

Planet earth is knocking on the doctor's door

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A patient enters in an outpatient clinic. The patient introduces herself “Planet Earth.” “Take a seat, please says the doctor. How can I help you?” “I have had a slight temperature for a long time, my skin is turning grey, and I am gradually getting worse,” the patient replies. After auscultating her lungs and palpating her stomach, the doctor looks somewhat unsure. “Hmm, your symptoms may indicate some sort of long-term disorder, we need more tests and examinations.”

I should perhaps consult an expert, the doctor thinks, would *James Lovelock* be available? He worked for the National Aeronautics and Space Administration in the 1960s and examined life on Mars. He proposed that Mother Earth (*Gaia* in Greek mythology) may be a living organism and the biosphere a self-supporting system organizing itself.¹ He may be able to help.

The human body is an ecosystem, a *holobiont*, a concept describing the host (animal or plant) as a community of species subject to continuous evolutionary pressure.² Holobiont species are *bionts*, and a *hologenome* is the combined genome of the bionts. When holobiont homeostasis is preserved, human health results. The natural environment supports human health in a holistic manner. A natural living environment is associated with physical, mental, and social health, and reduces mortality.³

In the Finnish and Russian Karelia, a sharp contrast in allergic conditions and asthma was observed between these two geoclimatically and genetically close populations. The high prevalence in Finland was mainly explained by biodiversity loss which affected the human microbiome and immune regulation.⁴

Inspired by these results, a nationwide public health action, *The Finnish Allergy Programme*, was implemented from 2008 to

2018 to strengthen primary and secondary allergy prevention. Avoidance was turned into tolerance/resilience and health was endorsed instead of disease. Medicalization was reduced, for example, in food allergy. The overall aim was to mitigate the growing burden of allergic diseases and asthma. In clinical practice, endorsing nature relatedness, “what you breathe, eat, drink, and touch,” was a paradigm shift. Over 10years, the prevalence of asthma and rhinitis levelled off, and food allergy, occupational allergy, and asthma hospitalizations halved.⁵ The societal costs were reduced by €201 million over 10years and the cumulative, deferred saving was €1.2 billion in a country with a population of 5.5 million.⁶

The crisis of the COVID-19 pandemic has occupied health care around the globe, and noncommunicable diseases (NCDs)—a slower crisis—have been put aside. Nevertheless, they are increasing globally and rapidly. Allergic disorders are not isolated but concurrent with the increase of diabetes, cardiovascular diseases, obesity, inflammatory bowel diseases, and even mental disorders and cancer.⁷ They are all characterized by microbial and immunological imbalance and tendency for inappropriate inflammatory responses. The “urban” immune system does not distinguish between danger and nondanger, or self and non-self. There is no biological sense in responding by inflammation to a harmless particle like pollen.

By scaling up the saving of costs obtained for allergic disorders and asthma in Finland, or by extending these costs to NCDs in general, an enormous saving potential can be seen for the *Planetary Health* approach.⁸ The slow divorce of humankind from its evolutionary home, soil, and natural waters, that is, green and blue space (Fig. 1), is the most expensive divorce ever.⁹ It needs to be softened, for the sake of both parties.

After examination, and consultation with James Lovelock, the patient Planet Earth received her diagnosis: severe separation anxiety and intimidating poverty. The patient feels exploited, poisoned by gases, loaded with waste, pumped, and sucked empty. Her fluid balance has been disturbed, her skin has peeled, and she feels abandoned and ignored.

Digital totalitarianism is a threat to the democracy of the new world. However, digitalization has also connected human brains as never before to experience common awareness, and to join together as a mega-brain of the Planet Earth to solve global challenges.¹⁰ At first, the idea of *Gaia* was not well received by the scientific community. But maybe Lovelock was right, after all. It is time to let Mother Earth be the healer and humans to be healed (Fig. 2).

For the past 1000 years, the *Kogis*—the original people of Sierra Nevada, Colombia—have been saying: earth is alive, trees live, stones live, sky lives—they are sacred. Mother Earth says: I sing old songs, and praise the holiness of life and unity of all. I do not want my child to die.

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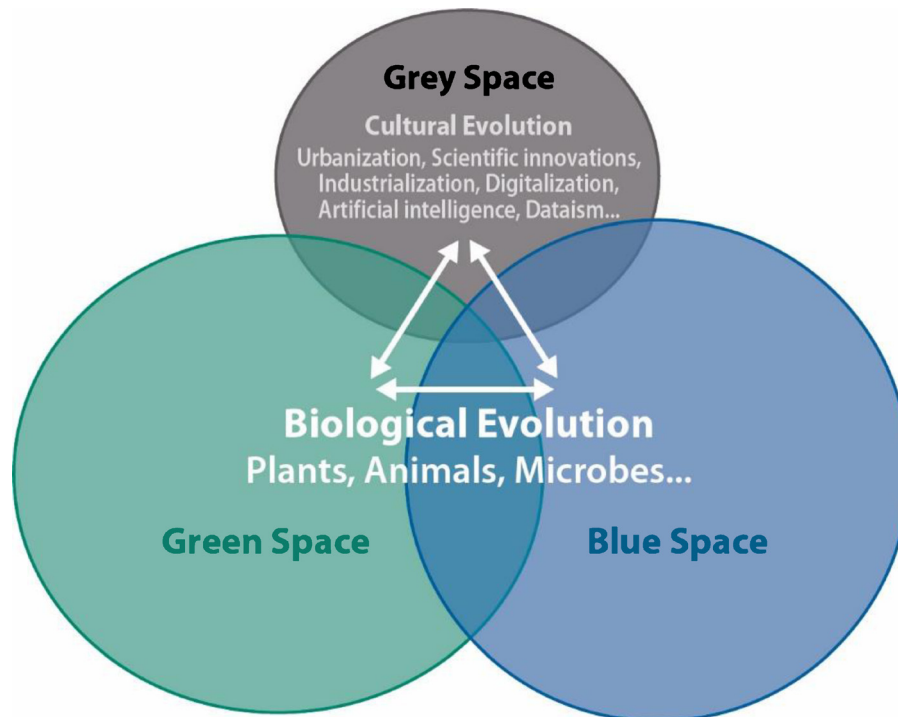


Figure 1. Cultural evolution is built on biological evolution, which is also influenced by it. Humans learnt to use fire in a controlled way, some 1 to 1½ million years ago. This had profound consequences on food, light, and heat and gave impetus to brain development (4, modified).



Figure 2. The Planet Earth heals the human patient © 2021 by Josep M. Antó and Paco Palmer is licensed under Attribution-NonCommercial-NoDerivatives 4.0 International.

Conflicts of interest

The authors declare no conflicts of interest.

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