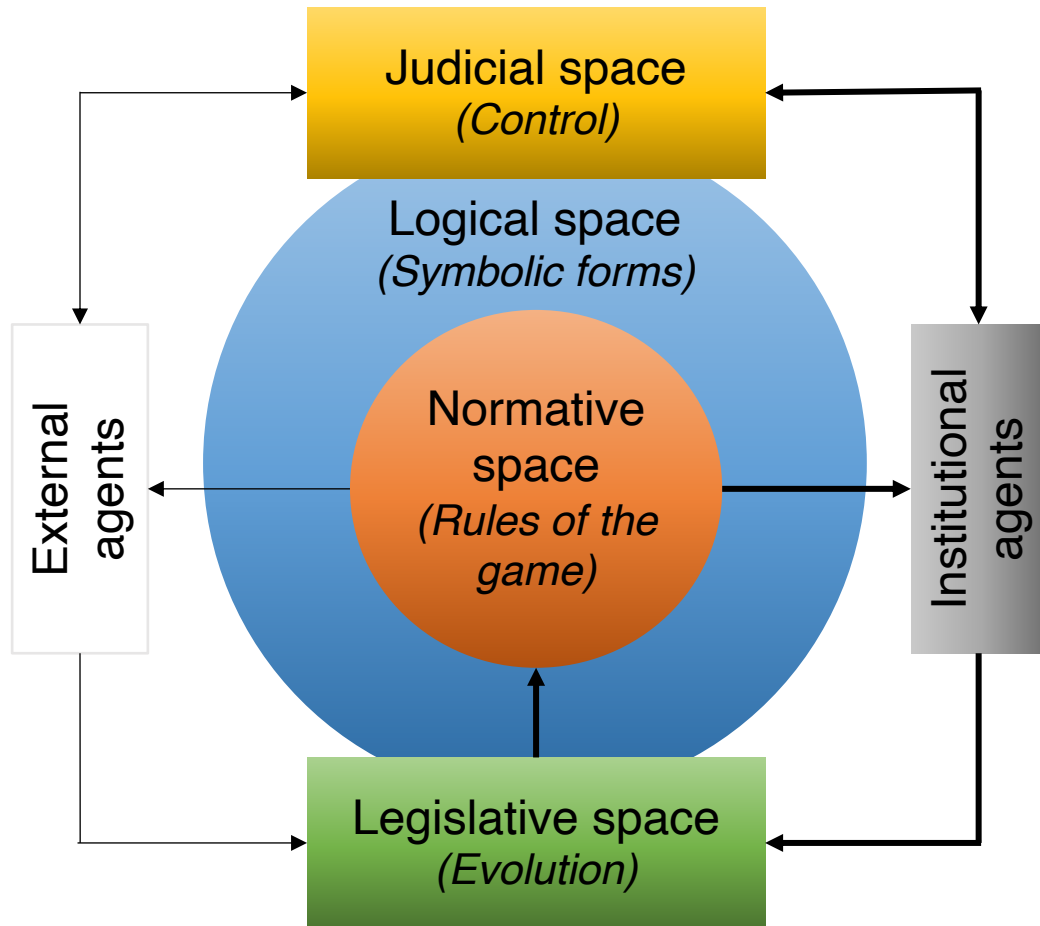
CREATING COMMON RULES FOR SOCIETY,
GOVERNING BEHAVIOR OF ITS AGENTS



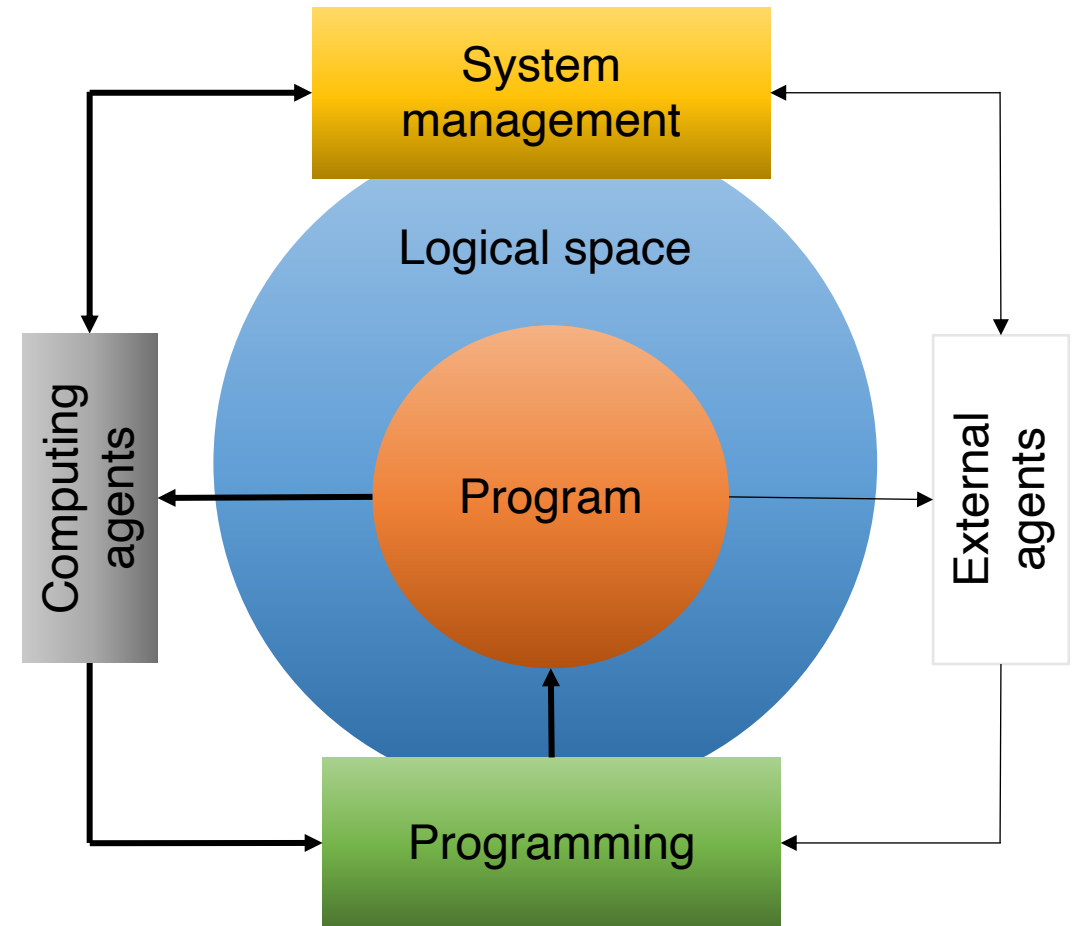
STRUCTURAL CORE OF AN INSTITUTION



STRUCTURAL CORE OF AN INSTITUTION

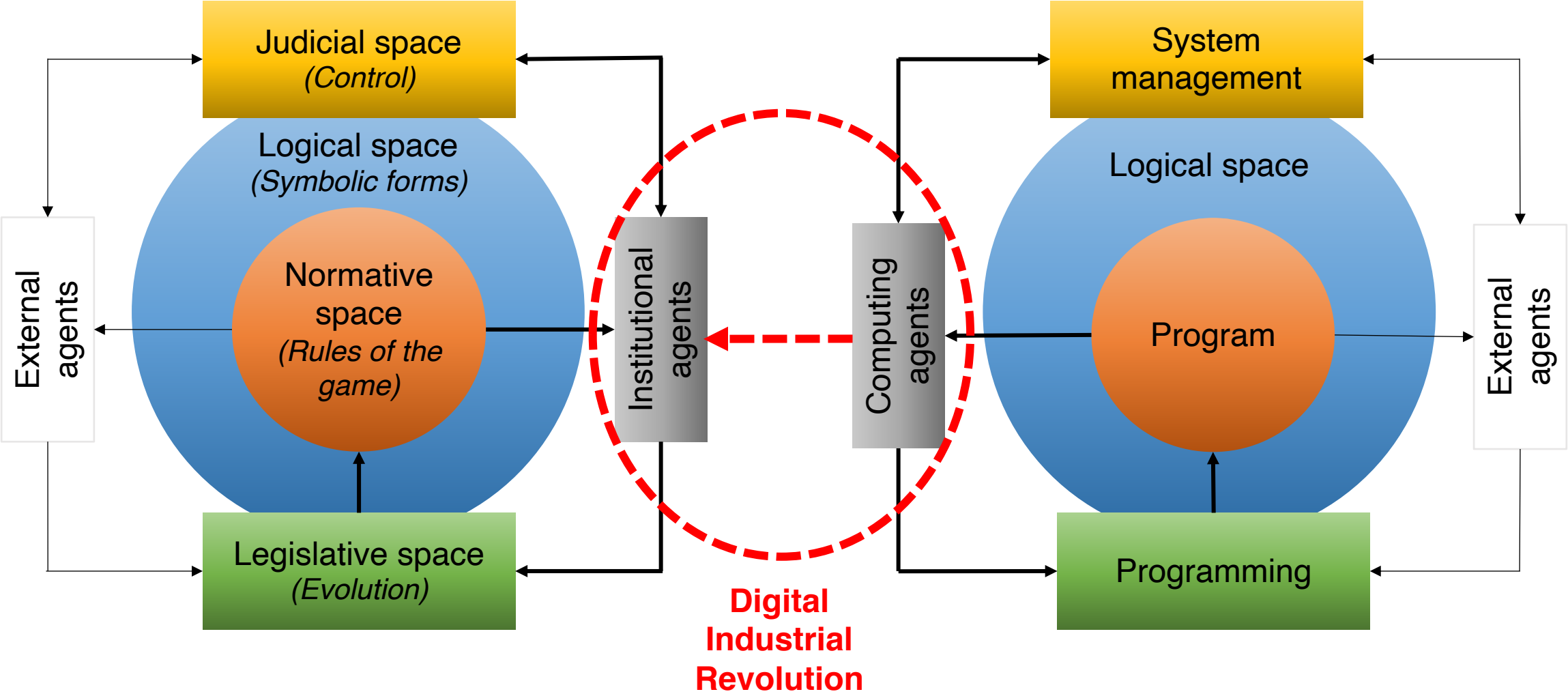


ELEMENTS OF A COMPUTING SYSTEM

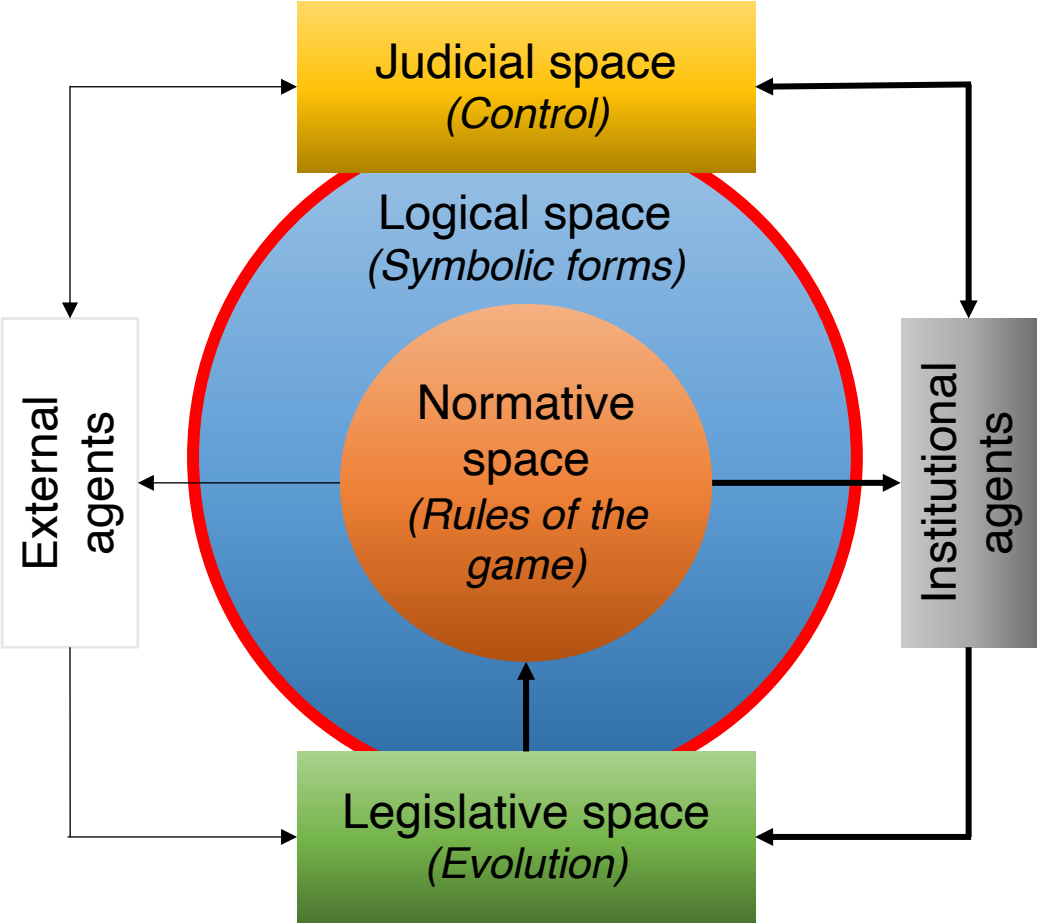


STRUCTURAL CORE OF AN INSTITUTION

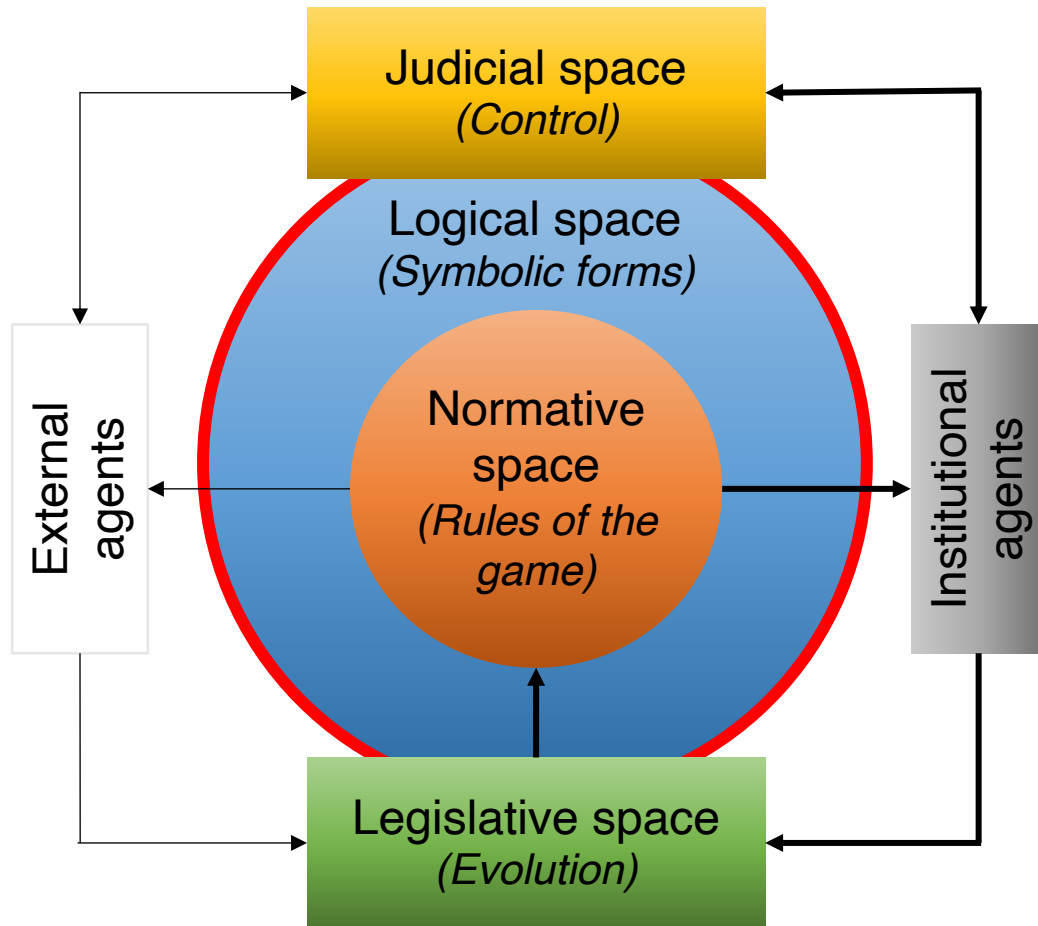
ELEMENTS OF A COMPUTING SYSTEM



STRUCTURAL CORE OF AN INSTITUTION: LOGICAL SPACE



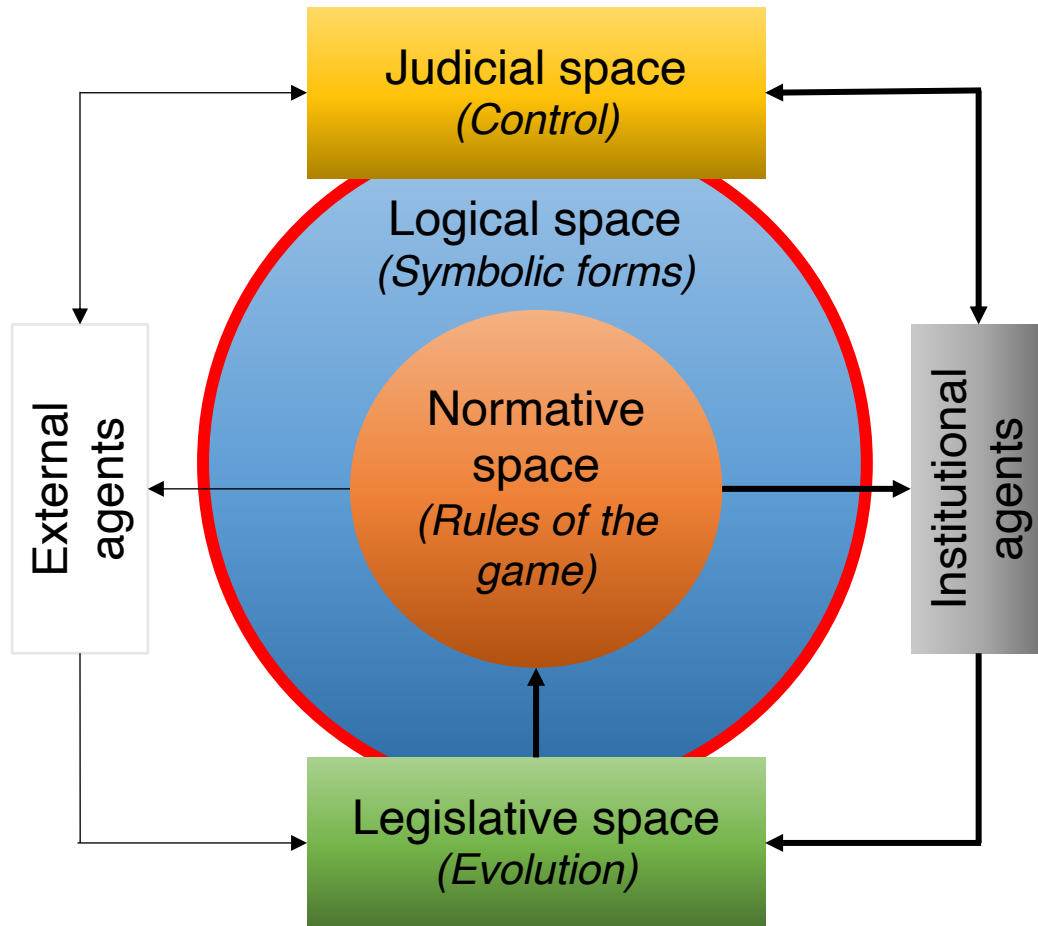
STRUCTURAL CORE OF AN INSTITUTION: LOGICAL SPACE



COMPUTING SYSTEM:

Logical space
(e.g., programming languages)

STRUCTURAL CORE OF AN INSTITUTION: LOGICAL SPACE



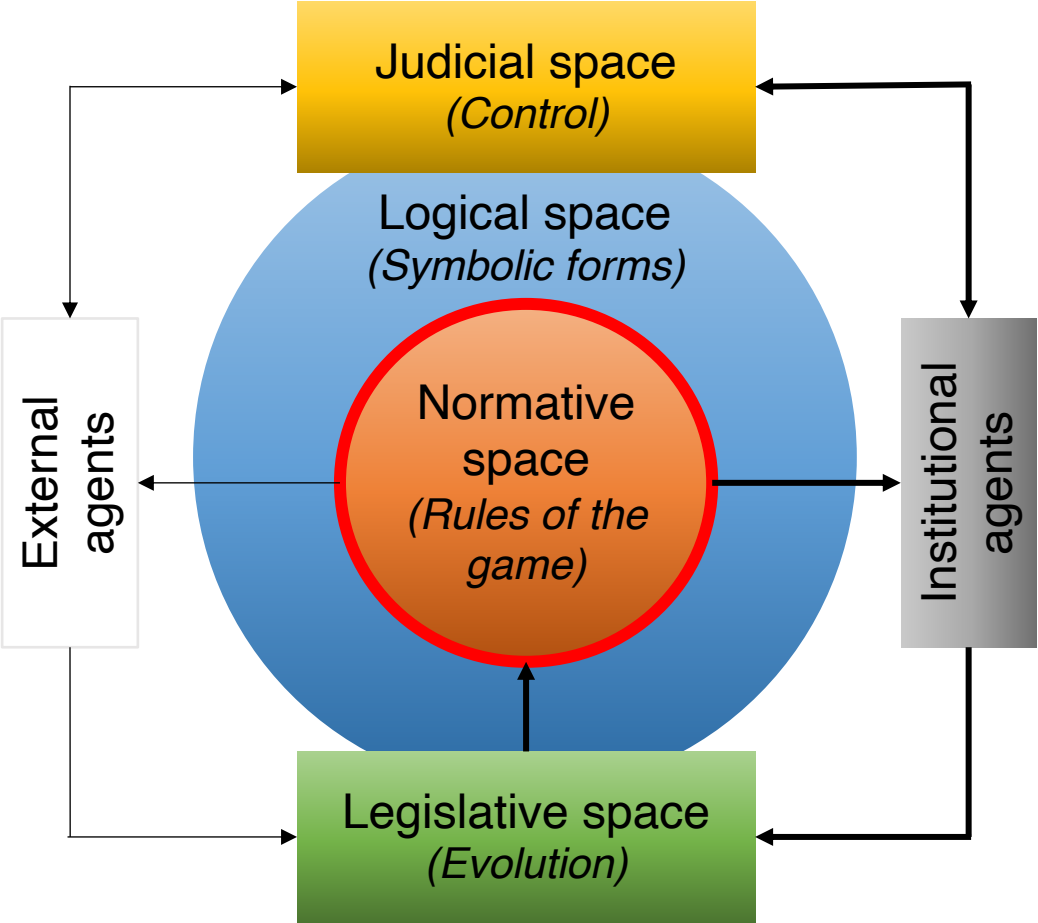
COMPUTING SYSTEM:

Logical space
(e.g., programming languages)

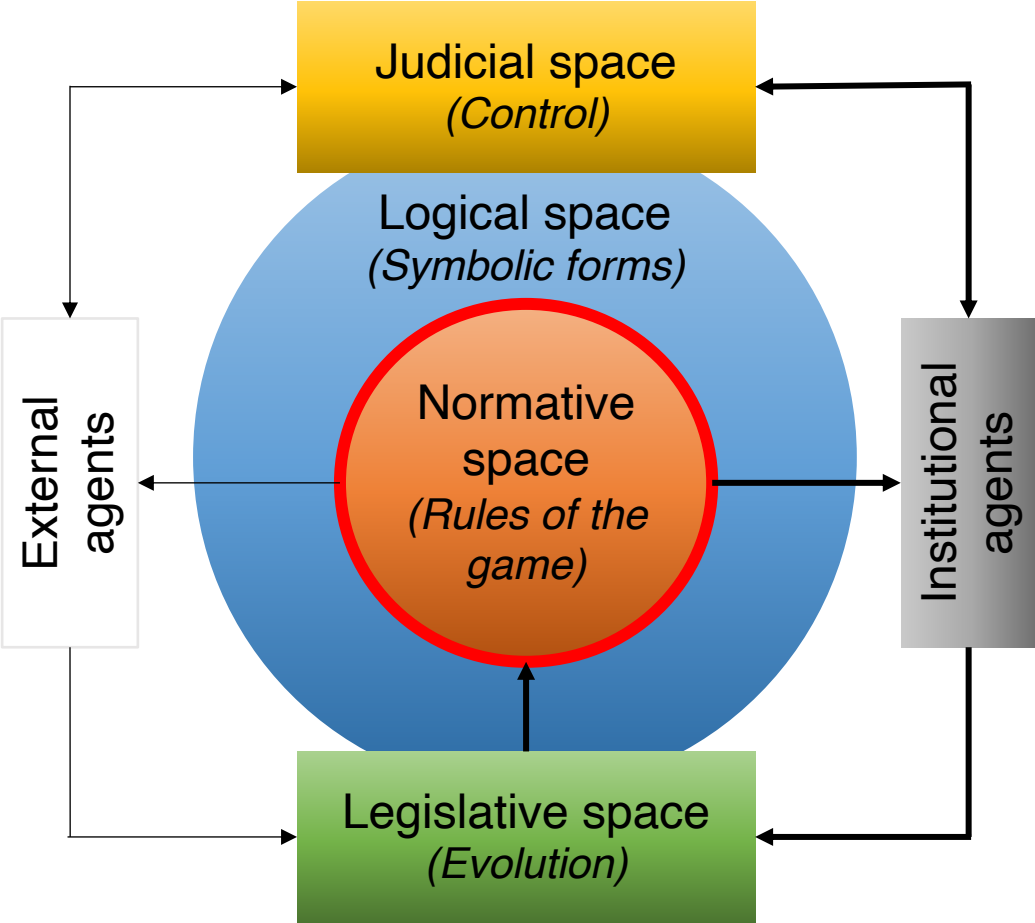
TRAFFIC SYSTEM:



STRUCTURAL CORE OF AN INSTITUTION: NORMATIVE SPACE



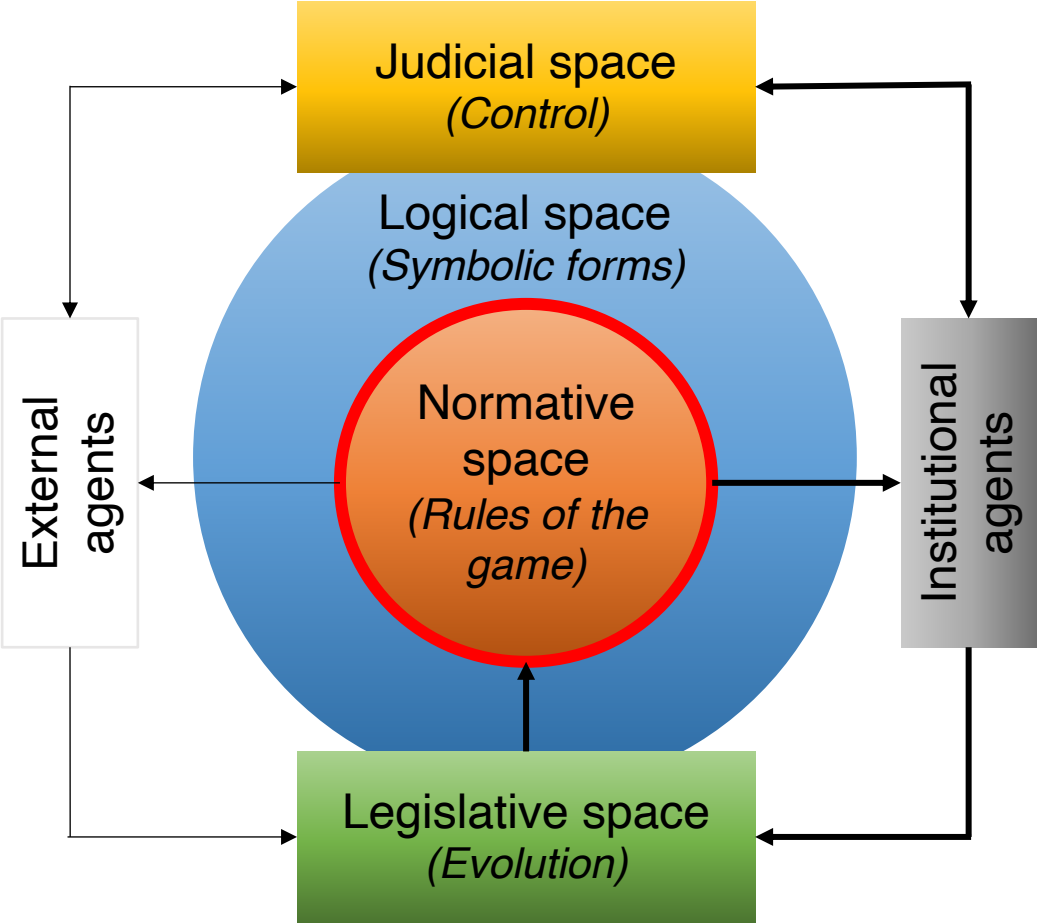
STRUCTURAL CORE OF AN INSTITUTION: NORMATIVE SPACE



COMPUTING SYSTEM:

Program

STRUCTURAL CORE OF AN INSTITUTION: NORMATIVE SPACE



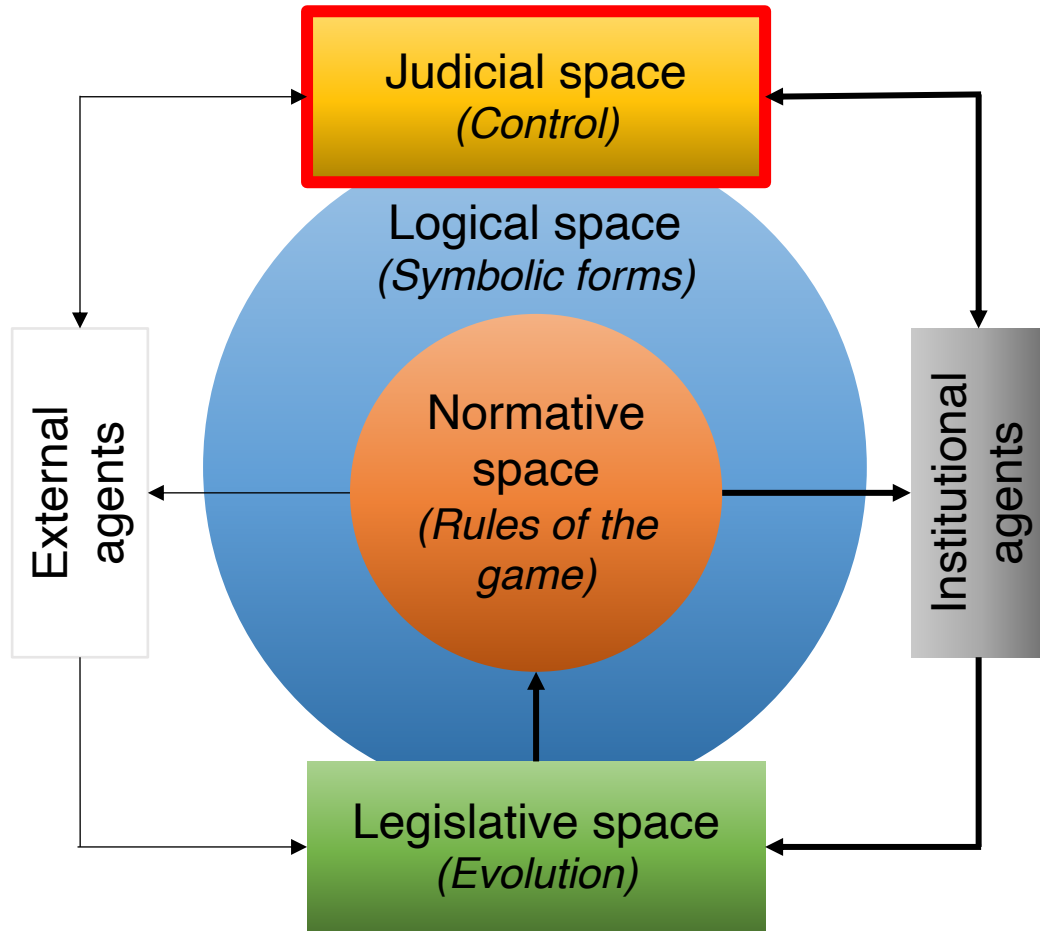
COMPUTING SYSTEM:

Program

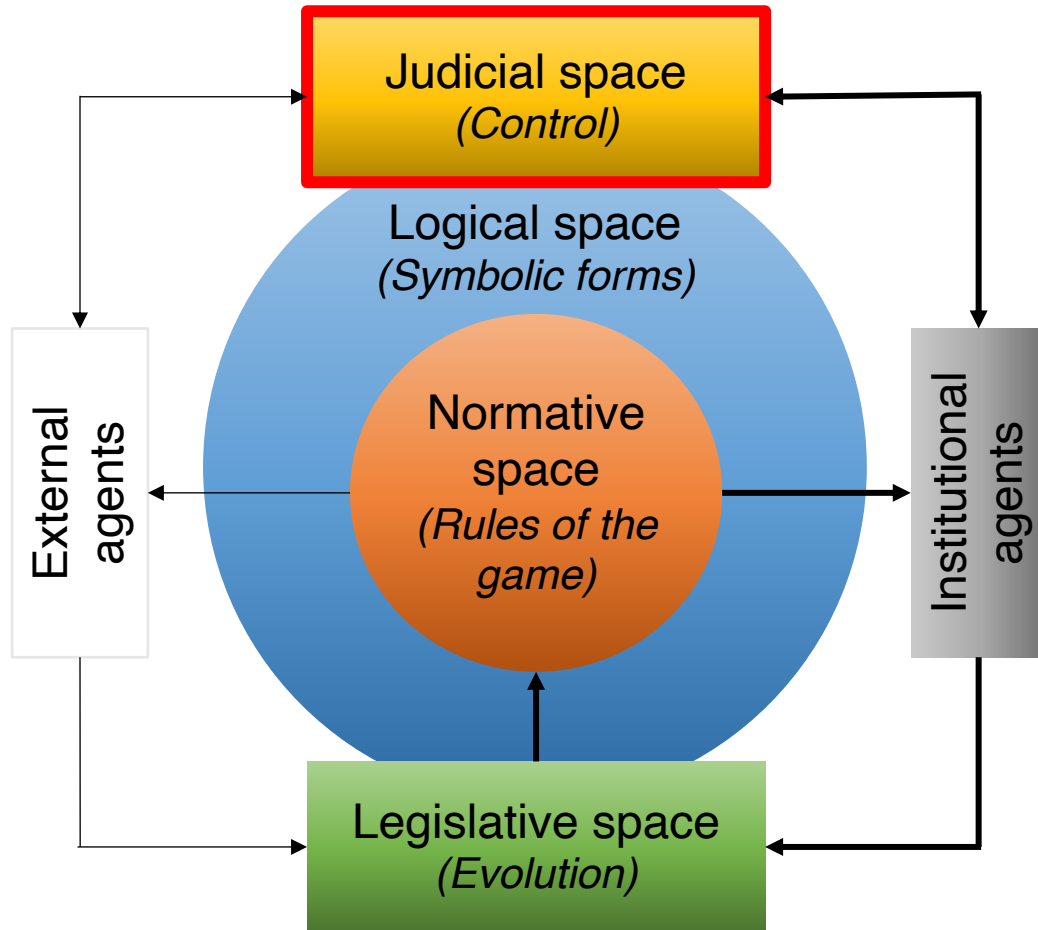
TRAFFIC SYSTEM:

The illustration shows a perspective view of a road with several vehicles: a blue car on the left, a black car in the distance, a green truck on the right, and a yellow car in the foreground. Arrows indicate movement or flow within the system.

STRUCTURAL CORE OF AN INSTITUTION: JUDICIAL SPACE



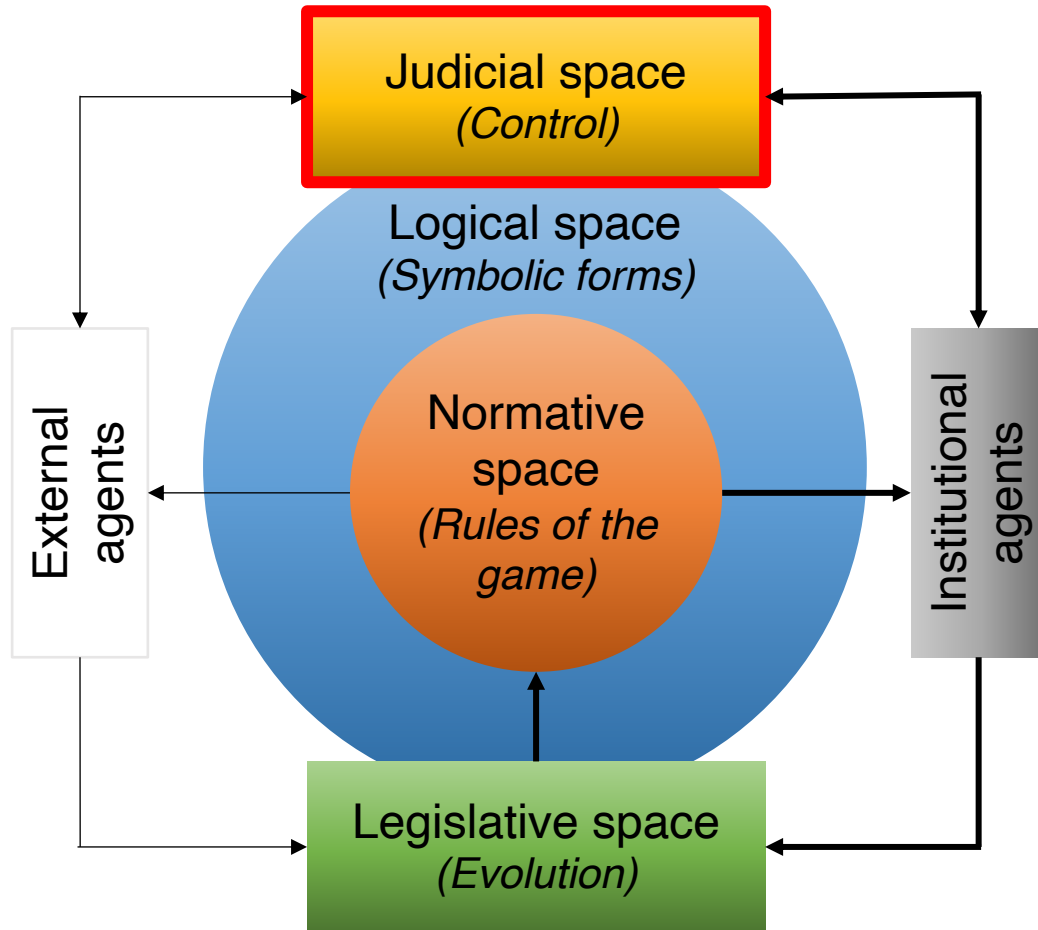
STRUCTURAL CORE OF AN INSTITUTION: JUDICIAL SPACE



COMPUTING SYSTEM:

System Management

STRUCTURAL CORE OF AN INSTITUTION: JUDICIAL SPACE



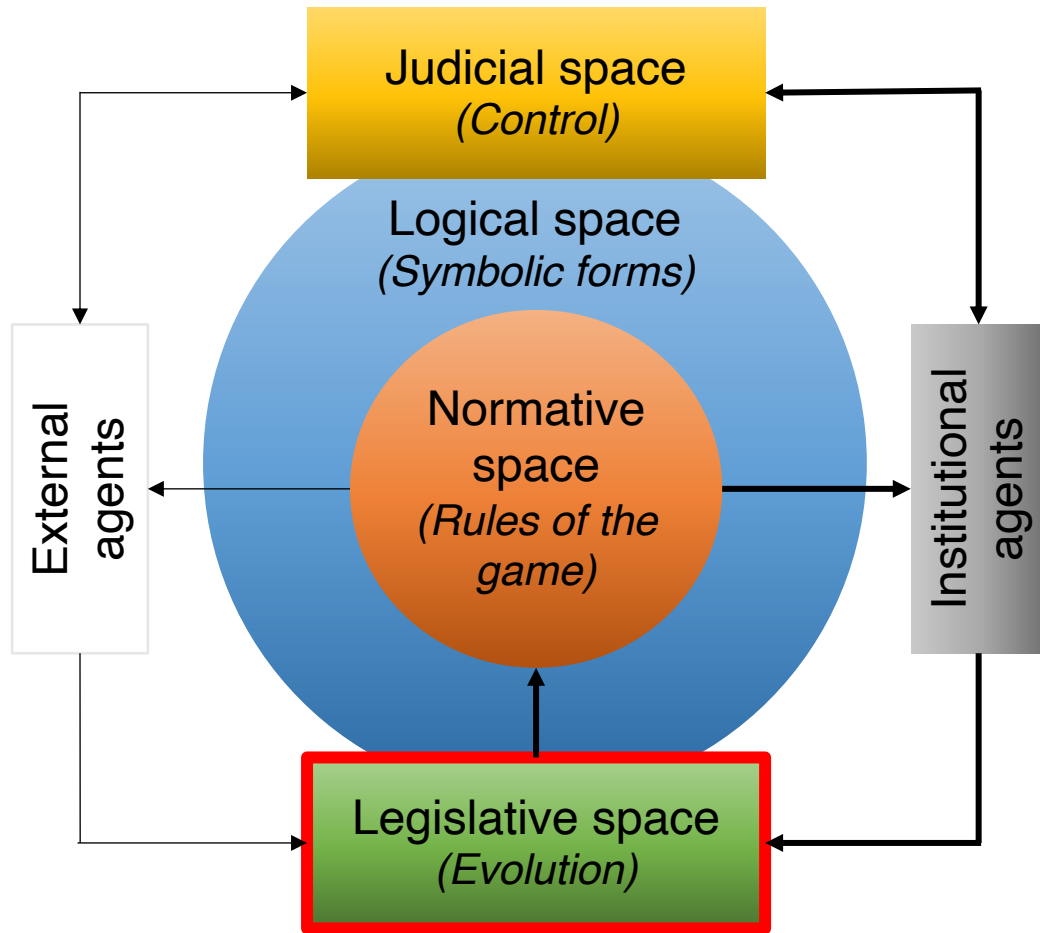
COMPUTING SYSTEM:

System Management

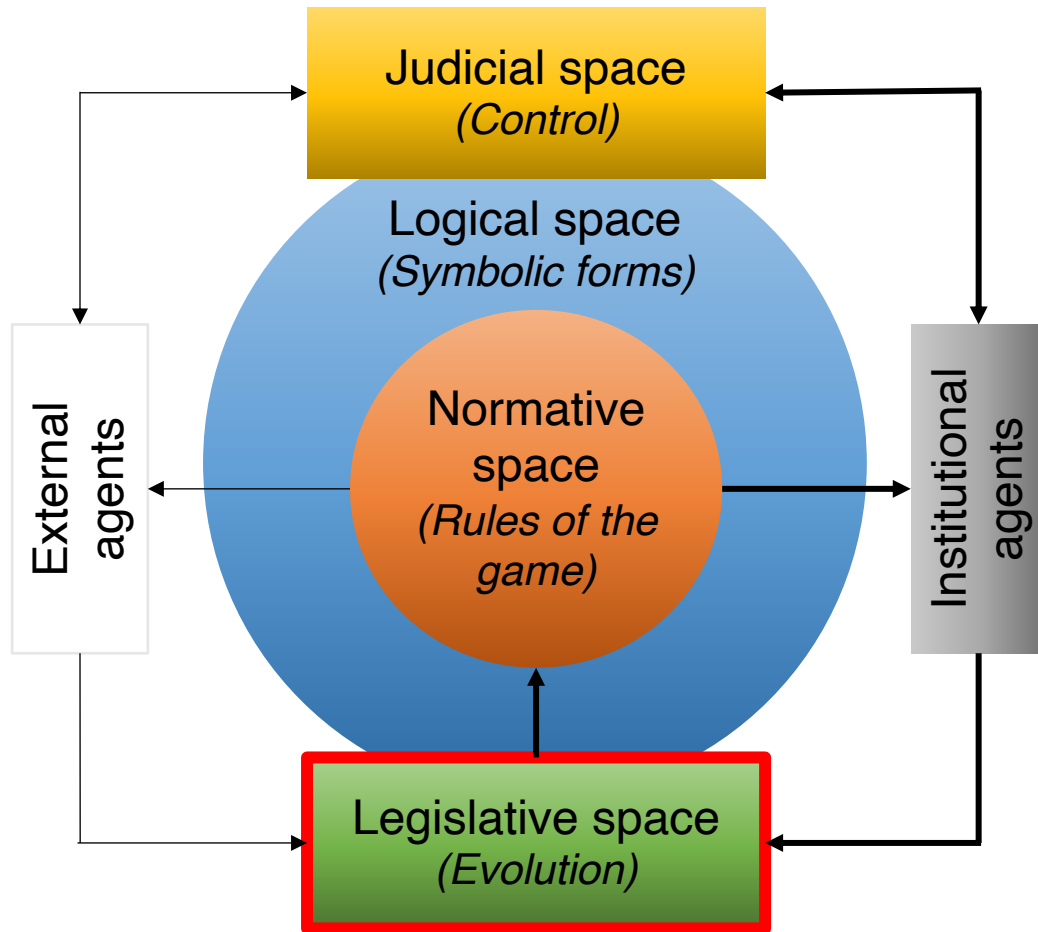
TRAFFIC SYSTEM:



STRUCTURAL CORE OF AN INSTITUTION: LEGISLATIVE SPACE



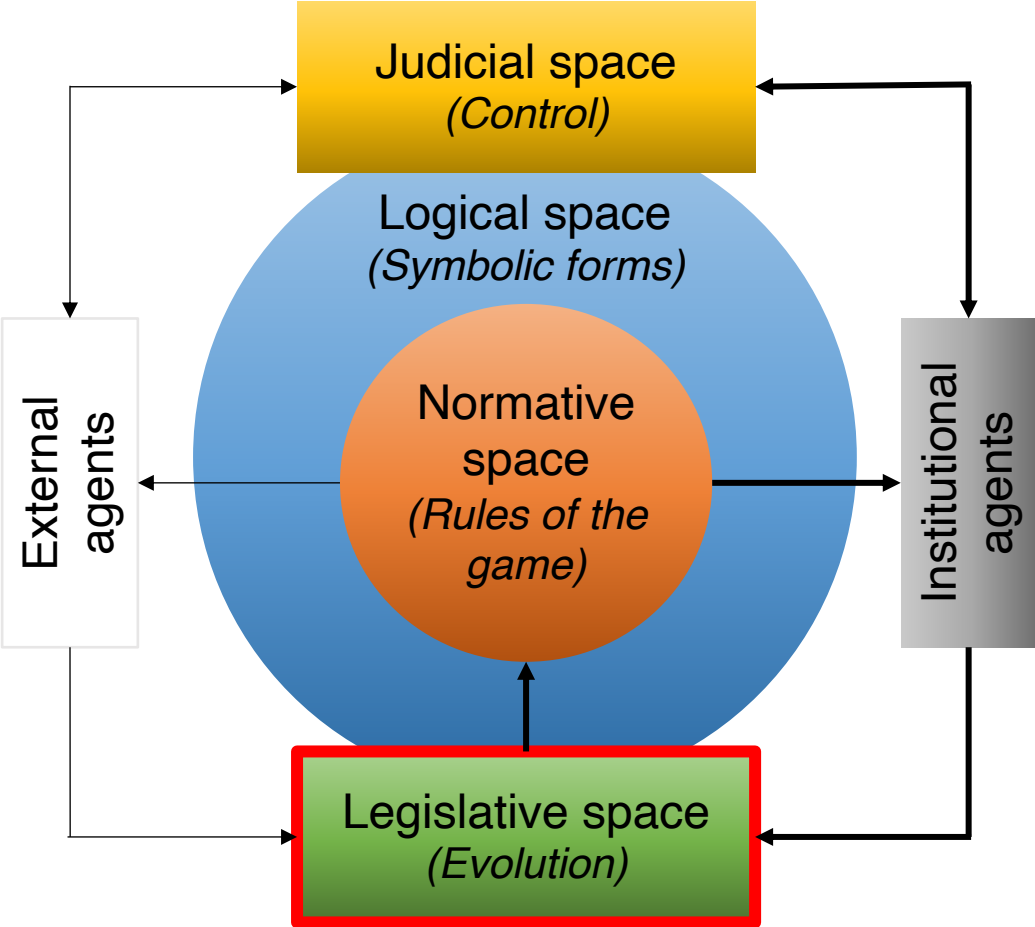
STRUCTURAL CORE OF AN INSTITUTION: LEGISLATIVE SPACE



COMPUTING SYSTEM:

Programming

STRUCTURAL CORE OF AN INSTITUTION: LEGISLATIVE SPACE



COMPUTING SYSTEM:

Programming

TRAFFIC SYSTEM:



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra





STRUCTURAL CORE OF AN INSTITUTION

ELEMENTS OF A COMPUTING SYSTEM

