

“Universe 25” by John Calhoun and Modern Society: Between Metaphor and Reality



Viktor Bed, Doctor of Theology, Doctor of Law, Professor, Academician, Research Institute of Strategic and Political-Legal Studies of the Carpathian University named after Augustin Voloshyn.

A socio-psychological essay-analysis.

Uzhorod, 31 July 2025

Introduction

Can an environment with unlimited access to resources contribute to the decline of a community? Does material comfort guarantee happiness and survival? To answer these questions, the American ethologist John Calhoun conducted the “Universe 25” experiment (“Universe 25”). He placed a group of mice in maximally comfortable conditions: he provided continuous access to food and water, an absence of predators and disease, a controlled microclimate and 256 separate “apartments” for nesting [1]. The only limitation was physical space, but even under these conditions the population first grew rapidly, and later the animals developed behavioural deviations that led to the extinction of the entire colony [2].

The experiment: from utopia to collapse

In July 1968 John Calhoun began the study known as “Universe 25” in the laboratory of the U.S. National Institute of Mental Health. To do this he placed four pairs of mice in a specially constructed enclosure, providing them with unlimited access to food and water and protecting them from external threats [1]. At the early stage the population increased rapidly: the first litter appeared roughly 3.5 months later, and the number doubled approximately every 55 days [2]. After the population exceeded two thousand individuals, the rodents’ behaviour changed dramatically. Dominant males, exhausted by continuous fights, stopped guarding their territories; the less aggressive, the so-called “beautiful ones,” isolated themselves and devoted themselves mainly to grooming [2]. Under pressure from aggression the females drove away, and sometimes even killed, their offspring, or hid and stopped reproducing [2]. As a result, the birth rate dropped to zero, and by 1972–1973 the colony had completely died out [2]. Calhoun described this process with the term “behavioural sink” [4].

Are there parallels with humankind?

The human being is not only a biological creature but also a spiritual and social one; his behaviour is determined not only by instincts but also by values, culture, spirituality and the system of social and legal norms. Therefore, directly transferring the conclusions of John Calhoun’s “Universe 25” experiment to human communities is incorrect, although its results deserve serious analysis and careful consideration in social forecasting. People’s reaction to overpopulation and stress depends significantly on the historical-cultural, national, spiritual and social context, on the roles they occupy in the community and on the level of personal autonomy, family and social support [1].

In highly organized megacities high population density is offset by a developed infrastructure, a culture of mutual respect, a level of spirituality and morality, and the effective work of state and civic institutions that uphold the rule of law and prevent social chaos. At the same time Calhoun's experiment serves as a metaphor that encourages us to think about the consequences of excessive concentration on material comfort. When the meaning of life and one's own values are reduced to consumerism, society may lose the ability to engage ethically. This manifests itself in the weakening of family ties, the infantilization of adults, the reduction of socialization, the decline in birth rates and the growth of apathy and aggression—phenomena reminiscent of the behaviour of the “beautiful ones” [2].

The spread of Internet technologies and artificial intelligence partly deepens these tendencies, promoting virtual isolation and replacing live communication with digital. Therefore “Universe 25” should be considered not as a forecast of humanity's future but as a warning: the absence of spiritual, cultural, moral and legal guidelines combined with uncontrolled access to material resources can lead to the degradation of the individual and his social ties. Interpreting the experiment, it is important to take into account the differences between people and animals and to rely on the cultural, spiritual, ethical and legal factors that shape human societies and the person himself.

The loss of roles and meaning

According to John Calhoun, the “behavioural sink” is not biological death but a gradual loss of the ability for meaningful interaction [4]. In the final phase of the “Universe 25” experiment this degradation unfolded against a backdrop of excessive resource provision: worn-out males stopped guarding their territories, and some males and females almost completely lost interest in partnership and raising offspring, spending hours engaged only in grooming and self-isolation.

Under such conditions a group of the so-called “beautiful ones” formed—animals focused on their own appearance and comfort but indifferent to reproduction and normal socialization [2].

The absence of clear roles and positive examples at early stages of development affected new generations: improperly raised young individuals did not form healthy social bonds, and females, under pressure from aggression, drove away or even killed their offspring. John Calhoun noted that when a man does not understand what it means to be a man, the woman is forced to perform several roles, and children grow up without love and guidance; the foundation of the family and the human community is destroyed.

In a broader social context this means that material comfort without purpose, spiritual support and clear social roles turns into a void. People deprived of social, cultural, spiritual and legal benchmarks may lose their capacity for empathy, responsibility and self-realization. Thus, the “behavioural sink” should be understood as a loss of meaning and social interaction rather than a direct consequence of overpopulation [4]. To prevent such decline it is necessary to preserve moral and spiritual guidelines and to support healthy social roles.

Political and cultural lessons

The result of John Calhoun's “Universe 25” experiment indicates: unlimited material wealth

by itself guarantees neither stability nor development—it must be combined with values and responsibility [1]. Modern culture often proclaims freedom without obligations; however, freedom without reference points of good and evil degenerates into chaos and disintegration. When education is reduced to the accumulation of certificates, spirituality to external rituals, and truth becomes only an “interpretation,” human society loses a common base for mutual understanding. Calhoun’s experience reminds us that material prosperity is not an end but a means; without culture, spirituality, morality and a sense of purpose it turns into emptiness.

Several lessons follow from this.

1. Combining freedom with responsibility and service. Rights and freedoms must be accompanied by a culture of responsibility, which is cultivated both in the family and through public institutions.
2. Education that fosters personality. Educational systems should form not only technical competences but also critical thinking, empathy and creativity, developing a highly spiritual and highly moral person rather than just a consumer [1].
3. Living spirituality and culture. Churches, communities and other social institutions must promote deep spiritual life: helping people find meaning in life and in God and build community rather than confining them to formal ritualism.
4. A fair and lawful state. The state must ensure the rule of law, social justice and the protection of human dignity. This includes supporting the family and demographic policy that allows parents to combine professional activity with raising children and provides decent conditions for motherhood and childhood.
5. Human-oriented cities and spaces. The planning of urban space should take into account the need for personal and common space, as John Calhoun himself emphasized.

Thus, the lessons of John Calhoun’s “Universe 25” experiment relate not only to biological aspects but primarily to politics, culture and spirituality: only the harmonious combination of freedom with responsibility, the material with the spiritual, the family with the social and the individual with the collective can prevent social decline.

Psychological consequences: aggression and apathy

John Calhoun’s “Universe 25” experiment showed that even under conditions of full material provision, the lack of social and behavioural regulators and proper socialization led to pathological changes: in males the behaviour ranged from excessive aggression to extreme passivity and self-isolation, while females lost interest in offspring and their natural readiness to reproduce [2]. These regulatory mechanisms are a system of norms, roles and mutual obligations that under natural conditions restrain aggression and support the care of the young.

Similar symptoms can be observed in modern societies. Globalization and atomization are accompanied by wars, conflicts, “everyone against everyone” battles in the media space, growing narcissism, indifference to the lives of others, depression, a decline in spirituality, morality and culture, disregard for the rule of law and devaluation of the future. This is not a result of the number of the population or the lack of material resources but a sign of the loss of values and the destruction of the system of mutual support in combination with an

incessant pursuit of material goods.

From a psychological perspective, the blurring of social roles, the lack of spiritual and moral support, the destruction of family and community ties form a soil for treachery, apathy, aggression, anxiety and depressive states—and, accordingly, even an unwillingness to create a family and continue the lineage. These moods are intensified by virtual isolation and the transfer of interactions into the digital space, which complicates the formation of deep family and social bonds.

Thus, counteracting desocialization and the loss of social roles, aggression, depression and apathy, as well as protecting and developing spiritual, moral, social and family values, lies not in reducing the population or limiting resources but in restoring value orientations, strengthening family and social ties, preserving social roles, supporting spiritual life, developing culture and ensuring the rule of law. The spiritual-moral dimension—the search for God, the affirmation of the meaning of life, adherence to moral norms, proper socialization and the preservation of social roles—plays a key role in preserving the humane essence and the proper development of the person. It is precisely a return to spiritual and moral sources together with appropriate socialization and social support that can prevent a “behavioural sink” and ensure a healthy future for human society.

How to avoid the fate of “Universe 25”?

John Calhoun’s “Universe 25” experiment is more a warning than a prophecy. To avoid repeating the fate of the mice, it is necessary to formulate a series of political, cultural, spiritual and social strategies:

- Moral and spiritual guidelines. Freedom must be combined with responsibility and service; society must cultivate moral norms and spiritual values that direct the person toward goodness and support the natural desire to continue one’s kind.
- Education that develops personality. Education should not only transmit knowledge but also develop critical thinking, the capacity for compassion, love and creativity in order to raise an integral person rather than just a specialist.
- Living spirituality and culture. Churches, communities and other institutions must help people find meaning in the spiritual, the eternal, being and life through the knowledge of God and the world he created, rather than reducing spirituality to formal rituals or fanaticism.
- Just social institutions and humane cities. The design of urban space and the work of social institutions should take into account people’s need for private and shared space, ensuring conditions for healthy social interactions; John Calhoun himself emphasized the importance of space.
- Support for the family and demographic policy. The state and society must actively support parents, motherhood and childhood, promote a balance between work and personal life and create conditions for increasing the birth rate.
- The social and legal function of the state. The authorities should ensure the rule of law, adherence to universal and Christian values and social justice so that every person feels protected.

Combining these steps will help prevent a “behavioural sink” and build a society in which material abundance harmoniously coexists with spirituality, morality and social responsibility.

Conclusion

John Calhoun’s “Universe 25” experiment is not a ready-made model for human coexistence but rather a mirror reflecting extreme phenomena in animal behaviour and hinting at the problems a community may face in the absence of purpose and social responsibility. Its results require careful interpretation and should not be automatically transferred to people without considering the cultural, spiritual and social features of human society. John Calhoun created not a forecast of the future but a powerful metaphor that demonstrates: material comfort without purposefulness, morality and spiritual guidelines, as well as without socialization and adherence to social roles and family values, leads to destruction and self-annihilation.

Therefore, the results of John Calhoun’s “Universe 25” experiment serve as a warning that if a person abandons his high calling, stops cultivating spirituality, morality, culture and social responsibility, even the most favourable material conditions will not save him from decline. Only by preserving human dignity and realizing the meaning of one’s existence can one avoid a “behavioural sink” and direct the development of society in a humane and sustainable direction.

Sources used

1. Melchor A. “Universe 25 Experiment.” *The Scientist* (27 May 2024).
URL: <https://www.the-scientist.com/universe-25-experiment-69941>.
Accessed: 31 July 2025.
2. Kean S. “Mouse Heaven or Mouse Hell?” *Science History Institute* (17 May 2022).
URL: <https://www.sciencehistory.org/stories/magazine/mouse-heaven-or-mouse-hell/>.
Accessed: 31 July 2025.
3. Ramsden E., Adams J. “Escaping the Laboratory: The Rodent Experiments of John B. Calhoun & Their Cultural Influence.” *Journal of Social History* (2009).
URL: <https://joeornstein.github.io/pols-4641/readings/Ramsden%20and%20Adams%20-%202009%20-%20Escaping%20the%20Laboratory%20The%20Rodent%20Experiments%20of.pdf>.
Accessed: 31 July 2025.
4. “Behavioral sink” – Wikipedia. Article on the term and Calhoun’s experiments.
URL: https://en.wikipedia.org/wiki/Behavioral_sink.
Accessed: 31 July 2025.
5. “John B. Calhoun” – Wikipedia. Biography of the researcher.
URL: https://en.wikipedia.org/wiki/John_B._Calhoun.
Accessed: 31 July 2025.