# PAI
## PALO ALTO INSTITUTE

# The Journal of the Palo Alto Institute

What are the potential implications of global depopulation?

The world population has been growing since antiquity, interrupted by wars, disasters, pandemics, and famine. But the global human population may soon hit an inflection point and enter a period of demographic contraction.

Population is already declining in many countries, including Japan, Brazil, China, Germany, Italy, Hong Kong, Singapore, Kazakhstan, Ukraine, Belarus, Moldova, Estonia, Latvia, Lithuania, Bulgaria, Georgia, Armenia, Bosnia, Croatia, Slovenia, and Hungary.[1] Many more are on the brink. If it were not for international immigration, both the United States and the EU would have declining populations today. The total population of the continent of Europe, including Russia and non-EU countries, peaked in the year 2000.

Many factors play a role in population decline, but the one that stands out is sub-replacement fertility (defined as any rate below 2.1 children per woman in developed countries). Over 40% of the world's population lives in nations with sub-replacement fertility, a common feature among most prosperous countries. The potential causes of sub-replacement fertility include high costs of living and low job security, urbanization, contraception, changes in female social roles, government policies, decreased religiosity, postponement of family, and partnership instability. Despite sub-replacement fertility, some populations still expand through immigration, population momentum, and lengthening life expectancy.[2] For now, many countries, especially the world's poorest nations, are still growing to offset declines elsewhere. Extrapolating from current

circumstances, however, it appears we are approaching a period of global depopulation.

The potential implications are enormous. Current assumptions about the increasing scarcity of natural resources could be turned upside down. Competition and demand for oil, minerals, land, and water could fade as human resources become the new scarcity. Commodity prices could collapse. Deflationary pressures could compound natural trends toward lower prices enabled by innovation. Real estate prices could decline everywhere other than the premium locations. Credit markets could decline due to debt deflation. Assets could deflate and could be held for yield rather than a speculative hope of a profitable sale to a growing pool of buyers. The current long-standing fiscal policy aimed at low-grade inflation could be revisited in the context of asset deflation and population decline.

Warring could fade as competition for natural resources fades. The scarcity of human resources could render senseless the idea of reducing each other's population through war. As the average age of citizens gets higher, average testosterone levels could be lower, which could reduce the will for war and aggressive behaviors. Sexual politics could shift in favor of women as their fecundity becomes even more prized. As the elderly population increases relative to the under-40 group, healthcare consumption could become the majority of economic activity. On one hand, fewer young people could be bearing more per capita stress of funding the needs of an aging population. Pensions, social security, and other deferred entitlements as they exist today could become even more suspect as the gap between new contributions and liabilities increases. Currently, many of these programs rely indirectly on the Malthusian assumption of an expanding population base where the younger generation funds the aging population. On the other hand, a smaller base of young people will be inheriting wealth from their predecessors.

Stress on infrastructure and services could recede. One might imagine a declining population moving to urban centers and vacating rural areas. In reverse homesteading, large tracts of land could be abandoned and returned to open land. Natural habitats could reappear, along with fauna and flora. Many of today's environmentalist concerns could self-resolve and be forgotten.

## References

[1] Retrieved at http://en.wikipedia.org/wiki/Population_decline.

[2] Retrieved at http://en.wikipedia.org/wiki/Sub-replacement_fertility.

Humans seek to maximize their freedom. What happens when a person's freedom encroaches on the freedom of another person? A person who maims another person would reduce the freedom of the latter. Taken to its logical extension, what can this simple tenet about personal freedom teach us about political philosophy?

At play is the conflict of maximizing individual freedom versus preserving the overall freedom of the group. A theoretical ideal balance occurs when each individual curtails his own freedom at the boundary limit of another individual's freedom. Conceptually, one can respect another's boundaries by either contracting the sphere of one's freedom or moving further away.

As population density increases, greater need develops for people to subordinate their freedoms to the needs of group. Some examples follow.

On a country road, absent other cars, a driver may be free to cruise anywhere be- tween 20 and 100 miles per hour. The same driver on a crowded city road might be granted less freedom to drive at the pace of his own choosing because it could impinge on the driving performance of others. Thus for urban settings we should typically create rules that reflect the need for more boundaries on personal freedom, but we should expect the opposite to be the case in rural settings. In similar fashion, a person living apart from the city may make noises with impunity, whereas such behavior in close quarters would encroach on the free- dom of others. One should therefore expect an urban citizen to favor noise ordinances and a rural resident to disfavor them.

Regions of high population density have greater potential for both intentional and unintentional conflict if citizens are armed. When conflicts arise, the police can be called in quickly. For those living in regions of low population density, police service is less available, so the expectation is that citizens should retain the right to defend themselves with weapons of their choosing. Naturally, high-density residents should prefer gun control, whereas low-density residents should abhor such limits to their freedom.

Rural citizens are more likely to be self-reliant as both a cause and an effect of all of their experiences. They may not be happy paying taxes for social services that they may not want or get. On the other hand, urban citizens live in a web of interdependence. They see everyday evidence of beneficial social programs such as public transportation funded by taxation.

In all of these examples, it is evident that in high-density areas, rules of behavior should proliferate over time, which is exactly what has happened. It is also understandable that rural residents should be befuddled by the relevance of such rules in their own lives and revolt against what they perceive as attacks on their personal freedom.

Political affiliations are affected by many factors. Nonetheless, it is notable that in the 2004 election, Kerry and the Democrats carried only cities with populations over 500,000, and the same thing happened in 2008 with Barack Obama[1]. In England, the Tory Shires and the Labour Inner Cities exist as political factions with the same dichotomy of support and demographics.

To some extent, self-selection is at play here — for example, one could argue that Democrats are moving to the cities because they prefer the liberal politics found in such areas, and conservatives are fleeing to the country accordingly. But could political disposition be instead a consequence rather than a cause of population distribution?

Is the ideal political philosophy elastic? Biased towards libertarianism in low-density areas of population, and biased towards socialism and a greater number of mutually-accepted rules in high-density quarters? Each political philosophy enables maximization of personal freedom in a particular demographic context. What does that say about national politics, which is bound to leave half its citizenry subject to a political philosophy not well suited to the local population density? Greater shift of power to local politics may be part of the answer. What are others?

## References

[1] Retrieved at http://neuropolitics.org/defaultfeb09.asp.

The English word "empathy" — a word similar to, yet distinct from, the word "sympathy" — was coined by E.B. Titchener in 1909 as the translation of the German term "Einfühlung" (or "feeling into"). How did such a fundamental human emotion elude the Eng- lish language for so long?

Often, we see or hear what we construct in our minds, rather than what is actually before us. Our perceptions of others' emotions may operate similarly. Empathy forms a cornerstone of intellectual movements such as Design Thinking and Social Emotional Learning, which suggests that thought leaders have found that humans can improve the ways in which they get in touch with the emotions of others. Conversational tools (such as "what I heard you say is") augment empathy by enabling the listener to tune into the intended message of the speaker, as well as enabling the speaker to tune into how the listener may feel. Similarly, re- placing statements such as "you excluded me" with "I felt excluded" enables conversationalists to calibrate their perceptions to each other's emotions.

Interest in the science of empathy continues to grow rapidly. Scientists use tools like functional magnetic resonance imaging to scan the brain for the neurological basis of empathy. Curiously, scholars neglect the science of those seeking empathy. Why?

Humans tend to desire empathy from others. Storytelling and story- listening traits likely co-evolved to promote meme transmission, which may be the reason that kids and adults respond so strongly to written, oral, or video stories. Analogously, we can intuit that the em- pathy trait may have co-evolved with an empathy-seeking trait.

Seeking empathy may be an adaptation produced during human social evolution to enhance fitness.

Strikingly, no English word precisely captures the trait of "desiring empathy". No Eng- lish word captures the traits of "wanting compassion" and "looking for validation". The closest approximation of a word that captures the general feelings of seeking empathy, compassion or validation is "needy", a colloquial term used in pop psychology. If an empathizer is someone who empathizes, what term describes the recipient of empathy — empathee? In a perverse irony, scientists and linguists who study empathy, but overlook the would-be recipient of empathy, may exemplify a lack of empathy.