# COGNITIVE DEPENDENCY

## An Integrated Framework for Understanding Information Pollution, Psychological Violence and Cognitive Sovereignty

### Core Thesis

The central challenge of the 21st century in EU and beyond is no longer merely political, economic or technological dependence.

It is **cognitive dependency** – the gradual transfer of perception, judgment and decision-making from autonomous individuals and societies to external systems of influence.

Cognitive sovereignty is not a state of complete independence from influence. Such a state does not exist.

It is the continuous effort to preserve independent judgment while navigating competing narratives, interests and uncertainties.

**The art of life lies in maintaining equilibrium between doubt and determination.**

Cognitive sovereignty is the individual and societal expression of that equilibrium.

### PART 0 – PURPOSE AND CONNECTION TO LEGAL FRAMEWORK

### 0. From Concept to Legal Protection: The Purpose of This Framework

This document provides the conceptual foundation of the phenomenon of cognitive dependency. It represents the base for the strategic analysis of the EU presented in the book *Good Morning, Europa* (Hladnik, 2025), and for the legal analysis presented in the accompanying paper *Legal Regulation of Psychological Violence*.

While the legal paper examines how European law recognizes and regulates psychological violence, this document explains:

- What cognitive dependency is and how it operates,
- Who produces it and through which mechanisms,
- What consequences it produces at individual, societal, democratic, strategic and economic levels,
- How individuals and societies can move from dependency toward cognitive sovereignty.

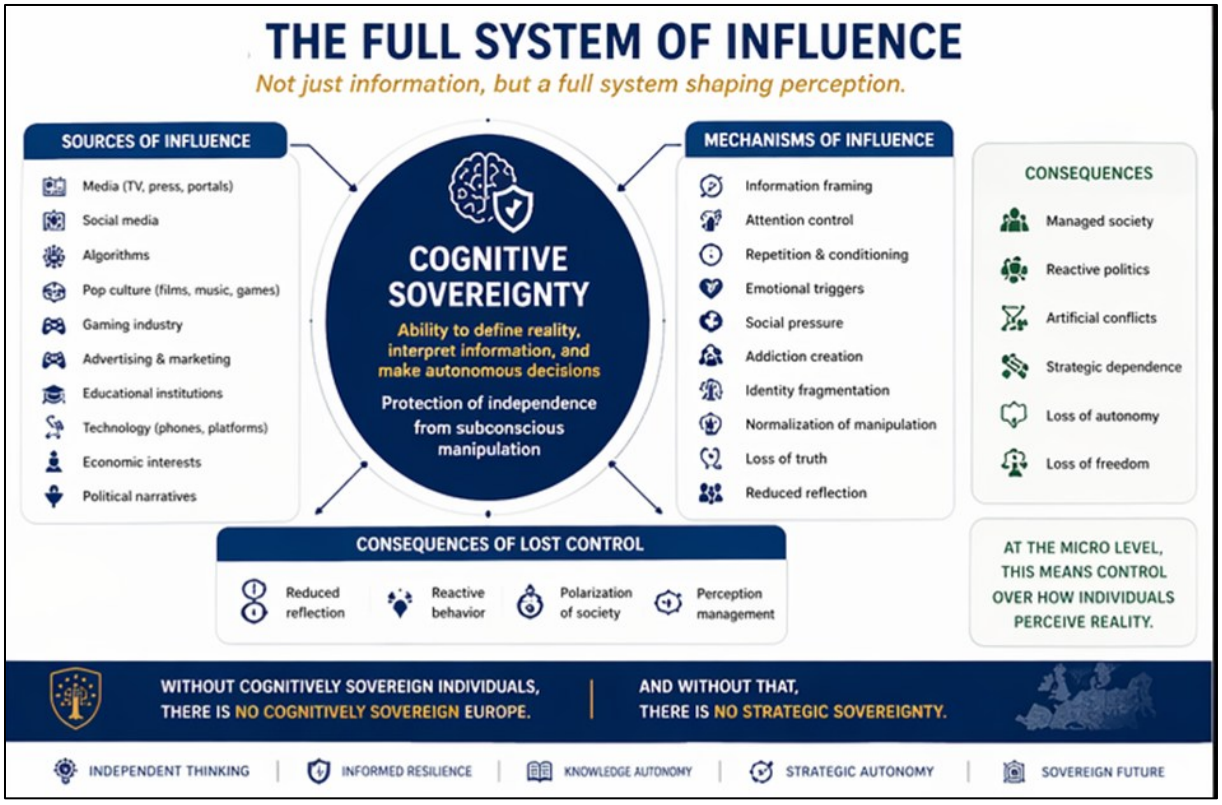
All three documents are designed to be read together. This framework identifies the phenomena; the legal paper identifies the regulatory responses and gaps; the book provides the empirical diagnosis and case studies. Together, they form a complete analysis of cognitive security in contemporary democracies.

**Relationship to *Good Morning, Europa* (Hladnik, 2025):**

| Document | Purpose | Content |
|---|---|---|
| *Good Morning, Europa* | Diagnosis and case studies | Political, geopolitical and civilizational consequences; real-world examples |
| *Cognitive Dependency* (this document) | Conceptual and regulatory framework | Mechanisms, actors, consequences, protective responses, regulatory model |
| *Legal Regulation of Psychological Violence* | Legal analysis | EU legal instruments, comparative analysis, regulatory gaps |

This document serves as the **bridge** between the empirical diagnosis (book) and the legal-regulatory response (legal paper).

**Figure 1: The Full System of Influence**




*Caption: Cognitive dependency emerges from the interaction of multiple sources, mechanisms and consequences. Cognitive sovereignty is the capacity to maintain autonomous judgment despite this system.*


# PART I – UNDERSTANDING COGNITIVE DEPENDENCY

## 1. What Is Cognitive Dependency?

### Definition

Cognitive dependency is a **persistent condition** in which beliefs, perceptions, preferences and decisions are predominantly shaped by external systems of influence rather than by autonomous evaluation and independent judgment.

Unlike physical dependency (e.g., substance addiction), cognitive dependency operates through information, narrative and emotional channels. It does not require chemical intervention. It requires only persistent exposure to systematically structured influence.

### Types of Cognitive Dependency

| Type | Definition | Example |
|---|---|---|
| **Individual** | Personal reliance on external sources for judgment | Trusting an AI assistant for all decisions |
| **Collective** | Shared dependency within a group or community | Echo chamber, ideological tribe |
| **Political** | Reliance on political authority for interpretation of events | State-controlled media as sole source |
| **Ideological** | Reliance on a fixed set of beliefs that reject alternatives | Dogmatic adherence without examination |
| **Media** | Single-source news consumption without verification | Only watching one channel |
| **Technological** | Inability to function without specific digital tools | Smartphone separation anxiety |
| **Commercial** | Shaped by advertising and behavioural targeting | Brand loyalty based on manipulation, not quality |
| **Cultural** | Acceptance of foreign cultural frameworks as universal | Adopting another nation's values as one's own |
| **Educational** | Dependence on institutional authority for knowledge | Reproducing without questioning |
| **Epistemic** | Reliance on external authorities for determining what is true, valid or legitimate without independent evaluation | Expert dependency, institutional dependency, scientific dependency, AI-generated knowledge dependency |

### 1.1 Epistemic Dependency (Detailed)

Epistemic dependency is the reliance on external authorities – experts, institutions, scientific bodies, AI systems – for determining what is true, valid or legitimate, without independent evaluation.

| Subtype | Description | Example |
|---|---|---|
| **Expert dependency** | Accepting claims solely because an expert said so | "Professor X said it, so it must be true" |
| **Institutional dependency** | Trusting institutional authority without verification | "The WHO/EC/UN says this, so I believe it" |
| **Scientific dependency** | Citing studies without reading or understanding them | "Studies show..." without examining methodology |
| **AI-generated knowledge dependency** | Treating AI output as authoritative truth | Copying ChatGPT answers without verification |

*Connection to legal framework:* Epistemic dependency is not addressed by existing law because it operates through authority, not coercion. It is a key regulatory blind spot identified in the legal paper (section 5.5 – Cognitive Dependency as a Regulatory Blind Spot).

**Key authors:** Tripathi & Saxena (2025 – epistemic colonization), Brcic (2025 – memory lock-in), Klein (2025 – sovereignty trap).

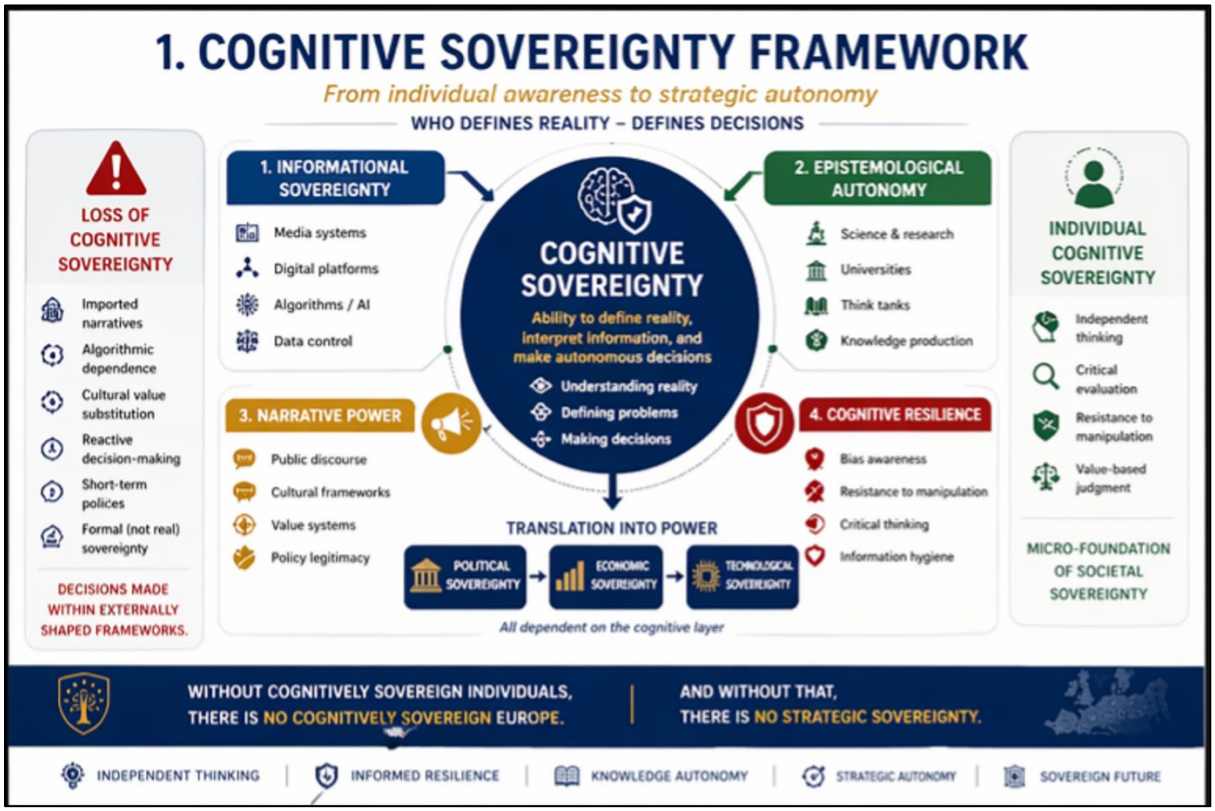
### 1.2 The Cognitive Dependency Vulnerability Scale

Not all individuals or groups are equally vulnerable to cognitive dependency. Vulnerability depends on:

| Factor | Low Vulnerability | High Vulnerability |
|---|---|---|
| **Education** | Critical thinking training | Rote memorization only |
| **Information diversity** | Access to multiple sources | Single source dependency |
| **Social support** | Strong, diverse networks | Isolation, echo chambers |
| **Cognitive load** | Low stress, adequate time | High stress, information overload |
| **Digital literacy** | Understanding algorithms | Passive consumption |
| **Age** | Adults (25–60) | Children, elderly |
| **Epistemic training** | Philosophy of science, logic | No epistemology education |

Understanding vulnerability is essential for designing proportionate regulatory responses and targeted educational interventions.

**Figure 2: The Cognitive Dependency Framework**




## 2. Types of Cognitive Dependency (Detailed)

| Type | Mechanisms | Consequences |
|---|---|---|
| **Political** | State-controlled media, patriotic narratives, leader worship | Reduced political autonomy, manipulated voting |
| **Ideological** | Dogmatic frameworks, purity tests, exclusion of dissent | Inability to evaluate opposing views |
| **Media** | Agenda setting, framing, repetition | Beliefs shaped by editorial choices |
| **Technological** | Algorithmic feeds, notifications, lock-in effects | Inability to function without platform |
| **Commercial** | Behavioral targeting, persuasive design, brand loyalty | Purchasing against one's own interests |
| **Cultural** | Cultural diplomacy, educational exchanges, media exports | Adoption of foreign values as universal |
| **Educational** | Standardized curricula, authority-based teaching | Reproducing frameworks without questioning |
| **Epistemic** | Authority reliance, lack of verification methods | Accepting claims without evaluation |

**Figure 3: Types of Cognitive Dependency Map**


## 3. The Cognitive Dependency Cycle

Cognitive dependency is not a static state. It develops through a repeating cycle:

| Stage | Description |
|---|---|
| **Exposure** | Initial contact with influence system (news, social media, advertising, education) |
| **Repetition** | Repeated exposure to similar messages, narratives, frames |
| **Normalization** | The message becomes familiar, then normal, then "common sense" |
| **Identity attachment** | The belief becomes part of self-concept; challenging it feels like personal attack |
| **Dependency formation** | Individual relies on the system for orientation, meaning, decision-making |
| **Resistance to alternatives** | Competing information is rejected without examination |

**Figure 4: The Cognitive Dependency Cycle**

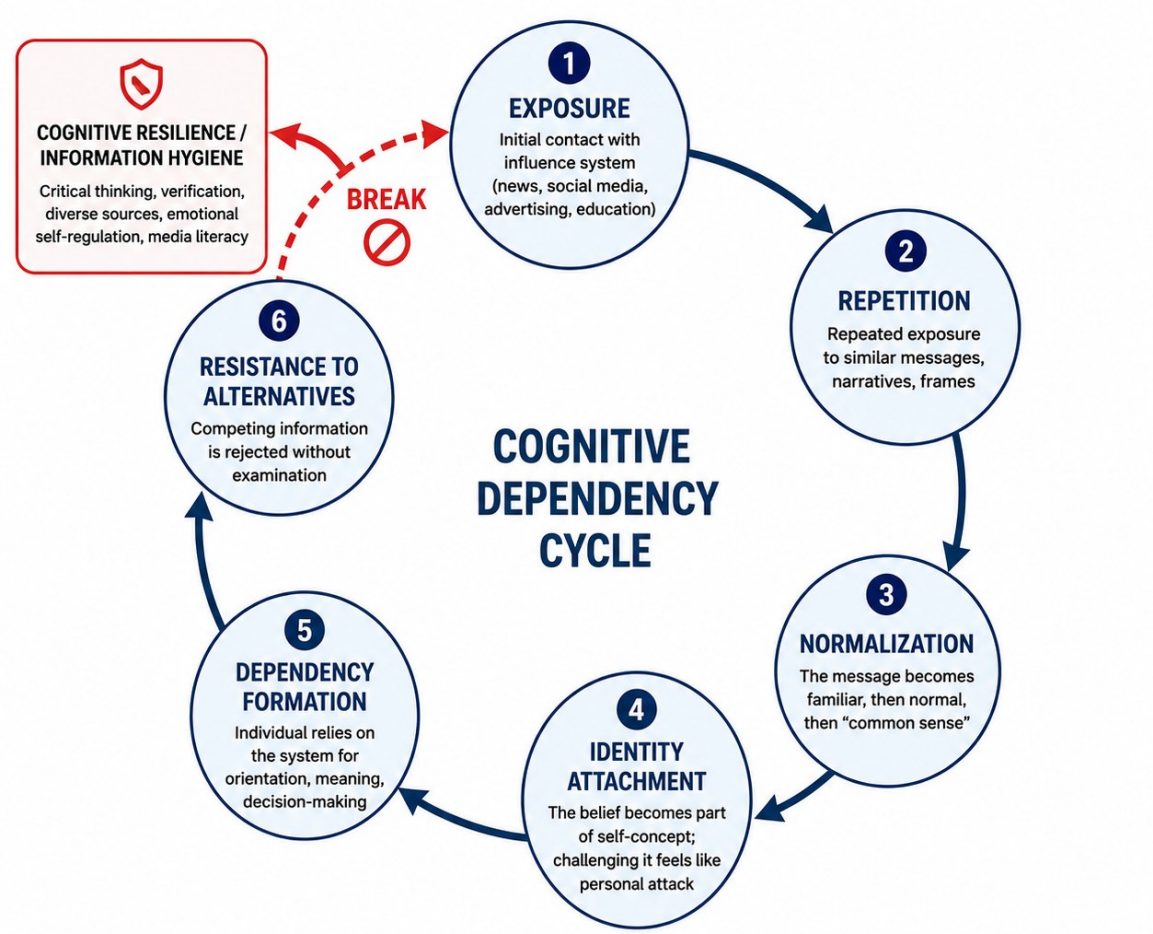



**Figure 4: The Cognitive Dependency Cycle.**
The cycle begins with exposure to an influence system. Through repetition, the message becomes normalized and attached to identity. Dependency forms, followed by resistance to alternatives. The cycle then repeats, each iteration deepening dependency. Breaking the cycle requires cognitive resilience and information hygiene.

## 4. Information Pollution

### Definition

Information pollution is the contamination of the information environment with:

- **Misinformation** – false information without intent to harm
- **Disinformation** – false information with intent to deceive
- **Malinformation** – true information shared with intent to harm
- **Information overload** – excessive volume preventing processing
- **Information fragmentation** – isolated knowledge pools without synthesis

### 4.1 Types of Information Pollution

| Type | Definition | Example |
|---|---|---|
| **Misinformation** | False information, no intent to harm | Unverified rumour shared in good faith |
| **Disinformation** | False information, intent to deceive | State-sponsored fake news |
| **Malinformation** | True information, intent to harm | Doxxing, leaked private communications |
| **Information overload** | Excessive volume preventing processing | 24/7 news cycles, notification fatigue |
| **Information fragmentation** | Isolated pools without synthesis | Echo chambers, filter bubbles |

### 4.2 The Information Pollution Lifecycle

| Stage | Description |
|---|---|
| **Production** | Who creates the pollution? (state actors, commercial platforms, individuals) |
| **Amplification** | How does it spread? (algorithms, social sharing, media repetition) |
| **Reception** | Who is targeted? (general public, specific demographics, vulnerable groups) |
| **Internalization** | When does it become belief? (repetition, emotional resonance, identity fit) |
| **Consequence** | What follows? (behaviour change, democratic distortion, psychological harm) |

### 4.3 Democratic Consequences of Information Pollution

| Consequence | Description |
|---|---|
| **Epistemic chaos** | No shared factual basis for debate |
| **Deliberative breakdown** | Cannot deliberate when facts are contested |
| **Trust erosion** | Loss of trust in institutions, media, science |
| **Polarization** | Tribes form around competing information ecosystems |

**Figure 5: Information Pollution Map**

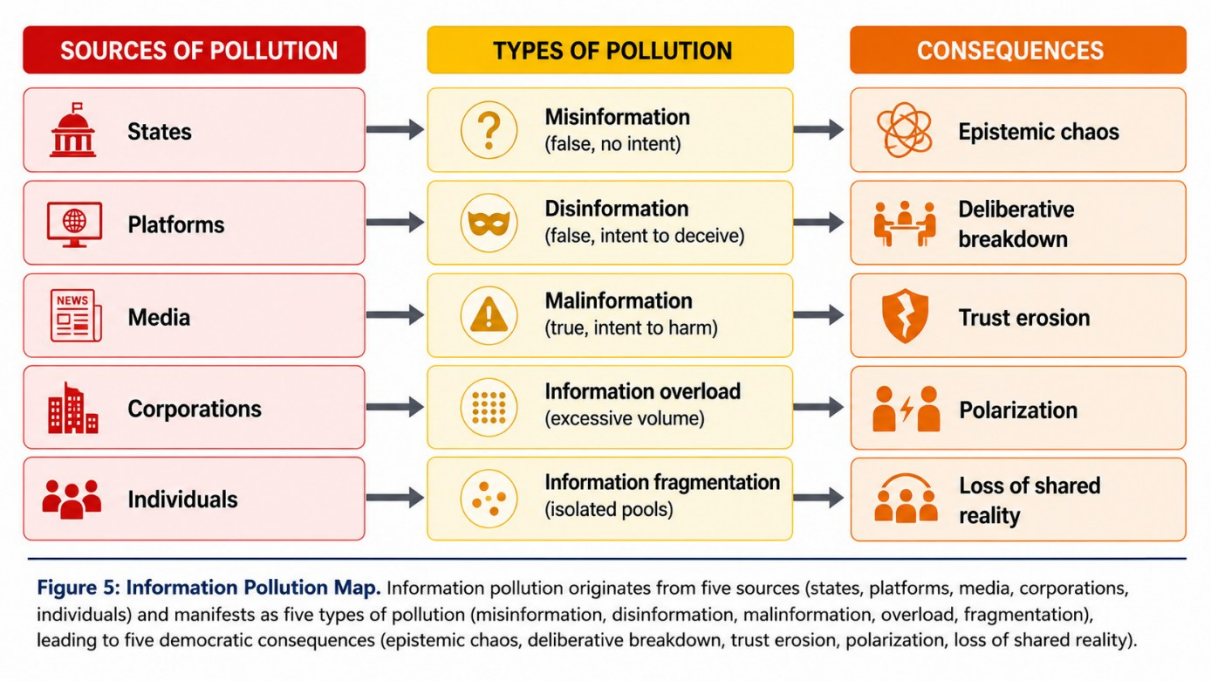



**Figure 5: Information Pollution Map.** Information pollution originates from five sources (states, platforms, media, corporations, individuals) and manifests as five types of pollution (misinformation, disinformation, malinformation, overload, fragmentation), leading to five democratic consequences (epistemic chaos, deliberative breakdown, trust erosion, polarization, loss of shared reality).

## 5. Psychological Violence

### Definition

Psychological violence is the systematic use of communicative, behavioural, informational or environmental techniques that impair the ability of an individual or group to make free, informed and autonomous decisions, thereby violating psychological integrity, cognitive autonomy or human dignity, **with the intention of obtaining benefits for the perpetrator or a third party**.

### Distinguishing Ethical Influence from Psychological Violence

Not every influence that reduces autonomy constitutes psychological violence. Democratic societies depend on legitimate forms of influence, including education, healthcare, parenting, public health campaigns, political persuasion and commercial advertising within legal boundaries.

**Ethical influence** is distinguished by two characteristics:

1. **Intent to benefit the target** (or society as a whole) – the primary purpose is the well-being, safety, or development of the person being influenced.
2. **Transparency** – the target is aware that they are being influenced and can, in principle, consent or reject.

**Psychological violence**, by contrast, is defined by:

1. **Intent to benefit the perpetrator or a third party** – the target's autonomy is reduced not for their own good but for the benefit of another.
2. **Opaqueness or deception** – the target is often unaware of the influence or cannot meaningfully consent.

**Examples of legitimate influence (NOT psychological violence):**

| Context | Method | Intent | Why legitimate |
|---|---|---|---|
| Parenting | Limiting screen time | Protect child's development | Intent to benefit target |
| Education | Correcting false beliefs | Student's understanding | Intent to benefit target |
| Healthcare | Recommending treatment | Patient's health | Intent to benefit target |
| Public health | Vaccination campaign | Community immunity | Intent to benefit society |
| Political debate | Persuasive argument | Democratic competition | Transparent, reversible |

**Examples of psychological violence:**

| Context | Method | Intent | Why unlawful |
|---|---|---|---|
| Coercive control | Isolation, monitoring, gaslighting | Domination, control | Intent to benefit perpetrator |
| Dark patterns | Deceptive interface design | Profit extraction | Intent to benefit third party |
| Fear-based political manipulation | Threat amplification, us-versus-them | Electoral victory | Intent to benefit perpetrator |
| AI synthetic authority | Presenting AI as omniscient | User lock-in, data extraction | Intent to benefit third party |

**Levels of Psychological Violence**

| Level | Description | Example |
|---|---|---|
| **Individual** | Interpersonal abuse | Coercive control in relationships |
| **Organizational** | Workplace mobbing | Systematic humiliation, exclusion |
| **Political** | State-sponsored intimidation | Fear-based campaigns, stigmatization |
| **Commercial** | Manipulative marketing | Behavioural targeting, dark patterns |
| **Societal** | Systemic discrimination | Structural exclusion of groups |

### 5.1 Coercive Control – The Most Pervasive Form

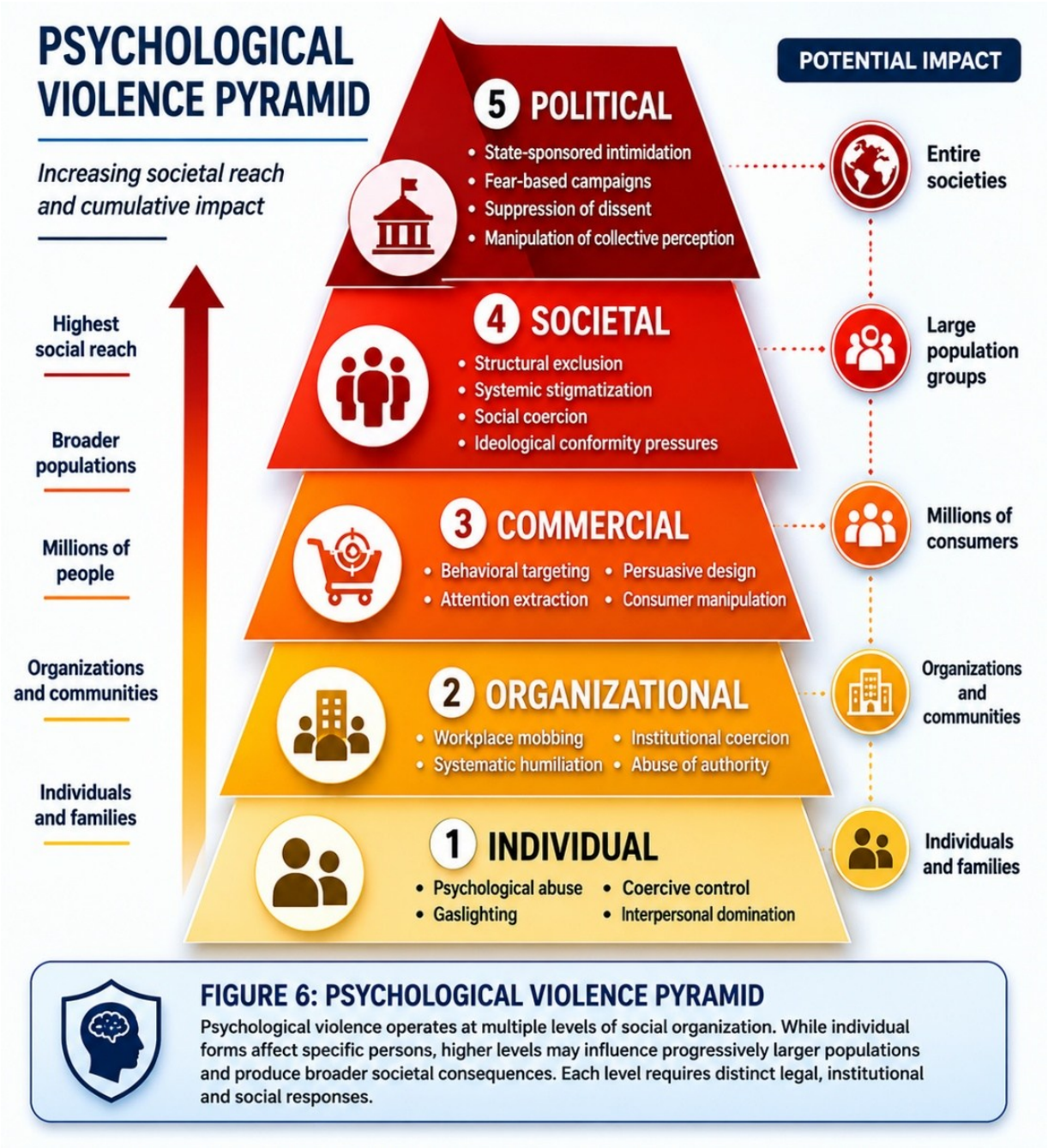
Coercive control is a strategic pattern of domination rather than isolated incidents of abuse. It operates through:

| Mechanism | Description |
|---|---|
| **Isolation** | Cutting off access to friends, family, alternative information sources |
| **Monitoring** | Surveillance of communications, movements, beliefs |
| **Gaslighting** | Systematic denial of reality to undermine confidence in one's own judgment |
| **Threats** | Veiled or explicit threats of harm, abandonment, or exposure |
| **Economic control** | Restricting access to resources, creating dependency |

Coercive control is relevant not only to interpersonal relationships but also to institutional and political contexts. When a political regime or commercial platform systematically isolates, monitors, gaslights, threatens and economically controls individuals or groups, it engages in coercive control at scale.

*Connection to legal framework:* Directive (EU) 2024/1385 explicitly recognizes coercive control as a form of violence, requiring Member States to criminalize it. This document extends that recognition from interpersonal to systemic contexts.

**Figure 6: Psychological Violence Pyramid**




## 6. Legitimate Influence vs Manipulation

Influence is not inherently harmful. Democratic societies depend on persuasion, education, advocacy and public debate.

## The Influence Continuum

| Stage | Description | Legitimacy |
|---|---|---|
| **Information** | Neutral facts, data, evidence | Fully legitimate |
| **Education** | Teaching with transparent authority | Legitimate |
| **Persuasion** | Reasoned argument, evidence-based | Legitimate |
| **Advocacy** | Partisan but transparent | Legitimate (with disclosure) |
| **Propaganda** | One-sided, emotionally charged, opaque | Questionable |
| **Manipulation** | Deceptive, exploitative, non-transparent | Illegitimate |
| **Psychological violence** | Systematic harm to autonomy | Unlawful |

## Key Distinction

| | Legitimate Influence | Manipulation | Psychological Violence |
|---|---|---|---|
| **Transparency** | Transparent | Opaque | Opaque |
| **Consent** | Informed | Manipulated | Absent |
| **Autonomy** | Preserved | Reduced | Destroyed |
| **Intent** | Beneficial or neutral | Self-interested | Malicious or reckless |

## Figure 7: Influence Continuum

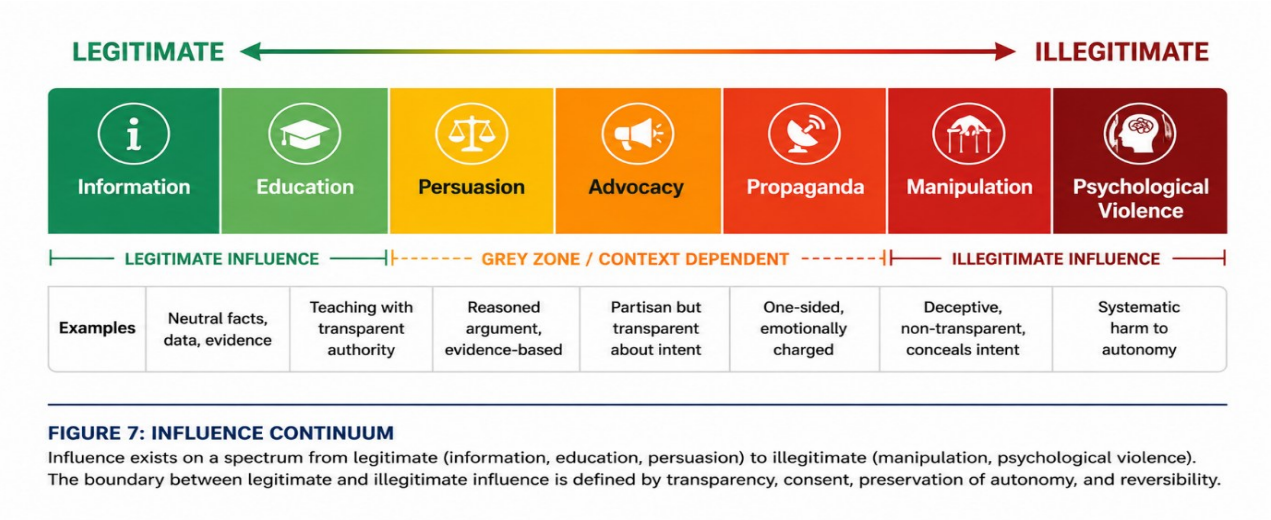


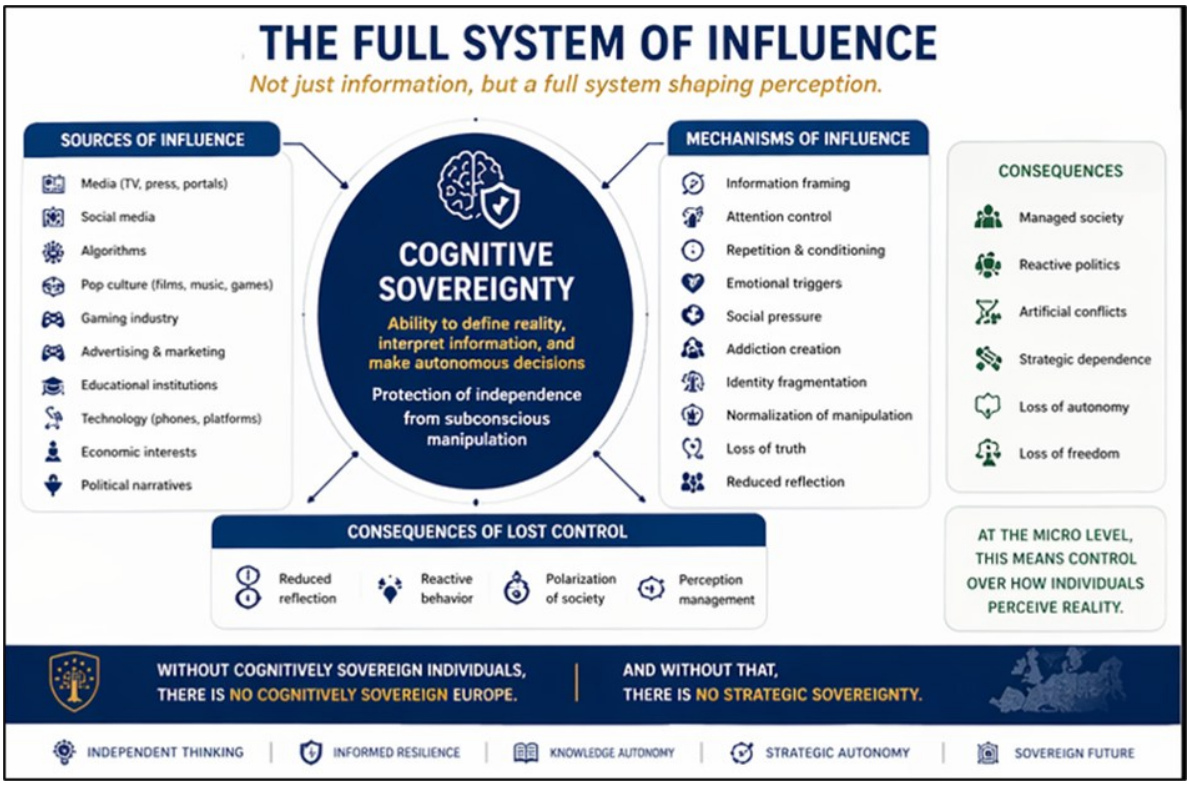

**FIGURE 7: INFLUENCE CONTINUUM**
Influence exists on a spectrum from legitimate (information, education, persuasion) to illegitimate (manipulation, psychological violence). The boundary between legitimate and illegitimate influence is defined by transparency, consent, preservation of autonomy, and reversibility.

## PART II – MECHANISMS OF COGNITIVE DEPENDENCY

### 7. The Full System of Influence

| Stage | Description |
|---|---|
| **Narrative construction** | Creation of coherent story about reality |
| **Belief formation** | Internalization of narrative as true |
| **Behavioral outcomes** | Action based on internalized beliefs |

**Figure 8: The Full System of Influence**




### 8. Conscious Mechanisms of Influence

| Mechanism | Description |
|---|---|
| **Agenda setting** | Media tells you what to think about, not what to think |
| **Framing** | Presenting an issue from a particular perspective |
| **Information selection** | Choosing which facts to include or exclude |
| **Repetition** | Repeating a message until it feels true |
| **Authority effects** | Using credible (or seeming credible) sources |
| **Social proof** | "Everyone believes this" |

## 9. Subconscious Mechanisms of Influence

| Mechanism | Description |
|---|---|
| **Fear** | Threat-based persuasion (see 9.1 below) |
| **Emotional triggers** | Anger, hope, disgust, outrage |
| **Identity formation** | Beliefs tied to who you are |
| **Tribal instincts** | Us vs them |
| **Dopamine systems** | Variable rewards, notifications, likes |
| **Behavioural conditioning** | Rewards for desired behavior |

### 9.1 Fear as the Primary Lock-in Mechanism

Fear is the most effective psychological mechanism for creating dependency. It operates through:

| Mechanism | Description |
|---|---|
| Threat amplification | Magnifying potential dangers beyond reasonable probability |
| Us-versus-them framing | Creating existential threat from an out-group |
| Loss aversion | Focusing on what will be lost rather than gained |
| Uncertainty exploitation | Providing simple answers to complex threats |

When fear is systematically deployed, individuals become dependent on the source that promises protection – whether that source is a political leader, a media outlet, a platform, or an ideology. Fear-induced dependency is particularly difficult to reverse because admitting that the threat was exaggerated requires admitting that one has been manipulated.

Connection to legal framework: Fear-based campaigns are documented in the legal paper (section 5.2 – Political and Ideological Manipulation). The DSA, AI Act and national laws do not directly address fear-based manipulation when deployed by political actors.

**Context from Standard Eurobarometer 104 (Autumn 2025):**

- 77% of EU citizens agree that Russia's invasion of Ukraine is a threat to the security of the European Union.
- 53% of EU citizens are satisfied with the EU's response to the invasion.
- Satisfaction with the EU's response to the invasion ranges from 77% in Portugal to 32% in Cyprus (Standard Eurobarometer 104, Autumn 2025).

*Source: Standard Eurobarometer 104 – Autumn 2025.*

**Observation.** Available survey data indicate substantial variation in threat perception and security attitudes across European societies. These differences cannot be explained solely by objective exposure or geographic proximity. Historical experience, political culture, media environments and collective narratives may all influence the perception of security threats and appropriate policy responses.

**Figure 9: Information → Emotion → Belief → Behavior**

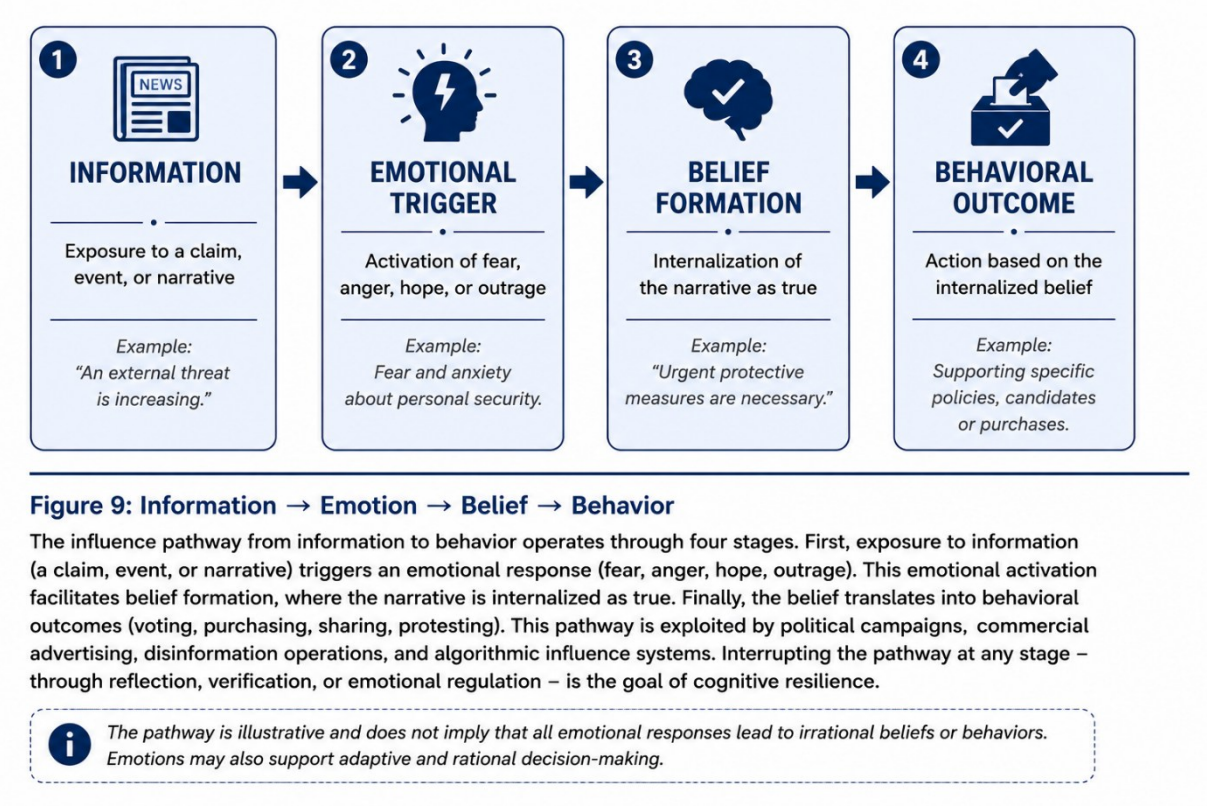



**Figure 9: Information → Emotion → Belief → Behavior**

The influence pathway from information to behavior operates through four stages. First, exposure to information (a claim, event, or narrative) triggers an emotional response (fear, anger, hope, outrage). This emotional activation facilitates belief formation, where the narrative is internalized as true. Finally, the belief translates into behavioral outcomes (voting, purchasing, sharing, protesting). This pathway is exploited by political campaigns, commercial advertising, disinformation operations, and algorithmic influence systems. Interrupting the pathway at any stage – through reflection, verification, or emotional regulation – is the goal of cognitive resilience.

*The pathway is illustrative and does not imply that all emotional responses lead to irrational beliefs or behaviors. Emotions may also support adaptive and rational decision-making.*

## 10. Cognitive Offloading and Extended Mind

### Extended Mind Thesis (Clark & Chalmers, 1998)

Objects outside the human body are part of the mind if they play an active role in cognitive processes. A notebook, a smartphone, an AI assistant can be considered part of extended cognition.

### Cognitive Offloading (Risko & Gilbert, 2016)

The use of physical action to alter the information processing requirements of a task in order to reduce cognitive demand. Examples: writing a list instead of remembering, using GPS instead of navigating, asking AI instead of thinking.

### 10.1 Sovereignty Traps and Memory Lock-in

| Concept | Author | Definition |
|---|---|---|
| **Sovereignty Trap** | Klein (2025) | Authoritative competence of AI tempts users to cede their own intellectual judgment. Users mistake access to information for genuine ability. |
| **Memory Lock-in** | Brcic (2025) | Users become cognitively dependent on AI assistants holding their deep personal memory. Switching is described as "cognitive amputation." |

**Common pattern:** Both describe a progressive transfer of cognitive function from human to system, where the system's competence creates dependency, and dependency creates reluctance to leave – a classic lock-in dynamic applied to cognition.

*Connection to legal framework:* These mechanisms are not addressed by existing law because they operate through gradual, cumulative effects rather than discrete harmful acts. They represent a key regulatory blind spot identified in the accompanying legal paper.

### 11. Ideological Exclusivism

| Feature | Description |
|---|---|
| **Ideological monopolies** | Single permitted worldview |
| **Moral superiority narratives** | "We are good, they are evil" |
| **Demonization** | Opponents portrayed as subhuman or malicious |
| **Stigmatization** | Labeling dissent as deviant or dangerous |
| **Social exclusion** | Expulsion from community for wrongthink |

Ideological exclusivism creates cognitive dependency by removing alternatives. When only one worldview is permitted, individuals have no choice but to adopt it – or face exclusion.

### 12. Cognitive Warfare

| Term | Description |
|---|---|
| **Information warfare** | Use of information to gain advantage |
| **Psychological operations** | Targeted influence on emotions and attitudes |
| **Strategic communication** | Coordinated narrative management |
| **Hybrid warfare** | Mix of military, economic, information tools |
| **Narrative warfare** | Competing to control the story |

**Key authors:** Claverie, Du Cluzel, Tögel (2023)

*Connection to legal framework:* Council of the EU Guidelines on Cognitive Warfare (4 October 2024) recognize cognitive warfare as an emerging hybrid threat. The legal paper (section 3.5) discusses these guidelines and their implications.

## PART III – PRODUCERS OF COGNITIVE DEPENDENCY

### 13. States and Geopolitical Actors

| Tool | Description |
|---|---|
| **Soft power** (Nye) | Attraction rather than coercion |
| **Public diplomacy** | Direct communication with foreign publics |
| **Strategic communication** | Coordinated narrative management |
| **National narratives** | Self-presentation as good actor |
| **Geopolitical influence** | Shaping preferences of other nations |

**Key authors:** Nye, Tögel

### 14. Media Systems

| Mechanism | Description |
|---|---|
| **Agenda setting** | Determining what is important |
| **Framing** | Presenting issues from a particular perspective |
| **Gatekeeping** | Selecting which stories to tell |
| **Narrative construction** | Weaving facts into coherent stories |

**Key authors:** Chomsky, Herman (*Manufacturing Consent*)

**Table 14.1: Trust in News Media – Selected European Countries (2025)**

| Country | Trust in News Media (%) |
|---|---|
| Finland | 67 |
| Hungary | 22 |
| Greece | 22 |

*Source: Reuters Institute Digital News Report 2025.*

**Context from Eurobarometer 104 (Autumn 2025)**

- 77% of EU citizens consider Russia's invasion of Ukraine a threat to the security of the European Union.
- 53% of EU citizens are satisfied with the EU's response to the invasion of Ukraine.
- Satisfaction with the EU's response ranges from 77% in Portugal to 32% in Cyprus.

*Source: Standard Eurobarometer 104 – Autumn 2025.*

**Observation.** Trust in news media varies substantially across European countries. At the same time, Eurobarometer surveys indicate broad concern regarding European security and significant variation in public attitudes toward the EU's response to geopolitical challenges.

Available evidence does not support a simple relationship between media trust and threat perception. Multiple factors, including political culture, historical experience, social media environments, peer networks and geopolitical proximity, may influence public attitudes.

**Methodological Note.** Country-level data on fear of Russia as a military threat are not available in published Eurobarometer summaries used in this study. Consequently, no direct comparison between media trust and threat perception is attempted. Further empirical research would be required to examine such relationships.

### 15. Digital Platforms

| Mechanism | Description |
|---|---|
| **Algorithms** | Automated content selection |
| **Recommendation systems** | Personalized content feeds |
| **Attention engineering** | Designing for maximum time-on-platform |
| **Engagement optimization** | Prioritizing content that generates reaction |

### 16. AI Systems as Emerging Producers of Cognitive Dependency

This is a distinct category, not merely a subset of digital platforms. AI systems produce cognitive dependency through unique mechanisms that differ from traditional media or platforms.

| Mechanism | Description | Example |
|---|---|---|
| **Conversational agents** | AI that simulates human conversation | ChatGPT, Claude, Copilot |
| **Recommendation agents** | AI that suggests actions, purchases, content | TikTok algorithm, Amazon recommendations |
| **Memory delegation** | AI that stores and retrieves personal information | Memory features in AI assistants |
| **Decision delegation** | AI that makes decisions on behalf of users | Automated scheduling, prioritization |
| **Synthetic authority** | AI presented as neutral, objective, or omniscient | "According to AI..." as authoritative |

**Why AI is different from traditional media:**

| Dimension | Traditional Media | AI Systems |
|---|---|---|
| **Interaction** | One-to-many broadcast | Personalized conversation |
| **Authority** | Explicit (journalist, expert) | Synthetic (appears neutral) |
| **Memory** | No memory of user | Persistent memory across sessions |
| **Adaptation** | Static content | Dynamic, personalized response |
| **Lock-in** | Low | High (memory lock-in) |

**Key risks specific to AI:**

- **Epistemic dependency on AI** – Treating AI output as truth without verification
- **Decision atrophy** – Reduced capacity for independent judgment through over-reliance
- **Memory lock-in** – Inability to switch AI assistants without losing personal memory (Brcic, 2025)
- **Sovereignty trap** – Mistaking access to AI for genuine understanding (Klein, 2025)

*Connection to legal framework:* AI Act Article 5 prohibits certain manipulative AI practices (subliminal techniques, exploitation of vulnerabilities). However, the gradual, cumulative effects of AI dependency are not addressed by existing law.

### 17. Commercial Systems of Influence

| Mechanism | Description |
|---|---|
| **Advertising** | Persuasion for commercial gain |
| **Consumer psychology** | Understanding and exploiting decision-making |
| **Behavioral economics** | Nudging, choice architecture |
| **Surveillance capitalism** (Zuboff) | Extraction of behavioural data |
| **Influencer ecosystems** | Trust transfer from person to product |
| **Attention economy** | Monetizing human attention |
| **Commercial manipulation** | Exploiting cognitive vulnerabilities |

**Key authors:** Zuboff, Kahneman, Sunstein, Thaler

**Figure 10: Commercial Influence System**

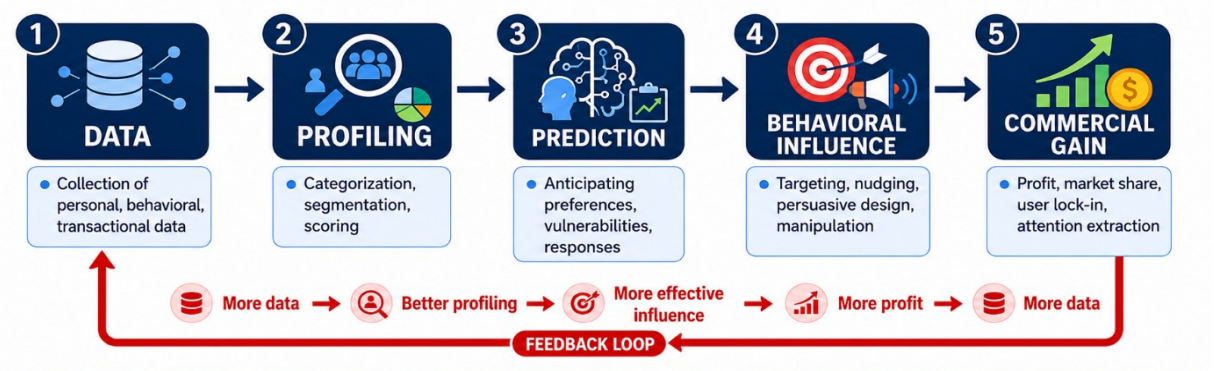



**Figure 10: Commercial Influence System**

The commercial influence system operates as a closed loop. Data collection enables profiling, which enables prediction of behavior and vulnerabilities. Prediction enables targeted behavioral influence (advertising, nudging, persuasive design, manipulation). Successful influence generates commercial gain (profit, market share, lock-in), which in turn funds further data collection. The system is self-reinforcing and operates largely outside consumer awareness.

## 18. Academia, Research and Think Tanks

| Function | Description |
|---|---|
| **Knowledge production** | Creating and validating knowledge |
| **Narrative legitimacy** | Granting scientific authority to narratives |
| **Expert authority** | Trust in credentialed voices |
| **Epistemological influence** | Shaping what counts as knowledge |

## 19. Civil Society and Advocacy Networks

| Actor | Description |
|---|---|
| **NGOs** | Non-governmental organizations with missions |
| **Activist organizations** | Campaigning for change |
| **Interest groups** | Representing specific constituencies |
| **Social movements** | Collective action for change |

## 20. Actors of Cognitive Influence

**Figure 11: Actors of Cognitive Influence Map**

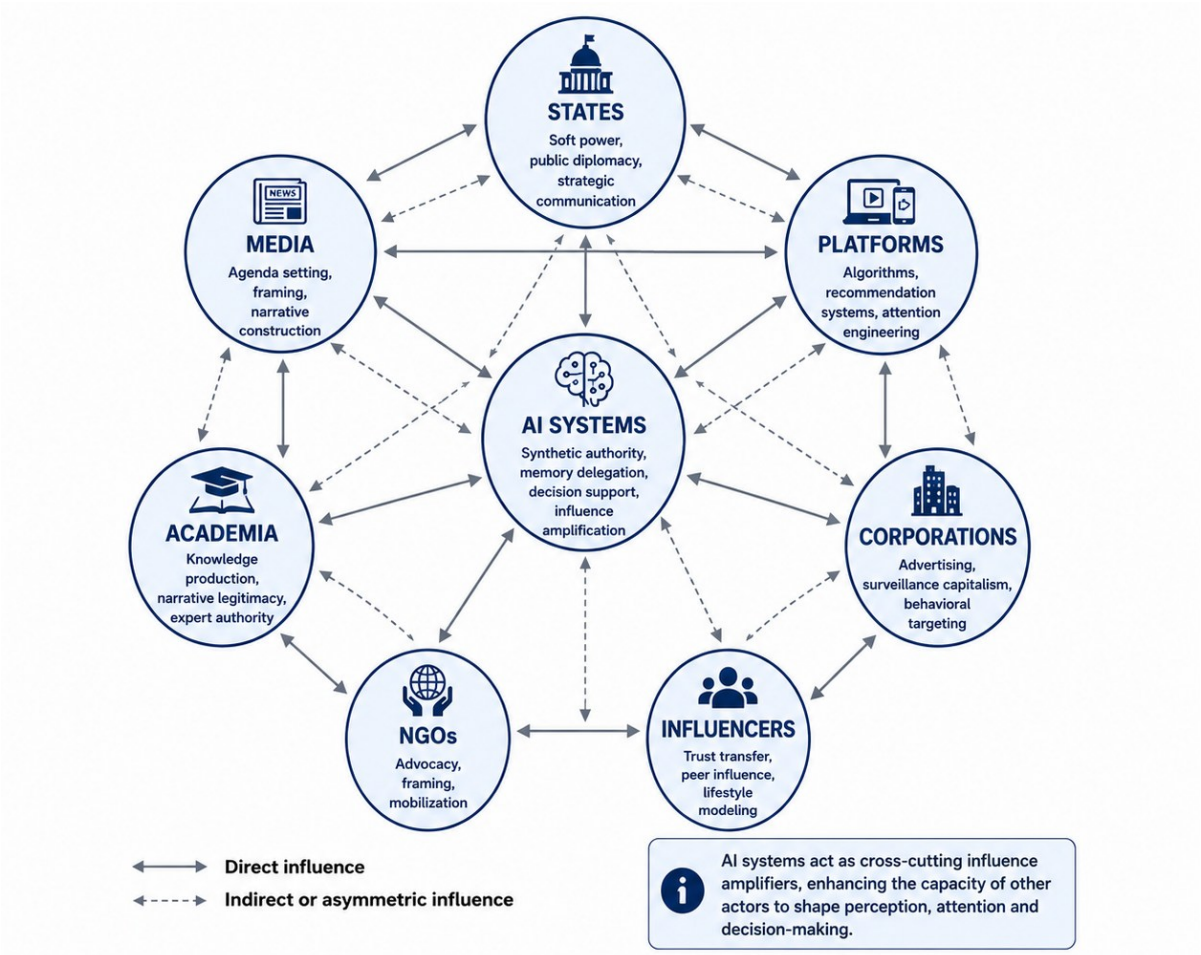



**Figure 11: Actors of Cognitive Influence Map**

Cognitive dependency emerges from a distributed network of interacting actors, including states, media systems, digital platforms, corporations, academia, NGOs and influencers. AI systems increasingly function as a cross-cutting influence amplifier, strengthening the capacity of other actors to shape perception, attention and decision-making. Influence flows are multidirectional and often asymmetric; no single actor controls the system. Dependency emerges from the cumulative interaction of multiple actors operating through different mechanisms.

## 21. Individual Consequences

| Consequence | Description |
|---|---|
| Reduced autonomy | Decisions increasingly shaped by external systems rather than independent judgment |
| Decision paralysis | Inability to decide without external guidance or validation |
| Increased conformity | Preference for group acceptance over independent reasoning |
| Dependence on external validation | Reliance on approval, recognition and social reinforcement |
| Anxiety and uncertainty | Increased psychological vulnerability resulting from conflicting information and constant stimulation |

| | |
|---|---|
| Loss of intellectual confidence | Reduced trust in one's own capacity to evaluate claims and evidence |
| Identity fragility | Self-concept becomes dependent on external narratives, groups or authorities |

Individual consequences are often the first visible manifestations of cognitive dependency. As external systems increasingly shape perception, interpretation and decision-making, individuals may gradually lose confidence in their own judgment and become more reliant on external sources of orientation and validation.

The process is typically cumulative rather than sudden. Repeated exposure to highly curated information environments, algorithmic recommendations, persuasive narratives and authority-based signals can reduce independent reflection and increase susceptibility to influence.

**Illustrative Observation**

Cognitive dependency may contribute to feelings of helplessness, reduced perceived agency and increased reliance on external authorities. Individuals who believe that important decisions are determined primarily by external actors may become more vulnerable to fear, passivity and conformity. The precise relationship between perceived helplessness, threat perception and cognitive dependency requires further empirical research.

### 22. Societal Consequences

| Consequence | Description |
|---|---|
| **Social fragmentation** | Breakdown of shared social fabric |
| **Polarization** | Opposing camps unable to communicate |
| **Tribalism** | Loyalty to group over truth |
| **Erosion of trust** | Distrust of institutions, media, science, each other |
| **Reduced social cohesion** | Inability to act collectively |

## PART IV – CONSEQUENCES OF COGNITIVE DEPENDENCY

### 23. Democratic Consequences

| Consequence | Description |
|---|---|
| Decline of informed citizenship | Citizens cannot make informed choices |
| Manipulation of public opinion | Elites shape what citizens believe |
| Weakening of democratic deliberation | No shared factual basis for debate |
| Reduced accountability | Citizens cannot hold power accountable without reliable information |

| Consequence | Description |
|---|---|
| Increased susceptibility to propaganda | Vulnerability to manipulation |
| Weakened deliberation | Arguments replaced by tribal loyalty |
| Voter manipulation | Elections decided by manipulation rather than preference |
| Institutional distrust | Distrust of courts, media and electoral authorities |

**Selected Eurobarometer 104 Indicators (Autumn 2025, EU averages)**

| Indicator | EU Average (%) |
|---|---|
| Concern about EU defence and security | 78 |
| Support for a common EU defence and security policy | 81 |
| Russia's invasion perceived as a threat to EU security | 77 |
| Support for financing military equipment for Ukraine | 59 |
| Support for a stronger EU role in security and protection | 67 |

*Source: Standard Eurobarometer 104 – Autumn 2025.*

**Observation.** Available survey data suggest a relationship between perceived security threats and support for defence-related policies. However, threat perception is only one of several factors shaping public attitudes. Historical experience, political culture, media environments and trust in institutions may also play significant roles.

**24. Strategic Consequences**

| Consequence | Description |
|---|---|
| Vulnerability to foreign influence | Foreign actors exploit cognitive dependency |
| Strategic dependency | Reliance on foreign systems for information, technology and narratives |
| Loss of national autonomy | Reduced capacity to pursue independent policy |
| Reduced societal resilience | Difficulty responding collectively to crises |

**Illustrative Observation**

Threat perception is not purely objective but is influenced by historical experience, alliance structures, media environments and political narratives. Different societies may interpret identical geopolitical events in substantially different ways. Understanding these differences is essential for assessing strategic resilience and cognitive sovereignty.

## 25. Economic Consequences

| Consequence | Description |
|---|---|
| **Consumer manipulation** | Purchasing decisions shaped by exploitation, not preference |
| **Attention extraction** | Time and focus extracted as raw material |
| **Behavioral exploitation** | Vulnerabilities monetized |
| **Reduced innovation capacity** | Dependent societies innovate less |

**Figure 12: Consequences of Cognitive Dependency Map**

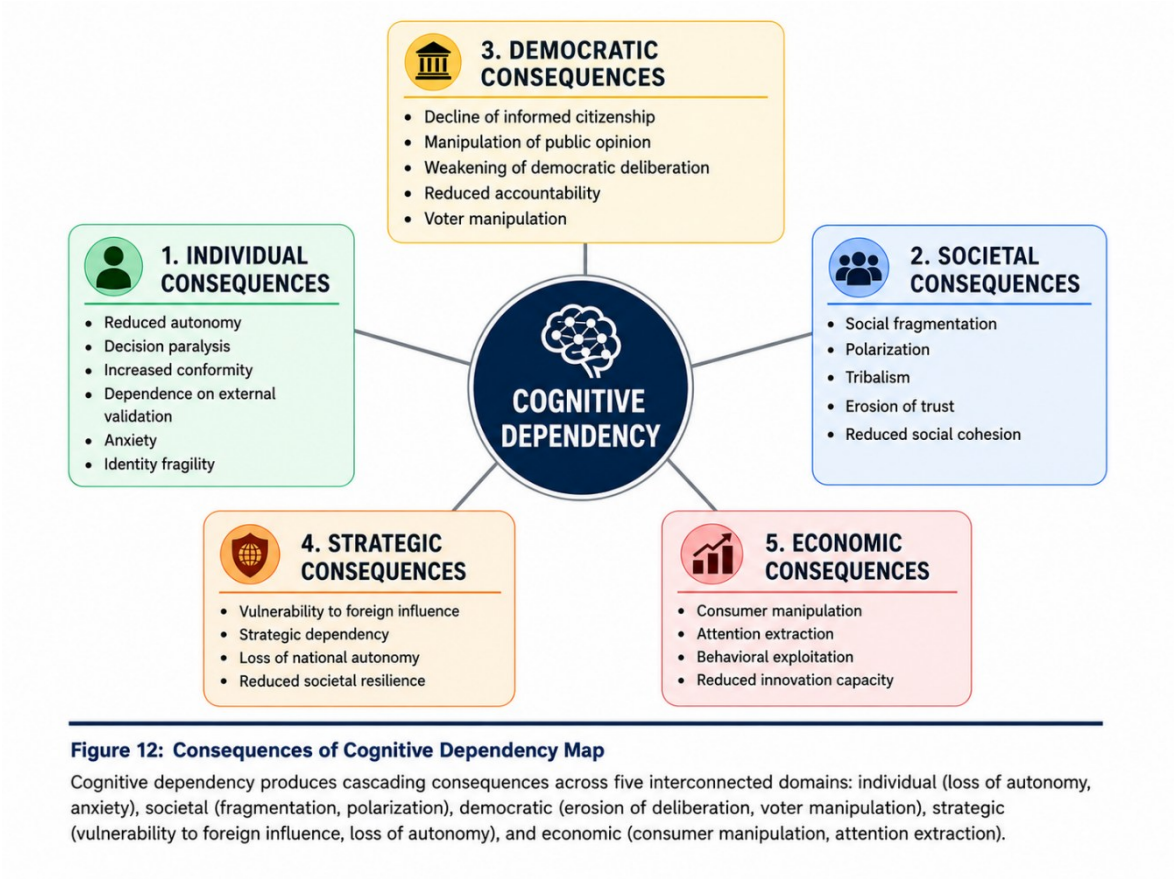



**Figure 12: Consequences of Cognitive Dependency Map**

Cognitive dependency produces cascading consequences across five interconnected domains: individual (loss of autonomy, anxiety), societal (fragmentation, polarization), democratic (erosion of deliberation, voter manipulation), strategic (vulnerability to foreign influence, loss of autonomy), and economic (consumer manipulation, attention extraction).

# PART V – ETHICS OF INFLUENCE

## 26. When Is Influence Legitimate?

| Principle | Description |
|---|---|
| **Transparency** | The target knows they are being influenced |
| **Informed consent** | The target agrees to the influence |
| **Preservation of autonomy** | The target retains capacity for independent judgment |
| **Proportionality** | Influence is proportional to the issue |
| **Reversibility** | The target can change their mind |

### 27. When Does Persuasion Become Manipulation?

| | Persuasion | Manipulation |
|---|---|---|
| **Transparency** | Open about intent | Hidden intent |
| **Information** | Accurate, complete | Selective, distorted |
| **Autonomy** | Preserved | Reduced |
| **Consent** | Informed | Exploited |
| **Target** | Reason | Emotions, vulnerabilities |

### 28. Can Manipulation Ever Be Justified?

| Context | Justification? | Condition |
|---|---|---|
| **Parent-child** | Possibly | Child lacks capacity |
| **Emergency** | Possibly | Imminent harm |
| **Therapy** | Possibly | Patient consent |
| **Public health** | Debated | Nudging vs coercion |
| **Politics** | No | Democracy requires autonomy |
| **Commerce** | No | Consumer sovereignty |

### 29. Is Paternalistic Nudging Ethical?

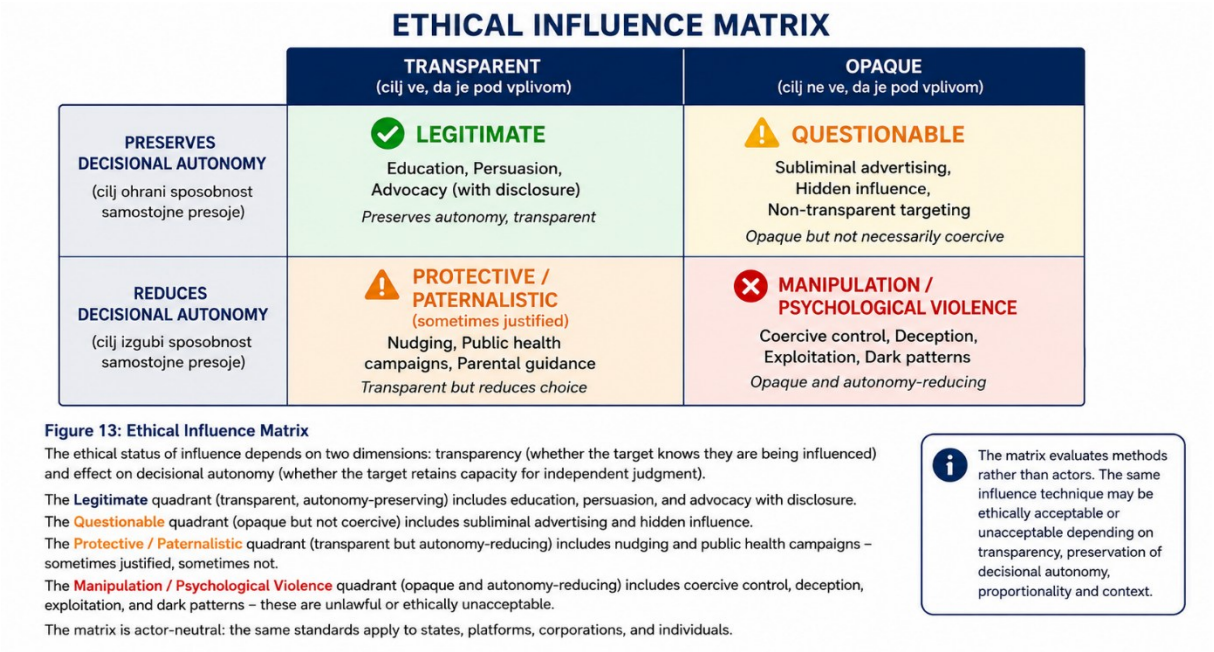
| Position | Argument |
|---|---|
| **For (Sunstein, Thaler)** | Preserves choice; helps overcome biases |
| **Against** | Undermines autonomy; slippery slope to manipulation |

**Key question:** Who decides what is good for the individual?

### 30. The Ethical Influence Matrix

| | Transparent | Opaque |
|---|---|---|
| **Preserves autonomy** | ✅ Legitimate education, persuasion | ⚠️ Questionable (e.g., subliminal advertising) |
| **Reduces autonomy** | ⚠️ Paternalistic (sometimes justified) | ❌ Manipulation, psychological violence |

**Figure 13: Ethical Influence Matrix**




## PART VI – FRAMEWORK FOR REGULATORY RESPONSES

### Purpose

To provide a structured framework for future regulatory, educational and institutional responses without prescribing specific legislation. This framework serves as the **bridge** between conceptual analysis (this document) and legal regulation (accompanying legal paper).

### 31. Individual Level

| Response | Description |
|---|---|
| **Critical thinking** | Evaluating claims, identifying biases |
| **Information hygiene** | See Part VII |
| **Emotional self-regulation** | Managing fear, anger, hope |
| **Cognitive resilience** | See Part VIII |
| **Independent judgment** | Practicing autonomous decision-making |

### 32. Family Level

| Response | Description |
|---|---|
| **Early value formation** | Teaching intellectual honesty, curiosity |
| **Emotional security** | Safe environment for questioning |
| **Resilience development** | Coping with uncertainty |
| **Independent thinking** | Encouraging questions, not just answers |

### 33. Educational Level

| Response | Description |
|---|---|
| **Logic** | Formal and informal reasoning |
| **Argumentation** | Constructing and evaluating arguments |
| **Media literacy** | Analyzing sources, detecting bias |
| **Digital literacy** | Understanding algorithms, data |
| **Critical reasoning** | Applying logic to real-world claims |
| **Epistemology** | What counts as knowledge? |

### 34. Media Level

| Response | Description |
|---|---|
| **Transparency** | Disclosing ownership, funding, conflicts |
| **Editorial accountability** | Corrections, ombudspersons |
| **Source verification** | Fact-checking standards |
| **Pluralism** | Multiple perspectives within outlet |

**Illustrative example** (Source: European Commission – EU spending and revenue 2000–2024, 2024 data):

- EU spending allocated to 22 selected member states in 2024: approximately €44.84 billion
- Ukraine support reference: approximately €45 billion/year (EU's €90 billion package for 2026–2027)

*This is a scale comparison, not a direct budget-equivalence claim. It illustrates the magnitude of EU financial transfers and the importance of transparency in public communication.*

### 35. Platform Level

| Response | Description |
|---|---|
| **Algorithm transparency** | Disclosing how recommendations work |
| **Explainability** | Why was this shown to me? |
| **User control** | Ability to adjust, disable algorithms |
| **Recommendation systems** | Reducing amplification of harmful content |

*Connection to legal framework:* DSA Articles 34–35 already require VLOPs to assess and mitigate systemic risks, including those related to mental well-being and democratic discourse.

### 36. AI Systems Level

| Response | Description |
|---|---|
| **Memory portability** | Right to transfer personal memory between AI systems (Brcic, 2025) |
| **Synthetic authority disclosure** | Clear labeling of AI-generated content as non-authoritative |
| **Decision delegation limits** | Restrictions on AI making binding decisions without human oversight |
| **Epistemic dependency warnings** | Notifications when user outsources judgment repeatedly |
| **Lock-in prevention** | Prohibition of technical barriers to switching AI assistants |

*Connection to legal framework:* AI Act Article 5 prohibits subliminal and exploitative techniques. However, memory lock-in and synthetic authority are not yet addressed.

### 37. Commercial Level

| Response | Description |
|---|---|
| **Behavioral targeting** | Transparency, opt-out rights |
| **Dark patterns** | Prohibition of deceptive design |
| **Persuasive design** | Ethical limits on attention engineering |
| **Consumer autonomy** | Right to make uninfluenced choices |

*Connection to legal framework:* AI Act Article 5 prohibits subliminal and exploitative techniques. Consumer protection law prohibits dark patterns.

### 38. Political Level

| Response | Description |
|---|---|
| **Political advertising transparency** | Who paid? Who was targeted? |
| **Campaign transparency** | Disclosure of funding, methods |
| **Funding transparency** | Follow the money |
| **Foreign influence disclosure** | Labeling foreign-sponsored content |

*Connection to legal framework:* DSA requires transparency for political advertising on VLOPs. The proposed European Democracy Shield would expand these requirements.

## 39. State Level

| Response | Description |
|---|---|
| **Cognitive security** | Protecting citizens from cognitive manipulation |
| **Democratic resilience** | Strengthening institutions against influence |
| **Strategic communication standards** | Transparency for public communication |
| **Institutional transparency** | Public access to decision-making |

## 40. International Level

| Response | Description |
|---|---|
| **Common standards** | Global norms for cognitive security |
| **Human rights protection** | Cognitive integrity as human right |
| **Digital governance** | Cross-border platform regulation |
| **International cooperation** | Mutual legal assistance, extradition |

**Figure 14: Multi-Level Protection Framework**

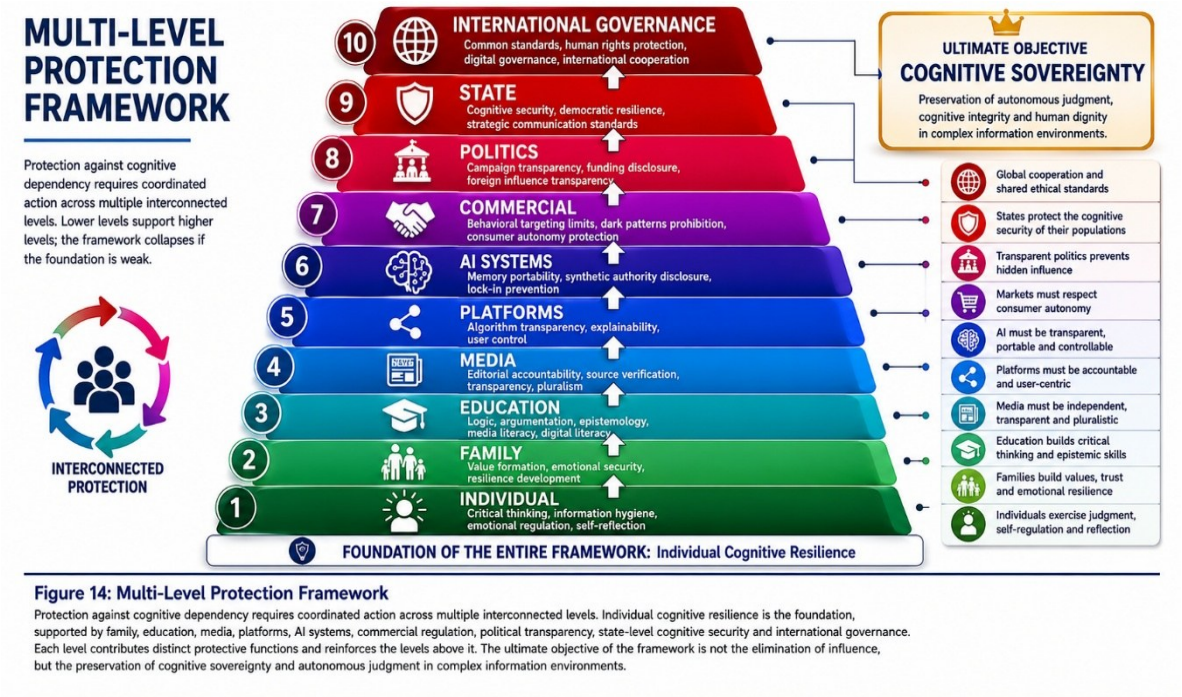



**Figure 14: Multi-Level Protection Framework**

Protection against cognitive dependency requires coordinated action across multiple interconnected levels. Individual cognitive resilience is the foundation, supported by family, education, media, platforms, AI systems, commercial regulation, political transparency, state-level cognitive security and international governance. Each level contributes distinct protective functions and reinforces the levels above it. The ultimate objective of the framework is not the elimination of influence, but the preservation of cognitive sovereignty and autonomous judgment in complex information environments.

## PART VII – INFORMATION HYGIENE

### 41. The Analogy

| Domain | Practice | Purpose |
|---|---|---|
| **Personal hygiene** | Washing hands, brushing teeth | Prevent individual disease |
| **Public health** | Sanitation, vaccination | Prevent community disease |
| **Information hygiene** | Source verification, diversity, fact-checking | Prevent information disease |

Just as personal hygiene prevents physical illness and public health prevents epidemics, information hygiene prevents cognitive contamination and societal information pollution.

### 42. Individual Information Hygiene Practices

| Practice | Description |
|---|---|
| **Source verification** | Check the original source, not just headlines |
| **Lateral reading** | Leave the site to verify claims elsewhere |
| **Diversity consumption** | Seek out opposing perspectives |
| **Delayed sharing** | Wait 24 hours before sharing anything |
| **Fact-checking** | Use multiple fact-checking services |
| **Notification management** | Turn off non-essential notifications |
| **Scheduled consumption** | Designated times, not constant feed |

### 43. Collective Information Hygiene

| Practice | Description |
|---|---|
| **Media literacy education** | Teaching skills in schools |
| **Public fact-checking** | Independent verification services |
| **Transparency requirements** | Disclosing sources, methods |
| **Algorithm auditing** | Independent review of recommendation systems |
| **Correction norms** | Expectation that errors will be corrected |

### 44. Information Hygiene vs Information Pollution

| Pollution | Hygiene Response |
|---|---|
| Misinformation | Fact-checking, verification |
| Disinformation | Source tracking, labeling |
| Information overload | Scheduled consumption, filtering |
| Fragmentation | Diversity seeking, bridging |

**Figure 15: Information Hygiene Model**

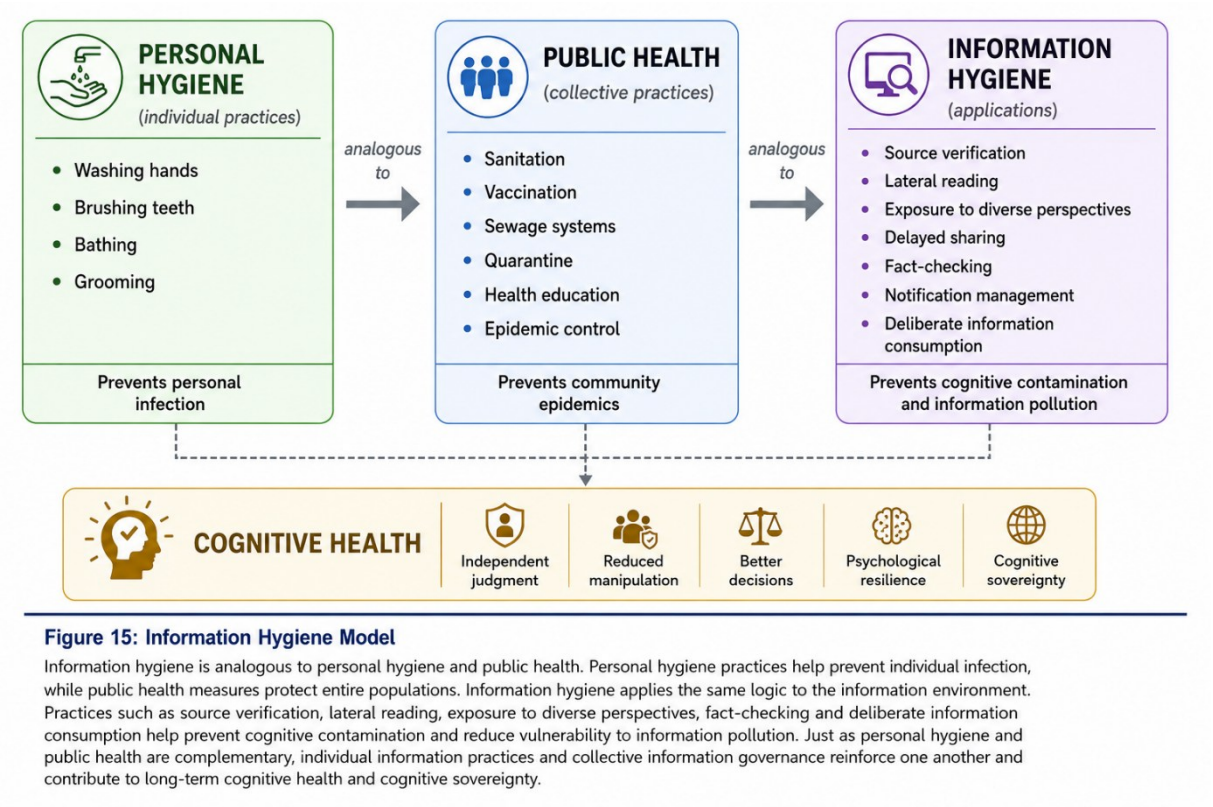



**Figure 15: Information Hygiene Model**

Information hygiene is analogous to personal hygiene and public health. Personal hygiene practices help prevent individual infection, while public health measures protect entire populations. Information hygiene applies the same logic to the information environment. Practices such as source verification, lateral reading, exposure to diverse perspectives, fact-checking and deliberate information consumption help prevent cognitive contamination and reduce vulnerability to information pollution. Just as personal hygiene and public health are complementary, individual information practices and collective information governance reinforce one another and contribute to long-term cognitive health and cognitive sovereignty.

## PART VIII – COGNITIVE RESILIENCE

### 45. What Is Cognitive Resilience?

Cognitive resilience is the capacity to maintain independent judgment, emotional regulation and intellectual flexibility despite exposure to manipulation, uncertainty and competing narratives.

Cognitive sovereignty begins with cognitive resilience. Without resilience, there is no capacity for sovereignty.

### 46. Components of Cognitive Resilience

| Component | Description |
|---|---|
| **Resistance to manipulation** | Recognizing and resisting influence attempts |
| **Emotional resilience** | Regulating fear, anger, hope |
| **Tolerance of uncertainty** | Comfort with not knowing |
| **Tolerance of ambiguity** | Holding multiple possibilities without premature closure |
| **Delayed judgment** | Resisting pressure for immediate conclusion |
| **Independent verification** | Checking claims before believing |
| **Intellectual humility** | Willingness to be wrong |

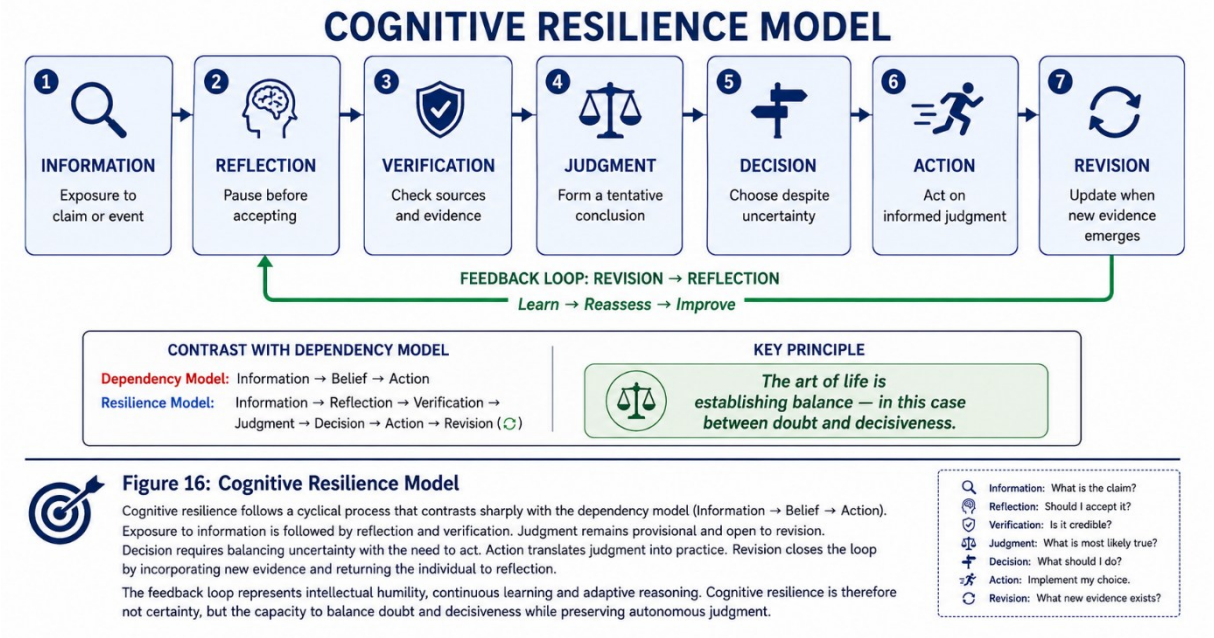
## 47. The Cognitive Resilience Model

| Stage | Description |
|---|---|
| **Information** | Exposure to claim or event |
| **Reflection** | Pause before accepting |
| **Verification** | Check sources, evidence |
| **Judgment** | Tentative conclusion |
| **Decision** | Action based on judgment |
| **Revision** | Willingness to update when new evidence arrives |

This model contrasts with the dependency model:

| Dependency Model | Resilience Model |
|---|---|
| Information → Belief → Action | Information → Reflection → Verification → Judgment → Decision → Revision |

**Figure 16: Cognitive Resilience Model**




# PART IX – FROM RESILIENCE TO SOVEREIGNTY

## 48. The Hierarchy of Cognitive Protection

| Level | Concept | Description |
|---|---|---|
| **1** | **Information Integrity** | Information is accurate, complete, verifiable |
| **2** | **Information Hygiene** | Practices to maintain clean information environment |
| **3** | **Cognitive Resilience** | Capacity to resist manipulation, tolerate uncertainty |

| Level | Concept | Description |
|---|---|---|
| 4 | **Cognitive Integrity** | Right and capacity for autonomous judgment |
| 5 | **Cognitive Sovereignty** | Continuous effort to preserve independent judgment |

Each level builds on the previous. Without information integrity, information hygiene is impossible. Without hygiene, resilience is undermined. Without resilience, integrity is vulnerable. Without integrity, sovereignty is meaningless.

**Figure 17: Cognitive Sovereignty Pyramid**


## 49. Cognitive Sovereignty (Definition)

Cognitive sovereignty is the continuous individual and collective effort to preserve autonomous judgment while navigating competing influences, narratives, interests and uncertainties.

**What cognitive sovereignty is NOT:**

- Freedom from all influence (impossible)
- Isolation from society (counterproductive)
- Certainty about everything (unrealistic)

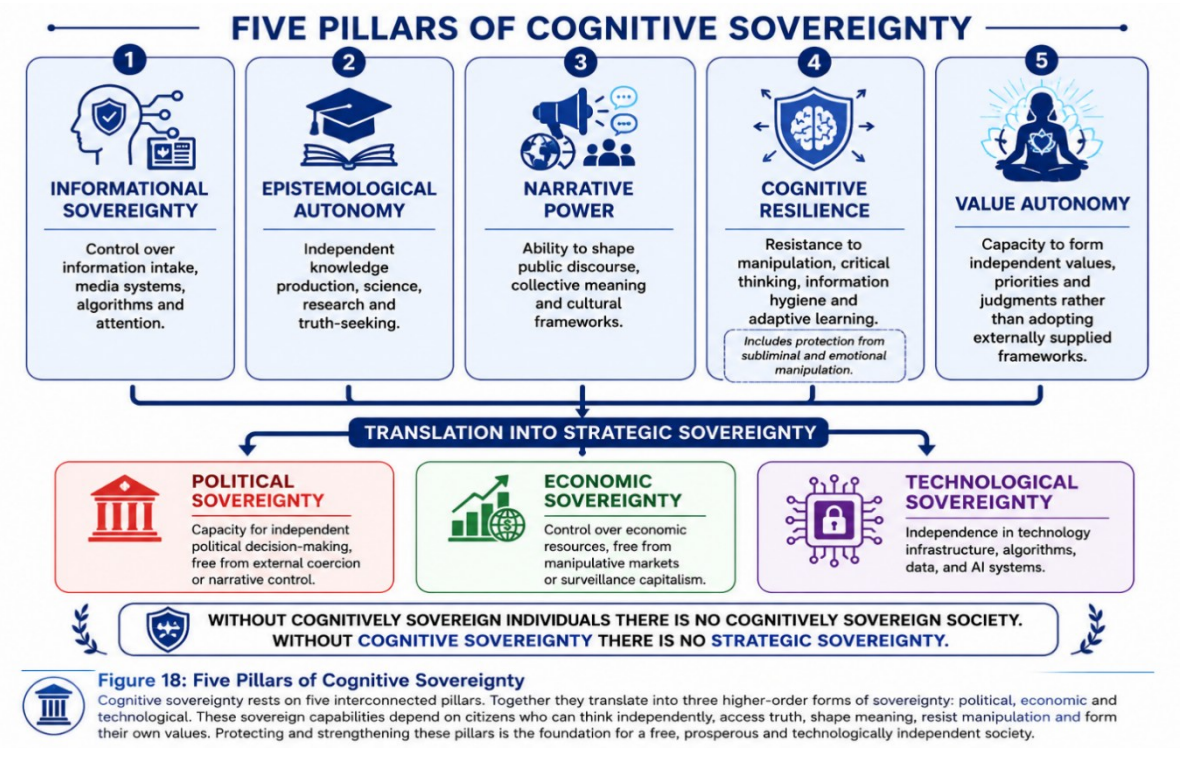
**What cognitive sovereignty IS:**

- The capacity to evaluate competing claims
- The ability to change one's mind when evidence changes
- The willingness to tolerate uncertainty
- The practice of delayed judgment
- The maintenance of intellectual humility

### 50. The Five Pillars of Cognitive Sovereignty

| Pillar | Description |
|---|---|
| **Informational Sovereignty** | Control over information intake, media systems, algorithms |
| **Epistemological Autonomy** | Independent knowledge production, science, research |
| **Narrative Power** | Ability to shape public discourse and cultural frameworks |
| **Cognitive Resilience** | Resistance to manipulation, critical thinking, information hygiene |
| **Value Autonomy** | Protection from subliminal and emotional manipulation |

**Figure 18: Five Pillars of Cognitive Sovereignty**



## 51. Cognitive Sovereignty as Equilibrium

- The art of life lies in maintaining equilibrium between doubt and determination.
- Too much doubt → paralysis, inability to act
- Too much determination → dogmatism, inability to learn
- Cognitive sovereignty is the expression of that equilibrium at individual and societal levels.

**Figure 19: Cognitive Sovereignty Ecosystem**

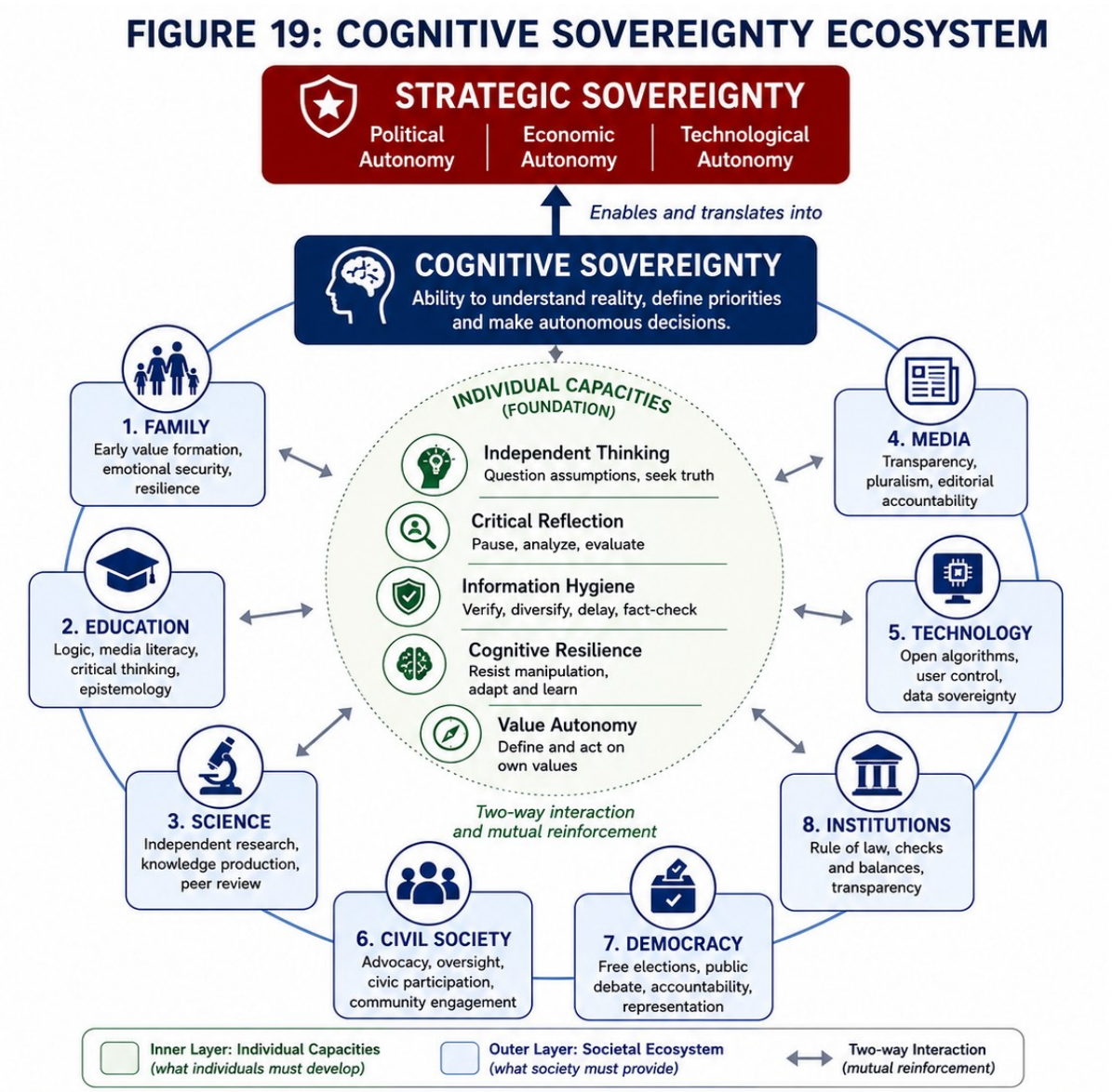



**Figure 19: Cognitive Sovereignty Ecosystem**

Cognitive sovereignty does not emerge in isolation. It arises from the interaction between individual capacities and societal institutions. Independent thinking, critical reflection, information hygiene, cognitive resilience and value autonomy form the individual foundation of cognitive sovereignty.

These capacities are supported and reinforced by a broader ecosystem consisting of family, education, science, media, technology, civil society, democracy and public institutions. Each domain contributes essential resources, norms and safeguards that enable individuals to think freely and act responsibly.

Together they enable cognitive sovereignty — the capacity for autonomous judgment. *Cognitive sovereignty in turn provides the* foundation for strategic sovereignty, including political, economic and technological autonomy. Without a healthy ecosystem, cognitive sovereignty cannot flourish; without cognitive sovereignty, strategic sovereignty remains illusory.

## PART X – EUROPEAN STRATEGY FOR COGNITIVE SOVEREIGNTY

### 52. Why Europe?

| Factor | Europe's Vulnerability | Europe's Strength |
|---|---|---|
| **Strategic sovereignty** | Dependent on foreign platforms, AI | Strong regulatory capacity (DSA, AI Act) |
| **Democratic resilience** | Vulnerable to disinformation | Strong democratic institutions |
| **Cultural diversity** | Fragmentation risk | Pluralism as strength |
| **Technological dependence** | Few European platforms | Developing European alternatives |
| **Information dependence** | Reliance on US platforms | Regulatory leverage (DSA) |

### 53. Strategic Sovereignty

Cognitive sovereignty is a prerequisite for strategic sovereignty. A nation whose citizens are cognitively dependent cannot exercise independent foreign policy, resist foreign pressure, or maintain democratic institutions.

### 54. Democratic Sustainability

Democracy depends on citizens capable of independent judgment. When cognitive dependency becomes widespread, democracy is hollowed out from within. Elections continue, but citizens cannot make informed choices. Accountability disappears. Trust erodes.

Protecting cognitive integrity is therefore not merely an individual concern. It is a precondition for democratic sustainability.

### 55. European Strategy Components

| Component | Description |
|---|---|
| **Regulatory** | DSA, AI Act, GDPR as foundation; further development needed |
| **Educational** | Media literacy, critical thinking in all curricula |
| **Technological** | European platforms, open algorithms, transparency |
| **Cultural** | Supporting diverse European voices |
| **Resilience** | Civil society training, public awareness |
| **International** | Setting global standards for cognitive security |

### Case Study: Spain

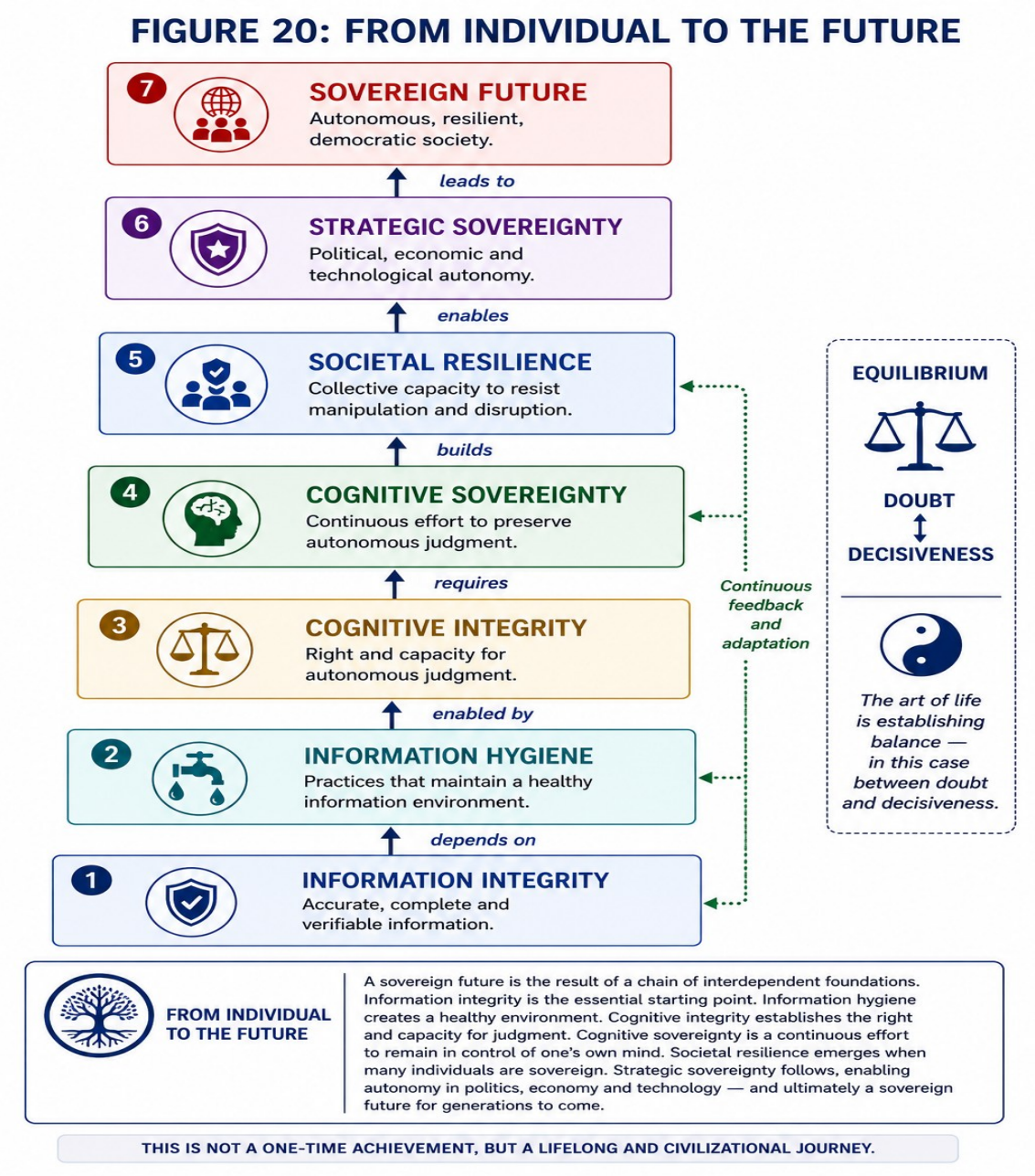
Spain exhibits lower fear and lower militarisation pressure despite low or moderate objective exposure to Russia. This suggests:

- Fear remains moderate despite very low direct exposure
- Public not trapped in the emotion–narrative inflation cycle
- Evidence of stronger psychological distance and stability
- Commitment to peace over escalation, democracy and international law

*Source: Eurobarometer 104 (Fear of War/Threat Perception, 2025); Cluster17 / Le Grand Continent (Exposure Index).*

*Illustrative example requiring empirical validation.* Spain demonstrates that cognitive sovereignty is possible – not through isolation, but through resilience, democratic culture and strategic maturity.

**Figure 20: From Individual to the Future**



## PART XI – THEORETICAL FOUNDATIONS

### 56. Propaganda, Public Opinion and Manufactured Consent

**Hannah Arendt (1906–1975)**

*Key concept:* Totalitarianism, propaganda and the destruction of factual reality.

Arendt argued that totalitarian regimes do not merely suppress dissent but actively destroy the capacity for independent judgment by blurring the distinction between fact and fiction, truth and falsehood.

*Connection:* Arendt's work illuminates how systematic information manipulation can erode the conditions necessary for autonomous judgment – a process closely related to cognitive dependency.

**Noam Chomsky (b. 1928) and Edward Herman (1925–2017)**

*Key concept:* Manufacturing Consent (1988).

Chomsky and Herman proposed a "propaganda model" of media in which structural filters (ownership, advertising, sourcing, flak, anti-communist ideology) systematically shape news content.

*Connection:* The propaganda model illustrates how systemic, institutional factors can shape public perception – an early formulation of systemic psychological influence.

### 57. Psychological Mechanisms of Influence

**Daniel Kahneman (b. 1934)**

*Key concept:* System 1 and System 2 thinking (Thinking, Fast and Slow, 2011).

Kahneman demonstrated that human cognition operates through two systems: System 1 (fast, intuitive, automatic) and System 2 (slow, deliberative, analytical). System 1 is highly susceptible to cognitive biases and framing effects.

*Connection:* Kahneman's work explains why manipulation works. Influence systems often target System 1 processing, bypassing deliberative reasoning.

**Robert Cialdini (b. 1945)**

*Key concept:* Principles of persuasion (authority, social proof, reciprocity, scarcity, liking, consistency).

*Connection:* These mechanisms are systematically exploited by commercial and political actors across all jurisdictions.

**Mattias Desmet (b. 1970)**

*Key concept:* Mass formation.

Desmet has analyzed how collective psychological processes can lead to shared beliefs and behaviors without rational foundation.

*Connection:* Desmet's analysis is relevant to understanding societal-level cognitive dependency.

**58. Digital Influence and Behavioral Engineering**

**Shoshana Zuboff (b. 1951)**

*Key concept:* Surveillance capitalism (The Age of Surveillance Capitalism, 2019).

*Connection:* Surveillance capitalism describes the commercial production of behavioral dependency – a structural driver of cognitive dependency.

**Jaron Lanier (b. 1960)**

*Key concept:* Behavior modification business models.

*Connection:* Lanier's critique identifies the commercial incentives that drive algorithmic influence systems.

**Cass Sunstein (b. 1954) and Richard Thaler (b. 1945)**

*Key concept:* Nudging and choice architecture (Nudge, 2008).

*Connection:* Sunstein's work illuminates the boundary between legitimate guidance and manipulative interference with autonomy.

**59. Power, Knowledge and Social Control**

**Michel Foucault (1926–1984)**

*Key concept:* Disciplinary power and normalization.

*Connection:* Foucault's analysis provides a framework for understanding institutional and societal influence systems that operate without explicit violence.

**60. Contemporary Discussions of Cognitive Sovereignty**

**Mario Brcic (2025)**

*Key concept:* Cognitive sovereignty in the age of AI.

Brcic defines cognitive sovereignty as "the ability of individuals, groups, and nations to maintain autonomous thought and preserve identity in the age of powerful AI systems, especially those that hold their deep personal memory."

Key concepts: Network Effect 2.0, memory lock-in ("cognitive amputation"), AI colonialism.

**Christian R. Klein (2025)**

*Key concept:* Sovereignty Trap.

Klein describes a mechanism where the authoritative competence of AI systems tempts users to cede their own intellectual judgment, mistaking access to information for genuine ability. He writes of the "hollowed mind."

**Gargi Tripathi and Lipi Saxena (2025)**

*Key concept:* Epistemic colonization (The Managed Mind).

Tripathi and Saxena argue that mechanisms of power operate within the citizen's own consciousness. They call for a new form of social contract that protects the integrity of the psyche.

**Nita Farahany (2023)**

*Key concept:* Cognitive liberty / Right to think freely (The Battle for Your Brain, 2023).

Farahany argues that emerging neurotechnologies threaten cognitive liberty – the right to self-determination over one's own brain and mental processes.

*Connection:* Farahany's concept of cognitive liberty is closely related to cognitive integrity. Neurotechnology threatens from the inside; influence systems threaten from the outside.

**60.1 Luciano Floridi (b. 1964) – Information Integrity and the Infosphere**

*Key concept:* Infosphere, information integrity, information hygiene, onlife (The Philosophy of Information, 2011; The Ethics of Information, 2013; The Green and the Blue, 2023).

Floridi is an Italian philosopher of information and one of the most influential thinkers on digital ethics and information philosophy. He argues that contemporary societies live in an **infosphere** – an environment where information and physical reality are no longer separate but deeply integrated. Digital technologies are not tools we use; they are environments we inhabit (the "onlife" condition).

**Key concepts relevant to cognitive dependency:**

| Concept | Description |
|---|---|
| **Infosphere** | The entire information environment as a unified space – physical, digital, biological, social |
| **Information integrity** | The quality of information as accurate, complete, verifiable and trustworthy |
| **Information hygiene** | Practices to prevent information pollution and maintain a clean infosphere |
| **Onlife** | The condition where online and offline life are no longer distinguishable |
| **Information ethics** | Ethical framework for the infosphere, extending moral consideration to information entities |

**Connection to this paper:** Floridi's concept of **information integrity** directly informs the hierarchy proposed in Part IX (from Information Integrity to Information Hygiene to Cognitive Resilience to Cognitive Integrity to Cognitive Sovereignty). His call for **information hygiene** as a collective practice (analogous to public health) is the theoretical foundation for Part VII of this document.

Floridi writes: *"We are not standalone informational agents. We are embedded in an infosphere that shapes our perception, our knowledge, and our decisions. Protecting the integrity of the infosphere is not a luxury. It is a precondition for autonomous judgment."*

*Connection to legal framework:* Floridi's work provides philosophical justification for regulating information environments (DSA, AI Act) as a matter of protecting the conditions for autonomous judgment – not as censorship but as infrastructure protection.

**61. Jonas Tögel (2023) – Cognitive Warfare**

**Jonas Tögel (active 2023–2025)**

*Key concept:* Cognitive warfare (Kognitive Kriegsführung).

Tögel argues that NATO has been developing cognitive warfare since 2020, described as "the most advanced form of manipulation" with the goal of "hacking human thoughts like computers." He analyzes the Integrity Initiative and the exploitation of nudging for political manipulation.

*Connection:* Tögel provides detailed analysis of psychological manipulation as systematic state practice – precisely the "soft power" and "systematic manipulation" dimensions of cognitive dependency.


## 62. Synthesis and Original Contribution

The common thread across these theoretical contributions – from Arendt to Tögel, from Farahany to Brcic, from Floridi to Tögel – is the recognition that psychological violence is not confined by borders.

Foreign actors, commercial platforms, domestic institutions and interpersonal perpetrators may employ similar methods. The mechanisms of influence – repetition, emotional targeting, selective exposure, algorithmic manipulation, behavioral engineering, narrative coercion – are universal. The harm to the individual – the gradual erosion of autonomous judgment – is the same regardless of the source.

The concept of **cognitive dependency** proposed in this paper synthesizes these observations into a common analytical framework.

**Original contribution of this paper:**

1. Synthesis of existing observations into a unified legal and conceptual framework applicable across domestic, foreign, commercial and institutional actors
2. Cognitive dependency as a distinct regulatory blind spot
3. Hierarchy from information integrity to cognitive sovereignty (informed by Floridi)
4. Actor-neutral operational definitions
5. Asymmetric regulation of public vs private vs foreign actors
6. Integration of epistemic dependency, AI systems, and cognitive resilience into a coherent model

## PART XII – FINAL SYNTHESIS

### 63. Cognitive Dependency Framework Summary

**COGNITIVE DEPENDENCY FRAMEWORK SUMMARY TABLE**

| PROBLEM | CONSEQUENCE | PROTECTIVE RESPONSE |
|---|---|---|
| **INFORMATION POLLUTION** (misinformation, disinformation, overload, fragmentation) | Distorted perception, epistemic chaos, loss of shared factual basis for public debate | **INFORMATION HYGIENE** (source verification, lateral reading, fact-checking, exposure to diverse perspectives) |
| **PSYCHOLOGICAL VIOLENCE** (coercive control, systematic manipulation, gaslighting) | Reduced autonomy, impaired judgment, psychological harm, erosion of dignity | **PSYCHOLOGICAL PROTECTION** (legal regulation, coercive control legislation, Directive (EU) 2024/1385, criminal law protections) |
| **MANIPULATION** (fear-based persuasion, algorithmic targeting, synthetic authority, dark patterns) | Cognitive dependency through progressive transfer of judgment to external systems | **COGNITIVE RESILIENCE** (emotional regulation, delayed judgment, tolerance of uncertainty, critical reflection) |
| **COGNITIVE DEPENDENCY** (persistent reliance on external systems for judgment, orientation and decision-making) | Erosion of Cognitive Integrity through loss of autonomous judgment | **PROTECTION OF COGNITIVE INTEGRITY** (right to autonomous judgment, transparency, accountability, informed consent) |
| **LOSS OF COGNITIVE INTEGRITY** (systemic erosion of autonomous judgment at societal scale) | Democratic vulnerability, strategic dependency, susceptibility to foreign influence, reduced societal resilience | **COGNITIVE SOVEREIGNTY** Continuous effort to preserve independent judgment through equilibrium between doubt and decisiveness |

**Caption**

This table summarizes the Cognitive Dependency Framework. The progression from left to right represents the transition from problem to consequence and protective response. The vertical progression from top to bottom represents increasing severity and the need for higher-level responses.

Information Pollution (misinformation, disinformation, overload and fragmentation) produces distorted perception and epistemic chaos; the response is Information Hygiene. Psychological Violence (coercive control, systematic manipulation and gaslighting) impairs autonomous judgment and causes psychological harm; the response is Psychological Protection through

legal regulation and criminal law. Manipulation (fear-based persuasion, algorithmic targeting, synthetic authority and dark patterns) produces Cognitive Dependency; the response is Cognitive Resilience. Cognitive Dependency gradually erodes Cognitive Integrity; the response is Protection of Cognitive Integrity through transparency, accountability and protection of autonomous judgment. Finally, the Loss of Cognitive Integrity at societal scale produces democratic vulnerability, strategic dependency and susceptibility to external influence; the response is Cognitive Sovereignty.

Each level builds upon the previous one. Without information hygiene, cognitive resilience is weakened. Without resilience, cognitive integrity cannot be protected. Without integrity, cognitive sovereignty becomes impossible. The framework is actor-neutral and applies equally to individuals, institutions, corporations, media systems and states.

**The framework progresses from information quality to cognitive sovereignty. Cognitive sovereignty is not understood as a fixed state, but as a continuous balancing process between openness to revision and the capacity to act. The art of life lies in maintaining equilibrium between doubt and decisiveness.**

## Final Reflection

**Cognitive dependency is not the absence of intelligence, education or information.**

It is the progressive transfer of judgment from the individual to external systems of influence.

**Cognitive sovereignty is not the absence of influence.**

It is the continuous effort to preserve autonomous judgment despite influence.

**The art of life lies in maintaining equilibrium between doubt and determination.**

A democratic society should strive to ensure that this equilibrium remains possible – for individuals, for democracy, and for the state.

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