

Hans-Martin Sass*

Bios and Ethics in Our Complex Adaptable Systems. Responsibilities towards Our Children and Our Globe

SUMMARY

We, our bodies and spirits and our natural and social biotopes are complex adaptable systems [CAS's], interdependent and vulnerable within natural, cultural and political biotopes, longing for life, health and happiness. Clinical and pediatric expertise and ethics are also integrated in many fields of competence and care for our integrated bios and for sustainable biotopes in nature and society. A Bioethical Imperative calls for protecting the complex and interdependent bios in nature and agriculture and in our human social, economic, corporate, cultural, and political bodies for the benefit of our children and ourselves, and for discussing 'health' and 'improvement' in ethical and not only in technical terms. The protection and promotion of healthy people, sustainable societies, and diverse and stable political bodies depend on basic economic accomplishments, healthy food, harmonious communities, preservation and diversity of cultures and environments, on individual dignity and social recognition, i.e. on gross happiness products [GHP's] and not only on gross national products [GNP's] measured in economic terms only.

Keywords: bios, bioethics, children, happiness, health, integrated bioethics, life, responsibility, sustainability.

1. INTEGRATED BIOS: INTERDEPENDING, INTERACTING, CHANGING

Bios is the Greek word for life, and ethos the term for behavior; bioethics thus is our interdisciplinary and intercultural attitude and strives in discussing and implementing appropriate measures – morals, rules, laws, cultures – for sustained life, health, and

* *Correspondence Address:* Hans-Martin Sass, 11776 Stratford House Place 607, Reston VA 20190, USA.
E-mail Sasshm@aol.com.

happiness of the many forms of integrated bios. Caring for others, for healthy natural and social biotopes is not just unselfishness or altruism, but a smart and cultivated form of self-interest in stabilizing and promoting health and happiness of ourselves, our children and families, and of the natural and social biotopes of which we are an integral part. Thus, clinical ethics and public health ethics – including ethics and expertise in pediatrics – are just one of the various interconnected fields of the care and ethics of bios, together with environmental, social, corporate, and political ethics. But, as Tris Engelhardt has observed, ‘bioethics is a theater of disagreement’ among ‘moral strangers’, who need to become good neighbors, and comrades, not necessarily close friends, ‘in the absence of God and in the presence of moral pluralism’.¹ Thus, it needs more than parents and pediatricians to bring kids up well, make them happy, it needs successful and good friends and neighbors; it ‘needs a village, to raise a child’ as Hillary Clinton once said. Others have more precisely analyzed special issues of intercultural transfer in population P, intervention I, and social environment E for transferability T, - called PIET.² As we unfortunately see in the treatment of children of emigrants all over the world, care for the souls and bodies of or children depends not only on parents and good pediatricians, but also on the morality or immorality of political bodies hurting families, parents, values, when cruelly separating emigrant children from their parents.

Challenges and options of the future will be different from the challenges of the past. Medicine has seen great changes since the time of our grandparents - in-vitro fertilization, oocyte donation, sex selection, prenatal testing and care, safer cesareans, organ donation, antibiotics, contraceptive and abortive pills were not known to our grandparents. Future options include genetic therapy of severe genetic disorders such as ADPKD (kidney cysts) by precise CRISPR surgery, but also challenges to use these and other technologies for ‘improving’ the physical, changing intellectual or emotional-spiritual heritage via parental choice or/and societal expectation. It is 40 years now that in 1978 Louise Brown, the first test-tube baby, was born; she is still alive but suffers somewhat from arterial hypertension.³ Some medical achievements show their medical and cultural results only quite some time after their first successful introduction. Also, different medical and social answers might have to be given in health care cultures and public discourses which will be different from ours, just as

1 Engelhardt HT (2012), Bioethics, Fritz Jahr and the Culture Wars: Moral Reflection in the Face of Intractable Moral Pluralism, in: Muzur A, and Sass HM, eds, *Fritz Jahr and the Foundations of Global Bioethics*, Paris; Lit, 181-92.

2 Schloemer T, Schroeder-Baeck P (2018), Criteria for evaluating Transferability of Health Interventions: a systematic review and thematic synthesis, *Implementation Science*, 13, 88.

3 Meister TA et al (2018), Association of assisted Reproductive Technologies with Arterial Hypertension during Adolescence, in: *J American College Cardiology*, 71 [in print], cf Baumann-Hoelzle R (2018), Die in-vitro Fertilisation, *Dialog Ethik*, 08-22-18.

the cultures and options of our grandparents were different to ours. Whenever in complex adaptable social and political systems we will have serious arguments about what is 'good' or 'bad', as long as 'bad' cannot be defined in legal terms as murder or deceit, then the educated individual eventually with support groups of similar thinking should be allowed to follow her or his conscience and vision.⁴ A recent article on child injury prevention and installing safety equipment in homes lists the 4 principles of the 'Georgetown Mantra', but adds 3 more: Proportionality, Efficiency, Health Maximization: 'Proportionality: interventions should be designed and implemented in proportion with the problem at hand. – Efficiency: efficient use of resources (e.g. finances) for evidence-based policies. – Justice: demands that benefits are equally spread across society. – Non-maleficence: 'do no harm' asserts that an HCP (health care professional) should harm no one (him/her self, other individuals, wider society) in the pursuance of a greater good. – Health Maximization: public health is responsible for the health of the whole community. There is an obligation, therefore, to maximize health of the whole population in addition to broader concepts of 'public good'. – Respect for Autonomy: an individual's moral value cannot be sacrificed for someone else. A strong burden of proof is required to justify restricting autonomy. – Beneficence: the moral obligation of the HCP to produce benefit for the individual. Ideally the intervention should not be a contribution to the common good without a direct impact on the individual.'⁵ Such a model, when translated into pediatrics practice and family-centered care may provide support for venturing into unknown territories of genetic sequencing newborns.⁶

4 Spinoza in his 'Tractato Theologico-Politico' argued that stability of political and social bodies would not fall apart when liberty and freedom would be granted, on the contrary peace and sustainability would be threatened if people would not be allowed to be their own prime moral agents. And these communal bodies do also change over time and provide different opportunities together with different challenges. My grandparents in well-to-do central Europe were happy to be among the few who had electricity and radio, also access to decent rural medical care; they never thought about television, cellphones, internet, robots, high-tech medicine; they went to church once in a while and my grandfather was a member of a local club. Today men and women, kids and seniors, poor and rich in most countries can leave their geospace and go into cyberspace; Facebook has 1.7 billion inhabitants outnumbering China with only 1.4 billion as so far the biggest community in the world; ever new tribes of various kind and various morals populate cyberspace, some with traditional or new cultures of communication and cooperation, others of terrorist nature, open to all of us, and as well acting globally. Corporate bodies such as Amazon or Tencent will progressively know more about me and others of their clients than the government of the country I live in. 'This is not a game, this is the real world' is the promotional slogan for the 'World of Warcraft' website; 'Second Life', another Virtual Reality [VR] site, calls itself 'a global community' and promises 'to democratize virtual reality as a creative medium; it will empower people to easily create, share, and ultimately monetize their own interactive social experiences (Second Life, website, press release 2016-04-26; cf. Sass HM, (2016). *Cultures in Bioethics*, Zuerich; Lit, 159-72.

5 Scholtes B, Schroeder-Baeck P (2017), Ethical Considerations for the Design and Implementation of Child Injury Prevention Interventions, in: *Injury Prevention* 0:1-5 , (p.2).

6 See the special 2018 issue of Hastings Center Report 'The Ethics of Sequencing Newborns. Reflections and Recommendations', Johnston J, Parens E, Koenig BA eds, which calls for moving slowly and reviewing results within family and society over time; 'direct-to-consumer sequencing services' outside of the doctor-family interaction are strongly discouraged, S6.

Not all people in all countries, however, have or will have relatively good access to medical care, the internet, new technologies and new fashions; some people and groups will use the new options for disrupting existing communities, harmonies, morals and information, radicalizing or confusing people, impacting geographic communities just as religions and philosophies have done in the past for millennia. While geographical disparities, inequalities, and injustices might grow, parents and societies in other geographies and cultures will be faced with grandiose opportunities in improving muscles, memories, genetics, sociality, health, physical and emotional harmony and happiness of tootlers, children, teenagers, ourselves and our social and political bodies; but how will parents, kids, doctors, society, politicians define 'improvement', 'health', 'harmony' and 'happiness'? A President's Council on Bioethics in the United States of America 'Beyond Therapy. Biotechnology and the Pursuit of Happiness' requested to see 'the human person in more than therapeutic terms: as a creature "in-between", neither god nor beast, neither dumb body nor disembodied soul, but a puzzling, upward-pointed unity of psyche and soma whose precise limitations are the source of its – our – loftiest aspirations, whose weaknesses are the source of its –our – keenest attachments, and whose natural gifts may be, if we do not squander or destroy them, exactly what we need to flourish and perfect ourselves – as human beings'.⁷ What are the challenges we as citizens, parents, and health care professionals face today in caring for healthy kids, healthy people, healthy communities, and for 'improving' lives with health and happiness, - beyond just therapy?⁸ How do we define and execute 'parental responsibility', 'professional responsibility', 'patient's best interest' or 'informed consent' for individuals, groups or society given diverse traditions and cultures in families, groups and cultures under the variables of the PIET (population, intervention, environment, transferability) model in general and in particular in the care for our newborn and children?

7 Report by the USA President's Council of Bioethics, 'Beyond Therapy. Biotechnology and the Pursuit of Happiness' 2003, XVII; the bioethical question is 'how pursuing the goals of better children, superior performance, ageless bodies, or happy souls might be aided or hindered, elevated or degraded, by seeking them through a wide variety of technological means, XVI.

8 The International Society of Clinical Bioethics has its 15th Conference these days in Barcelona and it is still the same body as it was at its inauguration in 2003 in Losinj, Croatia, but the topics discussed and the way they were discussed have changed; the body of ISCB has changed within its bioethical and global bios. If my grandfather had wanted to see a game of FC Barcelona, he had to travel from Germany to Barcelona; I can see it on TV in most countries of the world; when I see a soccer game in my local pub in Bochum, then that biotope is even more different, because I will be more interacting with my beer drinking and beer friends than with the TV screen. 2500 years ago, Heraclitus in Greek recognized that 'we cannot step into the same river twice'; this is true and that change is part of the interacting and integrating bios overall. If the leadership of ISCB would just collect papers every year and mail those to us members for internet discussion, would that be the same corporate body, we are a part of as we experience now?

2. HUMAN BIOS: WHAT WE KNOW. WHAT WE DO. WHAT WE HOPE FOR

The discussion about our responsibilities towards our children may profit from a birds-eye view on some particularities of our special human bios. Immanuel Kant⁹ divided the question regarding our human bios into three sub-questions: ‘What can I know? What shall I do? What may I hope for?’ Here are my preliminary answers:

1. This is what we know: The bios of the worlds and lives are interacting, but also changing. The lives of our grandfathers and their social, cultural, technological, and political biotopes without electricity, autos, radio, and effective medicines such as antibiotics were complex in their own way and also quite different from ours. The lives of our children and grandchildren will integrate and interact with new digital biotopes in cyberspace, new options in caring for health and happiness by various means of genetic, physical, intellectual, and spiritual manipulation; they will be associated with new cultured microbes, plants, animals, also with cyborgs or other companions with human-like features. My 6-months old granddaughter has a vtech book¹⁰ of 8 pages which she loves more than her teddy-bear, she interactively controls her (quite primitive) co-bot, she likes page 5 the most. A recent study by Lisa Littman of Brown University on ‘Rapid Onset of Dysphoria in Adolescent and Young Adults’¹¹ described a group tendency, fashion or even hysteria of young girls not fully understanding issues of transgenderism and escaping at the age of 11 to 15 into a self-chosen psychological and emotional transgender identity while displaying no biological and physiological changes. Thus, bios/life still is interacting and interdependent in new ways and in old ways. The atomic, molecular, astronomic, biological, environmental, social, physical worlds, still are intertwined and interdependent, and they interrelate to in their various part. Planets, suns, milky roads and universes and multiverses interact, live and die by rules of gravity and movement; Francesco Assisi was not the only bioethical thinker in predominantly anthropocentric Europe when calling the sun brother and the moon sister.¹² The seasons, day and night, water, oxygen and many other elements support the bios of microbes, animals, plants, environments, humans in sleeping and acting, eating, producing, manipulating, destroying and building. - I as an

9 Kant, *Logik Einleitung*, AA IX:25.

10 ‘Rhyme and Discover’, vtech book.

11 Littman L (2018), Rapid-Onset Gender Dysphoria in Adolescents and Young Adults, *Plos. One*, 08-16-18; the blind-reviewed, accepted, and published article was then withdrawn for unclear reasons by the Brown University arguing that it might be harmful and nor well researched.

12 Avancini Alves C (2017), Fritz Jahr and Francis of Assisi: An Interface between Nature and Bioethics at the Beginning and the End of Life, in: Byk C, Sass HM, eds, *Fritz Jahr 1895-1953*, MA Editions ESKA, 47-61.

individual of the human species are not autonomous, as no individual or species is. I am the result of pregnancy, birth, care and education. I need breathing, foods and drinks, sleep and some kind of personal activity, - and this within the interconnected parameters of this earth, the seasons, and surrounding natural and social biotopes. I cannot even digest foods and drinks myself and need the cooperation of billions of microbes in my intestine for digestion, also billions of 'good' microbes to protect my body from microbial infections.¹³ Individual life is terminal, so is mine; but I know of animals such as the naked mole-rat (*Heterocephalus glaber*)¹⁴ that show negligible aging due to different amino acid, peptide and lipid metabolism, and telomerase stability, which we might apply for extending human lifespans. Some of these interactions are guided by relatively strict rules such as movements within atoms or among neutrons, suns and planets; others are more flexible and sometimes unpredictable, such as movements and interactions within molecules or cells; similarly flexible are interactions and interdependencies in natural and social biotopes.

2. This is what we have done: We have manipulated some of these well-established interconnected systems, i.e. we have built houses, cities, streets for improving community and quality of life; we have produced clothing, machines, technologies, legal, educational, liberating, and indoctrinating systems; we have separated the extremely few unstable Uranium atoms and put them together for a deadly mix of atomic explosion or for producing nuclear energy; we have modified human and other DNA, transplanted organs and developed mood-modifying medicines and recreational foodstuffs; we have manipulated natural biotopes into fields for cultivated crops, some as sustainable agricultures for long life and others in deconstructive modification of microbial and plant environment and most likely also deconstructive for our children and us. Neonatal Intensive Care Units (NICU's) have saved 100.000's of early newborns, which was not

13 Lopez Moratella N, Santiago E, Hernanz G (2011), Inicio de la vida de cada ser humano, *Cuadernos de Bioetica*, 22(75), 283-308; Deglincerti A, Croft G, Pietila L et al (2016), Self-organization of the in vitro attached human embryo, *Nature*, 532(7602), 251-4. When I make my intestinal microbes 'unhappy' I will suffer from diarrhea or constipation; when I take antibiotics to kill unwanted bacteria, I harm also the 'good' ones. When I travel away from my family and my dog, their and mine and my dog's intestine microbiome will change; so closely are we interrelated and interacting even at this level. I will not survive on my own; even my stone-age ancestors had to communicate and cooperate in hunting, protecting the clan, surviving harsh seasons, cultivating fire, developing weapons and shelters, and keep their spirits and moods up by narrating and contemplating stories of success and mythical 'support' of higher powers and calculating future strategies, based on that stabilizing guidance. I would not be without my mother and father interacting in sex and love, in my care and education. My mother and father were interacting with their families, neighborhoods, employers, colleagues, friends in many, often complex and countless ways of interaction; so do I. Human bios is not just determined by genetic properties forming a zygote, but also by epigenetic factors prior and after birth, which put special responsibility on maternal and social environments.

14 Lewis KN, Rubinstein ND, Buffenstein R (2018), A Window into Extreme Longevity, *GeoScience*, 40(2), 105-21.

thinkable 50 years ago, and doctors and nurses have been sued or fired if they did not do their best in pediatrics¹⁵; but who sues communities or politicians or states over millions of neglected kids? Most of us love our kids as good parents, but some kids are obese, is that an indication of parental love, parental abuse, or parental neglect? National laws and public health regulations are not yet capable of addressing such an issue.¹⁶ Women have frozen their eggs during essential stages of their career, but then they do not find the right partner to raise a family with.¹⁷ At this point, we are already using many technologies combining geospace and cyberspace bios, and our children and we will very soon interact with transhuman bios. WebMD has recently signed a contract with Tencent Holdings to provide health care content and advice for more than a billion Chinese in their local language, expanding and probably even replacing personal care by physicians.¹⁸ This human-specific ‘attitude and ethics towards bios’ is our specific endowment to control our curiosity and creativity by means of controlling refrains and guiding commandments on manipulating our natural and social biotopes and ourselves. This has been called ‘flexible strategizing’: ‘The relevant environment for human social success is the collection of flexible strategies employed by other human individuals or groups. Inflexibility and preprogramming would be the worst possible strategy in the face of conflict of interest, competition, the importance of cooperation, and other aspects of sociality’.¹⁹ We have used special properties, shared in various degrees with other bios, to develop cultures, which including their risks are special for us humans; they include the 8 C’s: communication and cooperation, competence and competition, contemplation and calculation, compassion and cultivation.²⁰ Even before our ancestors left the trees in Africa, they had to communicate and cooperate for survival and for a better life. Every village needs experts in many fields, such as medicine, midwifery, baking, and housebuilding; if there are more than one baker in a village, they will compete in the quality or variety of bread and cake or price for the benefit of all. Contemplating and interacting with ‘God and the World’ and then using new or old insights in calculating and executing actions is our human way to protect and to modify ourselves and our community, to construct and to destruct for good and bad. We share

15 Cf Lantos JD (2006), Hooked on Neonatology, in: Mullan F, Ficklen E, Rubin K, eds, Narrative matters, Baltimore; Hopkins 2006, 41-8.

16 Priest M (2018), Are Obese Children Abused Children?, *Hastings Center Report*, 48(4), 31-41.

17 Murphy H (2018), Lots of successful Women are freezing their eggs. But it may not be about their careers, *New York Times* July 3.

18 Li Shan (2018), WebMD reaches into Asia, *Wall Street J* July 24.

19 Alexander RD, (2017). *The Biology of Moral Systems*. New York: Routledge, 9.

20 Sass HM, (2016). 41-56.

compassion with each other and with other forms of bios and may strive to include compassion and our other mentioned biological gifts in cultivating these capacities for sustaining the levels of social and cultural stability, health and happiness. Recognizing all, what we humans have done so far, Richard Alexander rightly summarizes: ‘uniquely among living beings ... humans have so controlled their environments that virtually their only significant hostile force of nature now is other humans; ... humans have evolved to cooperate extensively in direct intergroup competition. Only humans play competitively group-against-group ... only in humans are war and other forms of intergroup competition the central aspects and driving forces of social existence’.²¹

3. This is what we have hoped for: We have used our uniquely human dreams and desires applying our 8 C-capacities to develop our own quite different and diverse forms of social and cultural bios and applied for that purpose narrative-based spiritual, moral and educational guidance via story-telling, religions, philosophies, dogmatic temples, political constitutions, systems of law, police, protection by walls, weapons, armies, threats, and outright war. Therefore, we humans depend on our successful, healthy, sustainable and happy individual and collective bios, an ethics of bios, - bioethics as an integrating, pluriperspective, and multifunctional instrument. – Of course, today our goals and dreams of happiness, groupiness, health, stability, long life, and enjoyment are different from those of the stone-age cavemen and the narratives told for millennia at nomadic fireplaces, but they still seem to be of the same fabric of human bios. ‘Man does not live by bread alone’ said Jesus²² and meant these invisible powers, which have demonstrated their powerful reality as orientational guides and rulers, represented in the myriads of religions and stories, pieces of art and music, models of education and meditation.²³ – Because of the special biological endowments of us humans to yet be ‘unfinished’ in the realization and

21 Alexander, *lc.*, 261.

22 Matth 4:4.

23 Some species are more social than others; foxes make love and raise their offsprings well, but they do not live in social groups, such as wolves or deer or we humans. Other species form fully integrated communal bodies, such as bees and ants, where the individual is a part of a larger social body and roles and services within the social body that cannot be reversed. Among wolves and deer individual's roles are not defined in such a strict irreversible manner. We humans, individually and collectively, are social beings as well and have formed clans, communities, states for sustained interaction and lasting cultivation, - but not in the completely integrated form as bees and ants do, rather wolves and deer alike where social roles among members and sexes have to be defined and redefined depending on the inner-workings of the individuals within the pack. Are ants and bees on a higher stage of evolution for survival than wolves and humans? Maybe the multiple options to form, to modify, and to cultivate social and political bodies have allowed us humans to form many varieties of our complex sustainable social bodies, live in all climates and develop different forms of technologies, societies, and cultures, interdependencies and interactions based on our shared human endowments for curiosity and creativity, construction and control. Thus, human groupiness being not fully ‘finished’ has given us superiority of those totally integrated folks of ants and bees, and allowed to create the richness of diverse cultures, states, technologies.

application of our specific set of the 8 C properties, we need ‘an ethics of how to deal with bios’, and we have developed many model customs, rules, and cultures of cooperation, control, construction of natural and social biotopes, some more civilized and living longer for the good of all, others exploitive and dictatorial, some even what we as humans call ‘inhumane’. Caring for and cultivating our lives, environments, and groups is our specific human heritage, – and that is what bio-ethics is for!

3. THE ‘SCIENCE OF SURVIVAL’ AND ‘THE BIOETHICAL IMPERATIVE’

In order to assess our role in the integrated and interacting world of bios, I have used the term ‘*complex adaptable system*’, which I have not found in bioethics in, political science or in philosophy, but in business consulting strategy, where it has been developed to assess and guide healthy and stable corporations: ‘Complex adaptive systems are often nested in broader systems. A population is a CAS [complex adaptive system] nested in a natural ecosystem, which in itself is nested in the broader biological environment. A company is a CAS nested in a business ecosystem, which is nested in the broader societal environment. Complexity therefore exists at multiple levels, not just within the organizational boundaries; and at each level there is a tension between what is good for an individual agent and what is good for the larger system’.²⁴ I broaden and apply this definition in more general terms to the interdependent and interacting bios of our *body politic* as a whole. And thus, I put emphasis on the fact that complexity supports stability and healthy modes of adapting flexibly to changing biotopes of our body politic; communities and technologies, regions and religions are being interacting parts of the body politic, which may be a national or a global one.²⁵ Survival is the goal of all systems of bios and science and education that have been developed by us in order to protect and sustain our complex bios, - we are using the term ‘bioethics’ for this task and endeavor.

24 Reeves M, Levin S, Ueda D (2016), The Biology of Corporate Survival: Natural Ecosystems Hold Surprising Lessons for Business, *Harvard Business Review*, Jan/Febr, 49; cf Levin S, (1999). *Fragile Dominion: Complexity and the Commons*, Cambridge: Perseus; Russell Hochschild A, (2012). *The Managed Heart: Commercialization of Human Feeling*, Berkeley: University California Press; Sass HM, (2016), 209-20.

25 What contemporary economists call CAD, traditionally had been called ‘dialectical’ by Socrates, the father of European philosophy, and Marx, the father of communism; cf. Sass HM (1988), Marx und der Markt, *Deutsche Philosophie*, 4, China, 186-219, cf. 194f; Marx did recognize the close systematic connection between the Socratic and Marxian historical situation in comparing the challenge to humanism and reflecting the nature of humans as a value-based social being in times of perverted markets; cf Marx: ‘at the end of the dialectical processes of markets there will be a social association where ‘the free development of everyone will also be the condition for the free development of all’ (Marx, ed. Lieber II:843).

Van Rensselaer Potter, a research oncologist at the Wisconsin Medical School in Madison WI, made this essential role of bioethics urgent and pressing, when in an 1970 article 'Bioethics: the Science of Survival' he argued: 'mankind is in urgent need of new wisdom that will provide the *knowledge of how to use knowledge* for man's survival and for improvement of the quality of life ... I therefore propose the term 'bioethics' in order to emphasize the two most important ingredients in achieving the new wisdom that is so desperately needed: biological knowledge, human values ... It is the foundation on which we build *ecology*, which is the relation among plants, animals, man, and the physical environment'.²⁶ Potter did not know that the term bioethics was actually coined by the German Pastor Fritz Jahr in Halle/Saale already in 1926, appealing to an innate human capacity of compassion and an imperative to do accordingly. Fritz Jahr in a short article 'Life Sciences and the Teaching of Ethics' formulated this demand as 'a guiding *principle for our actions in the Bio-ethical Imperative: Respect every living being in general as an end in itself and treat it, if possible, as such*'.²⁷ Jahr, thus, extends the Categorical Imperative, - formulated by Immanuel Kant in 1785 as a guiding rule for enlightened civilized rule in 'respecting humanity, in your own person, as well as in any other person, on principle as an end in itself, never only as a means to an end', - from humans to all of life, including animals, plants, also to natural and social biotopes. Kant's Categorical Imperative was formal and rigorous in respect to the '*Sanctity of the Moral Law*'; Jahr's Bioethical Imperative is compassionate and overcomes and consoles unhealthy extreme forms of egoisms and altruism in the 'Sanctity of Life', 'in the relationship of the individual as a part of a community, may it be a professional organization, a political party, a village or an urban community, a national organization etc.'.²⁸ Of course, Jahr also made a difference between healthy and unhealthy living-together and he discussed priorities within bioethics.²⁹ He as well as Albert Schweitzer would not have tolerated mice and lice in hospitals, but they would have warned against destroying those biotopes, in which mice and lice play important interactive roles within healthy and integrated biotopes; Albert Schweitzer in Lambarene was said to have kept a section of his desk free of paper because it was used by ants on a busy street.

26 Potter VR (1970), (Bioethics). The Science of Survival, *Perspectives in Biology and Medicine*, 14, 123-53. Tom Beauchamp and James Childress ('Principles of Biomedical Ethics' 1979, 7th edition 2013) together with the Kennedy Institute of Ethics at Georgetown University, Washington DC, use the term biomedical ethics to promote a transition from a traditional paternalistic model of medical decision-making towards new forms of physician-patient partnership in promoting the four principles 'respect for autonomy, non-maleficence, beneficence, justice', that could/should be respected by everyone in pluralistic societies; cf. US National Commission for the Protection of Human Subjects: 'The Belmont Report' 1978.

27 Jahr F (2013), *Essays in Bioethics 1924-1948*, English Language Edition. Translated by Miller I, Sass HM, eds, Zuerich: Lit 2013, 20f.

28 Ibid, 54.

29 One of Jahr's points was the difference between 'necessity' (JG Herder) and 'destiny' (KC Krause) of individual and species forms of bios; cf. Jahr F (2013), 20.

Jahr was modest enough to not claim to have found a new solution to solve old problems; his article has the subtitle 'Old Knowledge in New Clothing'. He refers to comparative biological, anthropological, and philosophical studies, in other articles he shows specific influence of Buddhist and Indian thought; and he also indicates the relevance of those comparative and their 'practical value in medicine: animal experiments, blood and serum research, ... transplants of gonads from primates into humans'.³⁰ Of course, clinical bioethics today has expanded in many more fields and transformed traditional doctor-dominated medicine more and more into expert-lay partnership decision-making, informed consenting and informed contracting. Individual health responsibility and public health care ethics were also topics favored by Pastor Jahr, when he interpreted the 5th Commandment 'Thou shall not kill' in three most unusual steps: (1) duty of self-preservation by abstaining from unhealthy life styles, excesses in eating and drinking, anger, sex and daredevilry, (2) public health and healthy living in the entire community, (3) the avoidance of harm and killing extends to all forms of life, and thus a comprehensive '*transcription*' of the 5th Commandment is the Bioethical Imperative.³¹

Jahr coined the term bio-ethics but did not 'invent' the 'ethics towards bios'. We may quote the over 3000 years old Vedic slogan 'tat tvam asi' – this is also you: the snake, the flower, the woods, the dog, the neighbor.³² When Jesus refused to positively respond to an answer regarding the detailed complexities of the Mosaic Law and just said 'love God and love your neighbor as yourself', he differentiated between dogmatic hierarchy and legal rigidity in religion and the 'love for bios'. Would Jesus have rejected when someone would have told him 'follow the way of Tao'? Or would he have argued against Confucius³³, who said 'do not do to others, what you would not desire for yourself'? 2500 years ago Socrates on the marketplace in Athens criticized Euthyphro who had argued that the Gods have created the laws of good and bad, and argued himself that the Gods love the 'good' just because it is good; similarly argued my late colleague Richard McCormick SJ at the Georgetown University: 'One need not to be a Christian to be concerned with the poor, with health, with food problems, with justice and rights. But if one is a Christian and is not so concerned, something is wrong with that Christianity. It has ceased to be Christian because it has ceased to be what his founder was – human'. Can we say the same for Buddhists, Muslims, Daoists, Marxists, Humanists, when they cease to respect the bioethical imperative, i.e. 'to be human'? Diversity in belief and visions

30 Jahr l.c., 17.

31 Jahr l.c., 84.

32 You are what your deep driving desire is; as your desire is, so is your will. As your will is, so is your deed. As your deed is, so is destiny' (Brihadaranyaka Upanishads).

33 Analects 12:2.

may be a stabilizing factor in complex interdependent systems such as our societies are. The pious Rabbi and enlightened philosopher Moses Mendelssohn argued ‘let us not lie about consensus when plurality seems to have been the goal of providence’.³⁴ Over 1000 years earlier the Prophet Mohamed had said ‘differences of opinion in the congregation must be considered as a special grace of Allah’.³⁵ Did and do religious persecutions, fight about dogmatics, tortures, and recent sexual scandals involving Catholic priests not violate the Bioethical Imperative and an innate strive to ‘do good’ supporting stable and differentiated judgment and action in protecting and supporting the ethics towards all forms of bios?

Darryl Macer calls bioethics ‘love of life’³⁶, Ante Covic coined the terms ‘pluriperspective’ and ‘integrated bioethics’. Luka Tomasevic summarized 10 years ago the contemporary actually fully integrated concept of interdisciplinary and intercultural global bioethics: ‘Today we speak of bioethics from the medical, religious, cultural, philosophical, legal, sociological, and even political standpoint. No matter how many perspectives, approaches, and standpoints bioethics has, they are all focused on one point we call *life*, and bioethics at the extreme is nothing else than *love for life*. At the same time, all men accept that *life must be respected* in all its forms, phases and circumstances of appearance. If we set off from that fact, then all of us, on different sides of the world, in different disciplines, cultures and traditions, can better understand and exchange thoughts and experiences’.³⁷ Farida Tansykovna and Marina Yuryevna recently defined bioethics as ‘the interdisciplinary field of knowledge’ leaning ‘toward philosophy by its content’s “specific gravity” and reflects results of global social changes affecting the ultimate foundations of man, nature, and the society’.³⁸ This comes close to the 1997 Chennai Statement: ‘Bioethics is an interdisciplinary subject including the study of environmental, ethical, legal, and social issues, raised by the applications of biology, medicine, and science. Wide interdisciplinary debate is encouraged’.³⁹

34 Mendelsohn M (1819), *Jerusalem oder ueber religioese Macht und Judentum*. Ofen, Burian, 201.

35 Paret R (1979), Innerislamischer Pluralismus, in: *Die islamische Welt*. Wiesbaden: Steiner, 523-29; cf Sura 11:118f, If the Lord truly had wanted, he would have made humankind a single community (umma wahida), but they are still arguing (muhtalifun), but there are limits to human manipulation: ‘And the sky has He raised high and has devised (for all things) a balance, so that you might never transgress the balance: weigh, therefore (your deeds) with equity, and do not upset the balance’, Sura 55:7-9.

36 Macer D (2012), Fritz Jahr and Love of Life, in: Muzur A, Sass HM, eds, *Fritz Jahr And the Foundations of Global Bioethics*, Paris, 258.

37 Tomasevic L (2009), *From Medical Ethics to Integrative Bioethics* [Foreword]. Zagreb, 15.

38 Tansykovna NF, Yuryevna GM (2018), Russian School of Bioethics, IntechOpen, 101-20.

39 Chennai Statement on Bioethics, (1997), *Eubios*, 7, 34.

4. BIOS: SOCIAL, CORPORATE, CULTURAL, POLITICAL BODIES

Human societies are more or less well integrated political and social biotopes and have always been recognized as such living entities, not just by the letters of their constitutions, by laws and regulations or by their houses, tools and streets. The Tao says ‘we build rooms with windows and doors, but it is the inner space which makes the room livable’.⁴⁰ Indeed, we build different rooms, living rooms and sleeping rooms, private rooms and public rooms, concert halls and dance halls and town halls, torture chambers and court chambers, office rooms and chatrooms, - all these different rooms only express part of our social, cultural, and political body.⁴¹ Thomas Hobbes, one of the most influential European political thinkers published in 1651 the ‘Leviathan or the Matter, Former and Power of a Common Wealth Ecclesiastical and Civil’, the engraving by Abraham Bosse on the title page shows the mythological figure of the Leviathan, his body formed by individual human persons and holding a sword (political power) and a religious ceremonious crosier (value power) in his hands symbolizing the powers and matters of police and values in ruling and governing the political body. The oversized body of the Leviathan represents the biological, biosocial, bioethical, and biopolitical power of the body politic surrounded by cultivated agrarian lands, houses, castles, machines, all of his making.⁴² Today, in the age of globalization and the internet, we would sketch another landscape of the Leviathan including cellphones, autos, computers, robots and cobots (companion robots). A growing number of corporate persons populate our human biotopes, among them the FAANG’s (Facebook, Amazon, Alibaba, Netflix, Google); but there are still the old corporate industrial neighbors such as General Motors, Nestle, Siemens.

Hospitals are corporate neighbors as well and in order to be respected and gratefully honored, they have to develop flexible and adaptable internal and external interactions.⁴³ Corporate health care providers are integrated in their social biotope,

40 Tao Te Ching 11.

41 In European culture it was Christine de Pizan, a poet and philosopher, at the Court of Charles V of France, considered to be one of the first feminists, who wrote the book ‘Livre du Corps Policie’, - Book of the Body Politic – in 1407.

42 Sass HM (2014), Bioethik/Bioethics, *Archiv für Begriffsgeschichte*, 56, 221-8.

43 Bioethics also includes my own commitment to understand myself as being a part of a larger form of life and behave accordingly: ‘The social moral standards, the group ethics standards and the governmental legal standards of right and wrong, good and bad behavior in the society, groups and state in which one enjoys the benefits of membership as also a part of one’s world unless (a) one has explicitly and publicly expressed an intention not to keep one or more of these standards, and (b) one is willing to bear the costs of refusing to conform to these standards’, and the same level of integrity is required for any corporate person as well. Cf: Christensen K (2018), Do you Lead with Integrity? Interview with Michael Jensen, *Insigiam. Transforming the Practice of Management and Leadership*, 6(1), 43. For the corporate person there is the same requirement for integrity: ‘An organization (of any human system) is in integrity when: (1) it is whole and complete with respect to its word. This includes

work hard to have a good reputation, and strive to become indispensable and highly valued fellow citizens.⁴⁴ ⁴⁵ Some hospitals even reach out via cyberspace to provide health advice for simple day-to-day issues, such as diarrhea or constipation, the cold in the winter and sunburn in the summer, sleeplessness or being tired all the time. Others provide e-health information alone⁴⁶ or specialized fitness training nutritional advice, Tai Chi, Yoga, meditation classes⁴⁷ or offer self-examination tests.⁴⁸ Unfortunately, an early promising start of e-health sites seems to have stopped, maybe because the medical establishment felt threatened by the internet competition.⁴⁹ Many fellow humans and in particular children are disadvantaged by reasons of social and educational background and need a priority in social justice.⁵⁰ ⁵¹ Modern hospitals also have new and most sophisticated organs in their body, such as MRI and X-Ray machines, but these new organs will not be able to replace a good doctor or a kindergarten teacher or a parent; we would need a totally new brand of AI to achieve that.

that nothing is hidden, no deception, no untruths, no violation of contracts or property rights, etc, (2) that is to say an organization honors its word: internally between members of the organization and those it deals with. This includes what is said by or on behalf of the organization to its members as well as outsiders', lc.44.

44 Sass HM (2013), *The Clinic as a Good Corporate Neighbor*, *Croat Med J*, 54(1), 78–82; cf Sass HM (2016) lc., chapter 13.3: Clinics and Health Care Institutions as Living Beings, 213-20.

45 Hospitals as corporate health care providers may orient themselves on the rules by famous Confucian doctor Sun Simiao for individual health professionals: 'Doctors should first understand the cause of the disease, then treat it with diet; medicine should only be used when diet fails'. Such an understanding of the complex art and science of caring for health is met by European/s father of medicine Hippocrates, who recognized that the health of the body and the mind being governed through the right way of living based on six cultivating effects (diata: res non-naturales): air, food and drink, activity and rest, sleep and wakefulness, secretion and excretion, and mental affections (aer, cibus et potus, motus et quies, somnus et vigilia, secreta et excreta, affectus animi) Cf Sass HM (2016), 143-55, 175-85.

46 Eysenbach G (2001), What is E-Health?, *J Med Internet Research*, 3(2), e20; Sass HM (2006b), *Bioethics and Biopolitics*. Xian; press.fmmu.sn.en, 256-76; Sass HM, Zhai XM (2004), E-Health – a yet to be recognized issue in Medicine and Medical Ethics, *Eubios* 14, 147-8.

47 Cf. for Tai Chi the site 'Joy through Movement'.

48 Cf. RealAge.com.

49 The HealthyPeople.gov in the USA site has been closed; the German government supported by the *Bundesgesundheitsamt* (Federal Health Office) does not provide any basic health care education and information but spends selectively a lot of funds telling me in big posters at railroad stations and other public places that sex is good, but with use of condoms is even better, also that smoking is bad.

50 Powers M, Faden R, (2006). *Social Justice. The Moral Foundations of Public Health and Health Policy*. Oxford, esp, 92-5.

51 The World Health Organization, WHO, criticizes medicine which understands itself as a repair business, because 'health is a state of complete physical, mental and social wellbeing and not merely the absence of disease and infirmity'; I go one step further and give the educated and emancipated citizen an even more important role in the interacting partnership of caring for health: 'Health is a process and a balanced result of health-literate and health-competent care of one's own physical, emotional, and social wellbeing, achieved by competent understanding, modification, and enhancement of individual genetic, social, and environmental risk factor and challenges, with the support of health care professionals and through equal and fair access to health care services, including health education and preventive services', cf. Sass HM (2006a), *Cultivating and Harmonizing Virtues and Principles*, *Asian Bioethics Review*, 3(1), 38.

Contemporary non-geographic communal and social bodies in the virtual worlds of the internet play similar roles as traditional religions did for millennia. Religious players traditionally and internet players today have as well exploited people. Thus, we have to include religions, communities in geospace and cyberspace, also corporate bodies as a third category of bios between countries and individuals in need of education, refinement, and self-education. It is a good strategy to honor individuals, communities, and corporations, who serve their neighborhoods and biotopes well as exemplary role models in public. All of them can be good or evil, healthy or sick. All three groups, political bodies, non-state bodies, and we individuals will have to learn and to refine themselves for long-lasting, harmonious, prosperous, stable, and happy lives. The newly created cyberspace bodies and growing influence of corporate bodies have not changed general human expectations towards health and happiness of individual and communal bios, only specifics, trends, and fashions.

Progress and stability of societies and business traditionally was measured by GNP - Gross National Product - providing economic data on income distribution and on corporate and fiscal profits. But money is not everything in life, and people are unhappy for a multitude of other things than just their economic wellbeing. Discontent has been reported in fractioned and unhappy societies for reasons other than money and economic conditions.⁵² Another measurement has been developed which seems to be much more adequate to measure the stability and health of a community and nation, of social and political bodies in general: the GHP - Gross Happiness Product -. In 1972 Jigme Singye Wangchuck, the King of Bhutan, introduced at the young age of 27 years, just after his coronation, the concept of GHP for his country, an index measuring issues of pride, coherence, satisfaction, knowledge, spirituality, individual emotional and physical health, harmony with the environment and balanced use of personal time, and of course a decent economic base without hunger, and other basic

52 Confucius, when asked about good government said: 'The requisites of good government are that there be sufficient food, sufficient military equipment, and trust of the people in their ruler', the last one be the most important.

needs satisfied.⁵³ The United Nations in 2012 adopted this concept of happiness and defined happiness as a human right and a ‘fundamental human goal’.⁵⁴

What holds employees and workers in corporations together, and also believers in religions? It is the fabric of mutual respect and common enjoyment and appreciation, being accepted as a valued member of the group. Next to each-other appreciation and valuing within the business body of the corporation or the spiritual body of the religion, there are also traditional activities of intermingling people for happiness and togetherness: seasonal festivals, such as celebrating spring, summer, harvest, octoberfest, religious holidays, and the new year; neighborhood festivals remembering local heroes and/or traditions, inauguration festivals of churches or museums or monuments; specific sports event, routine festivities in kindergartens, schools, neighborhoods, and high-rise buildings.⁵⁵

53 Policy Innovations, in: <http://www.policyinnovations.org/ideas/briefings/data/000098/>; Bhutan GNH (2018). *11th Five-Year-Plan 2012-2018. Self-Reliance and Inclusive Green Socioeconomic Development Final Report*. GNH Foundation, XIX, and 467; in 2015 8.4% of the population were deeply happy, 35% extensively happy, 47% narrowly happy, 8.8% unhappy; this was a 1.8% improvement over the figures of 2010; cf Devine J, Hinks T, Naveed A (2017), Happiness in Bangladesh: The Role of Religion and Connectedness, *J of Happiness Studies*, 1-21. At his inauguration ceremony the successor of King Jigme Syngye Wangchuck, his son King Jigme Khesar Namgyel Wangchuck, in 2006 promised his people ‘Throughout my reign, I will never rule you as a King. I will protect you as a parent; care for you as a brother, and serve you as a son. I shall give you everything and keep nothing. I will live such a life as a good human being that you might find it worthy to serve as an example for your children; I have no personal goals other than to fulfill your hopes and aspirations; I shall always serve, day and night, in the spirit of kindness, justice and equality’.

54 The actual 2013-2018 plan details goals and estimates of cost for the support of infrastructure, communication, internet, schools, local communities, trade, environment, renewable resources, vulnerable populations, and the elderly. The index now includes eight pillars with greater specificity as general contributors to happiness: ‘physical, mental and spiritual health; time-balance; social and community vitality; cultural vitality; education; living standards; good governance; ecological vitality’ It has been estimated that in economic terms business loses 350 billion US\$ every year due to unhappy workers; cf various Wikipedia articles for more detailed information.

The General Assembly of the UN introduced in 2012 (Resolution 66/281) March 20 of each year as ‘International Day of Happiness’: ‘Conscious that the pursuit of happiness is a fundamental human goal, recognizing also the need for a more inclusive, equitable and balanced approach to economic growth that promotes sustainable development, poverty eradication, happiness and the well-being of all peoples, decides to proclaim 20 March the International Day of Happiness, invites all Member States, organizations of the United Nations system and other international and regional organizations, as well as civil society, including non-governmental organizations and individuals, to observe the International Day of Happiness in an appropriate manner, including through education and public awareness-raising activities’. Slogans and recipes for happier lives of individuals and communities include: ‘take care of yourself’, ‘love and help children’, ‘set a good example’, ‘do not harm a person of good will’, ‘safeguard and improve your environment’, ‘try to treat others as you would want them to treat you’; ‘make your personal happiness resolution’; ‘your happiness is part of something bigger’. - The person in charge of the UN ‘International Day of Happiness’ is Jayme Illien, an orphan rescued from the streets of Calcutta, India by Mother Teresa’s International Mission of Hope charities and later adopted by a single white American woman named Anna Belle Illien.

55 Modern high-rise building unfortunately do not have as many spaces as traditional smaller communities had for semi-public or public activities and that should be changed in building codes, so that small-community events and coherence can happen and stabilize local and geographical community towards the attractions and temptations of digital networks.

But life is not just fun, bios not just about happiness; there are other forces that determine our social and moral innerworkings, success or failure, as discussed by Richard Alexander and others in studying social evolution: ‘Human cooperative behavior, and associated moral codes, have evolved through a delicate dance of incentives (e.g. honor, recognition, and reward) and disincentives (e.g. punishment, shaming, and shunning) among individuals who are balanced on a knife edge of competition for hierarchy negotiation within groups and competition and warfare between groups’.⁵⁶ For the interplay between individual freedom and dialectical social action, controversy and interaction Tris Engelhardt had introduced the term ‘moral strangers’. But even given those controversies and discourses, the ‘res non-naturales’ are a message and education for all human bios; they are not described for doctors or experts, they are for all of us, our kids, our societies and communities as ‘ars vivendi’, the wisdom and knowledge of how to live good and of good living, harmony between sleeping and acting, working and relaxing, control and enjoyment of emotions, feelings, loving, which makes ‘health’ and living healthy a ‘virtue’ as Galen called it and the doctors only ‘ministers of nature’, not producers such as a carpenter produces a cabinet or chair.⁵⁷

What holds employees and workers in corporations and believers in religions and all of us together in our biotopes? Is it the fabric of mutual respect and common enjoyment and appreciation, being accepted as a valued member of the group? Next to the groupiness of each-other appreciation within the business body of the corporation or the spiritual body of the religion or the geographical body of a village or a high-rise, there are also traditional activities of intermingling people for happiness and togetherness in seasonal festivals and special events for fun and togetherness in geospace. The old Vedic slogan ‘tat tvam asi’ might not just be an expression of sentimental compassion,

56 Summers K, Crespi B (2013) *Human Social Evolution*. The foundational Works of Richard D. Alexander. Oxford U Press, 15. - Do we need new forms of healthy, happy and sustainable integrated political and social bodies for the 21st century or may we just transform and translate traditionally successful models of integration and stability into the new biotopes of global geospaces and cyberspaces, and ever more complex artificial biotopes? Since our human properties, dreams and visions have not changed for millennia, we may just translate traditional parameters into the new biotopes of our own making. The Complex Adaptive Systems, i.e. non-state communities such as traditional and new religions and big and small corporations, play important roles not just in economic terms but also in making people feel happy, connected and being valuable and appreciated members of the workplace and the other communities. Religions are not just edifices of orthodoxy and corporations are not just money-making machines, both are in various and different forms bodies including individuals and groups, which themselves are not just robots but empathic and emotional human bodies, enjoying togetherness and happiness. ‘Every organization has an emotional culture, even if it’s one of suppression’ describe Basarde and O’Neill the inner-workings of corporations and call for sensitive cultivation of ‘emotional culture’ for the benefit of the corporation and the corporate biotope. Can we use cyberspace, just as we use it for SecondLife and other interactive games, also for value games and VR learning and enjoyment? Are we, our religions and humanist people or even political bodies, ready to produce enjoyable IT games for enjoying good and healthy Buddhist, Christian, Muslim, interreligious or humanist games for fun, social, and bioethical learning?

57 Bergdolt K (2002), *Gesundheit eine Tugend. Zur Eigenverantwortung des Patienten in der Gesellschaft von morgen*, in: Guthoff R, Bergdolt K, eds, (2002), *Ethik, Oekonomie, Augenheilkund*, Köln, 15-31.

but also a well thought out advice to not disturb or ruin or kill complex living and interacting bios of one's own benefit. The complex and adaptable bios is not uniform; it prospers on complexity and harmonious integration and interaction, in a form of gentleman-like honor of 'harmony in diversity. Confucius said: 'The gentleman aims at harmony, and not at uniformity (*junzi he er bu tong*, 君子和而不同)⁵⁸: 'Thus, a gentleman may hold different views, but he does not blindly follow others. Instead, he seeks to coexist harmoniously with them'. Confucian scholar Mencius underlined more in detail the complexity in the interactions of individuals within social bodies: 'Between father and son, there should be affection; between ruler and minister there should be righteousness; between husband and wife there should be attention their different functions; between the young and the old, there should be a proper order; and between friends there should be faithfulness'.⁵⁹ 'Translating Mencius' wisdom into the modern world of non-state persons and powers, we may state: 'Between partners on Alibaba and Amazon platforms there should be mutual respect; between internet friends on social sites there should be fairness and trust; between colleagues in professional cyberspace sites there should be scientific integrity; between neighbors in old villages and modern high-rise there should be neighborly solidarity, respect and mutual aid; between providers and users of various internet information sites there should be clear terminology for the lay users and reliable and unbiased and verifiable consultation by the providers; between doctors and patients and between all other experts and customers there should be adequate competence and compassion; between pediatricians, parents, nurses, educators in kindergartens and schools, and public health officials there should be communication, cooperation, and compassion for the best of the kids; between teacher and student there should be indoctrination-free and fact-based information and critical and value-based discourse; between different ethnic or religions, communities in society there should be mutual respect, mutual aid and tolerance; between provinces of a state there should be competition in respect of national laws and cultures, between sovereign states there should be respect for human and civil rights; between states, communities, corporations, and individuals

58 Confucius, Lun Yu, chapter 13, paragraph 23.

59 Mencius, quoted in: Legge J (1895), *The Chinese Classics*, Oxford: Clarendon, vol. 2, Similarly, Confucius' contemporary 2500 years ago, Lao-tzu said: 'Cultivate the self and virtue will be true; cultivate the family and virtue will be complete; cultivate the village and virtue will grow; cultivate the country and virtue will be rich; cultivate the world and virtue will be wide' (*Dao te Ching* 54), may we also translate Lao tzu' Imperative into: Cultivate yourself and life and virtue becomes true; cultivate individual and corporate persons and virtue will be great; cultivate social and natural environments and virtue will be full; cultivate communication and cooperation, and life will grow; cultivate compassion and competence, and life will be rich; cultivate life, and world and virtue will be wide'.

there should be cooperation and competition in protecting and cultivating natural and cultural environments and habitats'.⁶⁰

Or, may we simply replace Kant's anthropocentric Categorical Imperative by Jahr's wider biocentric *Bioethics Imperative*: 'Respect every living being as an end in itself and treat it, if possible, as such!' Buddha, Confucius, Moses, Mohamed, Jesus, John Lennon, and Lao Tzu would have agreed to such a diverse, stable, and integrated ethos and ethics towards bios, 'in harmony but diverse', 'different but harmonious', - in responsibility towards our children and our globe.

BIBLIOGRAPHY

1. Analects 12:2.
2. Avancini Alves C (2017) Fritz Jahr and Francis of Assisi: An Interface between Nature and Bioethics at the Beginning and the End of Life, in: Fritz Jahr 1895-1953, Byk C. and Sass HM eds, MA Eds ESKA, 47-61.
3. Baumann-Hoelzle R (2018), Die in-vitro Fertilisation, *Dialog Ethik*, 08-22-18.
4. Bhutan GNH (2018). *11th Five-Year-Plan 2012-2018. Self-Reliance and Inclusive Green Socioeconomic Development Final Report*. GNH Foundation.
5. Chennai Statement on Bioethics, (1997), *Eubios*, 7, 34.
6. Christensen K (2018), Do you Lead with Integrity? Interview with Michael Jensen, *Insigniam. Transforming the Practice of Management and Leadership*, 6(1), 43.
7. Confucius, Lun Yu.
8. Deglincerti A, Croft G, Pietila L et al (2016), Self-organization of the in vitro attached human embryo, *Nature*, 532(7602), 251-4.
9. Devine J, Hinks T, Naveed A (2017), Happiness in Bangladesh: The Role of Religion and Connectedness, *J of Happiness Studies*, 1-21.
10. Eysenbach G (2001), What is E-Health?, *J Med Internet Research*, 3(2):e20.
11. General Assembly of the UN introduced in 2012 (Resolution 66/281) March 20 of each year as 'International Day of Happiness'.
12. Guthoff R, Bergdolt K, eds, (2002), *Ethik, Oekonomie, Augenheilkund*, Köln.
13. Jahr F, (2013). *Essays in Bioethics 1924-1948*, English Language Edition. Translated by Miller I, and Sass HM, eds, Zuerich; Lit.
14. Johnston J, Parens E, and Koenig BA, eds, (2018), The Ethics of Sequencing Newborns. Reflections and Recommendations, *Hastings Center Report*, 48, S2.
15. Kant, *Logik Einleitung*, AA IX:25.
16. Legge J, (1895). *The Chinese Classics*, Oxford; Clarendon.
17. Levin S, (1999). *Fragile Dominion: Complexity and the Commons*, Cambridge; Perseus.
18. Lewis KN, Rubinstein ND, Buffenstein R (2018), A Window into extreme Longevity, in: *GeoScience*, 40(2), 105-21.
19. Li Shan (2018), WebMD reaches into Asia, *Wall Street J*, July 24.

60 Cf Sass HM (2014) ,What is Bios and How to Protect and Promote its Cultivation, *The International Symposium on Bioculturology: Guandong Life Culture Association Conference 2014*, 8f

20. Littman L (2018), Rapid-Onset Gender Dysphoria in Adolescents and Young Adults, *Plos.One*, 08-16-18.
21. Lopez Moratella N, Santiago E, Hernanz G (2011), Inicio de la vida de cada ser humano, *Cuadernos de Bioetica*, 22(75), 283-308.
22. Meister TA et al (2018), Association of Assisted Reproductive Technologies with Arterial Hypertension during Adolescence, *J American College Cardiology*, 71 [in print].
23. Mendelsohn M, (1819). *Jerusalem oder ueber religioese Mcht und Judentum*. Ofen: Burian.
24. Mullan F, Ficklen E, Rubin K, eds, (2006). *Narrative matters*, Baltimore; Hopkins.
25. Murphy H (2018), Lots of successful Women are freezing their eggs. But it may not be about their careers, *New York Times* July 3.
26. Muzur A, and Sass HM, eds, (2012). *Fritz Jahr and the Foundations of Global Bioethics*, Paris; Lit.
27. Paret R (1979), Innerislamischer Pluralismus, *Die islamische Welt*. Wiesbaden: Steiner, 523-29.
28. Potter VR (1970), (Bioethics) The Science of Survival, *Perspectives in Biology and Medicine*, 14, 123-53.
29. Powers M, Faden R, (2006). *Social Justice. The Moral Foundations of Public Health and Health Policy*. Oxford.
30. Priest M (2018), Are Obese Children Abused Children?, *Hastings Center Report*, 48(4), 31-41.
31. Reeves M, Levin S, Ueda D (2016), The Biology of Corporate Survival: Natural Ecosystems hold surprising Lessons for Business, *Harvard Business Review*, Jan/Febr.
32. *Rhyme and Discover*, vtech book.
33. Russell Hochschild A, (2012). *The Managed Heart: Commercialization of Human Feeling*, Berkeley; University California Press.
34. Sass HM (1988), Marx und der Markt, *Deutsche Philosophie*, 4, China, 186-219.
35. Sass HM (2006a), Cultivating and Harmonizing Virtues and Principles, *Asian Bioethics Review*, 3(1), 38.
36. Sass HM (2006b). *Bioethics and Biopolitics*. Xian; press.fmmu.sn.en.
37. Sass HM (2013), The Clinic as a Good Corporate Neighbor, *Croat Med J*, 54(1), 78–82.
38. Sass HM (2014), Bioethik/Bioethics, *Archiv für Begriffsgeschichte*, 56, 221-8.
39. Sass HM (2014), What is Bios and How to Protect and Promote its Cultivation, in: *The International Symposium on Bioculturology: Guandong Life Culture Association Conference 2014*.
40. Sass HM, (2016). *Cultures in Bioethics*, Zuerich; Lit.
41. Sass HM, Zhai XM (2004), E-Health – a yet to be recognized issue in Medicine and Medical Ethics, *Eubios*, 14, 147-8.
42. Schloemer T, Schroeder-Baeck P (2018), Criteria for Evaluating Transferability of Health Interventions: a Systematic Review and Thematic Synthesis, *Implementation Science*, 13.
43. Scholtes B, Schroeder-Baeck P (2017), Ethical Considerations for the Design and Implementation of Child Injury Prevention Interventions, *Injury Prevention*, 0, 1-5 2.
44. Second Life, website, press release 2016-04-26.
45. Summers K, Crespi B, (2013). *Human Social Evolution. The Foundational Works of Richard D. Alexander*. Oxford: University Press.
46. Tao Te Ching 11.
47. Tomasevic L (2009) *From Medical Ethics to Integrative Bioethics* [Foreword]. Zagreb: 15.
48. Transykovna NF, Yuryevna GM (2018), Russian School of Bioethics, *IntechOpen*, 101-20.
49. US National Commission for the Protection of Human Subjects (1978), *The Belmont Report*.
50. US President's Council of Bioethics (2003), *Beyond Therapy. Biotechnology and the Pursuit of Happiness*.

INTERNET LINKS

1. Policy Innovations, <http://www.policyinnovations.org/ideas/briefings/data/000098/> (accessed: 04 December 2018).

Bios i etika u našim složenim prilagodljivim sustavima. Odgovornosti prema našoj djeci i našem svijetu

SAŽETAK

Mi, naša tijela i duše i naši prirodni i društveni biotopi, složeni su prilagodljivi sustavi, međusobno ovisni i ranjivi unutar prirodnih, kulturnih i političkih biotopa, žudeći za životom, zdravljem i srećom. Klinička i pedijatrijska stručnost i etika također su integrirani u mnoga područja kompetencije i brige za naš integrirani bios i za održive biotope u prirodi i društvu. Bioetički imperativ poziva na zaštitu složenih i međusobno ovisnih biosa u prirodi i poljoprivredi i u našim društvenim, ekonomskim, korporativnim, kulturnim i političkim tijelima za dobrobit naše djece i nas samih te za raspravljanje o ‚zdravlju‘ i ‚poboljšanju‘ u etičkom, a ne samo tehničkom smislu. Zaštita i promicanje zdravih ljudi, održivih društava i raznovrsnih i stabilnih političkih tijela ovise o temeljnim ekonomskim postignućima, zdravoj hrani, skladnim zajednicama, očuvanju i raznolikosti kultura i okoliša, o dostojanstvu pojedinca i društvenom priznanju, odnosno o produktu velike sreće, a ne samo o bruto nacionalnim proizvodima [BNP] koji se mjere samo u ekonomskom smislu.

Cljučne riječi: bios, bioetika, djeca, sreća, zdravlje, integrirana bioetika, život, odgovornost, održivost.