

Beyond Homo Economicus

By Tania Singer

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Humanity currently faces numerous global challenges, including climate change, resource depletion, financial crisis, deficient education, widespread poverty, and food insecurity. But, despite the devastating consequences implied by a failure to address these issues, we have not risen to the occasion.

Economies, both crisis-stricken and thriving, are failing to eliminate poverty, improve the provision of public services like education, and maintain and allocate collective goods, such as fish stocks and rain forests, effectively and equitably. At the same time, societies are increasingly fragmented, with perceived loneliness and stress-related illnesses on the rise. And existing governance structures are inadequate to improve the situation.

Clearly, a new approach is needed. But developing effective mechanisms for addressing large-scale shared challenges must begin with a fundamental shift in the way human motivation and cognition are understood.

The concept of *homo economicus*, which asserts that humans are rational actors who make decisions based on narrow self-interest, has dominated political and economic thinking since the 1970's. But, while the pursuit of self-interest may be advantageous in certain contexts, it is not the only, or even the principal, driver of human behavior – and it is not conducive to overcoming today's most pressing global issues.

It is time to replace the framework of *homo economicus* with a model that reflects humans' capacity for altruism and pro-social behavior. By illuminating opportunities for human cooperation, such a framework would provide a useful foundation for political and

economic systems that succeed where existing arrangements have failed.

Achieving such an understanding of human nature requires a comprehensive, interdisciplinary approach that moves beyond the social sciences. In recent years, developments at the frontier of evolutionary biology, psychology, and anthropology, together with the emergence of new fields, such as neuroeconomics, social and affective neuroscience, and contemplative neuroscience, have shown that humans can be motivated by pro-social preferences, like fairness and concern for others' welfare or rights.

In fact, humans are often driven to help those in need, even complete strangers, by feelings of empathy and compassion. This idea is reinforced by a vast amount of neuroscientific evidence, which contradicts the emphasis on individualism that prevails in Western societies, suggesting instead that the human brain is wired for affective resonance, with people naturally reflecting each other's emotions and motivational states.

Moreover, experimental data suggest that, contrary to mainstream economic theory, people's preferences are changeable. Shifting environmental factors shape human decision-making by activating motivational systems related to threat, achievement, and power motivation, as well as to care for others and social affiliation.

The emerging field of contemplative neuroscience has begun to produce evidence for plasticity of pro-social preferences and motivation. Short- and long-term mental-training studies (such as the ReSource project) reveal that mental-training programs can enhance cognitive and socio-affective

faculties like attention, compassion, and empathy. More specifically, training programs aimed at boosting pro-social motivation have led to increased activity in neural networks related to positive emotions and affiliation, as well as to reduced stress-relevant hormonal responses and increased immune markers, when participants are exposed to distress in others.

In other words, such mental-training programs make participants more efficient and more focused, while improving their capacity to cope with stress. At the same time, they promote pro-social behavior and a broader, less self-centered perspective that accounts for humans' interdependence. Such findings have started to inspire fields like experimental microeconomics and neuroeconomics, which, in turn, have begun to incorporate pro-social preferences into their decision-making frameworks.

These promising findings should now be incorporated into new economic models and concrete policy proposals. Given that brains are at their most malleable during childhood, beginning mental training in school would help to create a solid foundation for the kind of secular ethics that would contribute to the

development of a more compassionate society. But mental training also has benefits for adults, so businesses, political authorities, and research institutions should collaborate in establishing “mental gymnasiums.”

Furthermore, institutional reform could be aimed at adapting social environments to foster cooperation instead of competition, and to activate our motivation to engage in caring behavior, rather than seeking achievement, power, and status only. In the long run, striving only for the latter leads to imbalance and resource depletion not only on the individual level, but also globally.

Humans are capable of far more than selfishness and materialism. Indeed, we are capable of building sustainable, equitable, and caring political systems, economies, and societies. Rather than continuing to indulge the most destructive drivers of human behavior, global leaders should work to develop systems that encourage individuals to meet their full socio-emotional and cognitive potentials – and, thus, to create a world in which we all want to live.

Tania Singer is Director of the Department of Social Neuroscience, Max Planck Institute for Human Cognitive and Brain Sciences.