

# **Institutional functioning assessed by weal: the universal set of human needs**

## **Conceptual paper**

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Abstract: *Institutional functioning assessed by weal: the universal set of human needs*

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*Following the rationalist utilitarian tradition the utility of institutions tends to be interpreted as that of enterprises, based on an input-output ratio.*

*Notwithstanding the usefulness of this narrow approach we know being human is not inherently capitalistic. Investing toil for harvesting pleasure is a story with a tendency among a multitude of possibilities. Humans take pleasure and endure pain while living a life of any institutional format. Being social takes an ontological precedence over being profitable, becoming individual or having freedom.*

*To grasp actual human totality a wide, rich and universal framework is offered by the social and life sciences, ethnology and human ecology of the present day, revealing a shared core of human being, shaped by human evolution: weal.*

*Weal can serve as an operational tool to assess institutional functioning. Institutions regulate access to others, belonging, having status and destination within and among communities.*

*The descriptive approach to weal, mapping it under the guidance of discrete scientific disciplines reveals a limited set of cardinal aspects, the cardinal needs. Cardinal expresses the fundamental reorientation weal can bring about, needs deliver the sense of sine qua non.*

*Weal is conceived as a oneness approachable by eight cardinal needs. The needs, approached as aspects instead of analytically isolated factors do not require mutually exclusive definitions.*

*Weal is operationalized as a domain in multidimensional space, each dimension encompassing an optimal level of availability of the fundamental satisfiers between the two extremes of drastic insufficiency and harmful excess. Optimal availability of all aspects offers the highest probability of well-being for the great majority of people, leaving open the local possibility of individual extremes. Weal characterizes communities with a given livelihood pertaining to a specific location.*

*Weal stands for the totality of socialized reality as framing well-being for the individual beyond the possibility of deliberate change or choice. The descriptive approach to weal, mapping it under the guidance of discrete scientific disciplines reveals a limited set of cardinal aspects, the cardinal needs. Cardinal expresses the fundamental reorientation weal can bring about, needs deliver the sense of sine qua non. Weal is conceived as a oneness approachable by eight cardinal needs, each satisfiable by two elementary satisfiers. The needs, approached as aspects instead of analytically isolated factors do not require mutually exclusive definitions. To serve the purpose of reorientation, weal is operationalized as a domain in multidimensional space, each dimension encompassing an optimal level of availability of the fundamental satisfiers between the two extremes of drastic insufficiency and harmful excess. Weal*

*seeks a balance among material and social aspects and allows for cultural and individual uniqueness in attaining human flourishing.*

## **Introduction**

The paramount institutions of our age are the ones serving free market and monetary wealth, global organizations, transnational enterprises, national and federal states. Free markets and monetization are postulated to ensure potentially limitless development for humanity. Although far from being proven, economics takes for granted that income and wealth correlates with human welfare and thereby endorses policies preferring economic gains over other desirable outcomes (e.g. equity, beauty, social cohesion, the protection of environment, etc.). The general consent on a certain degree of correlation between financially measured growth and the betterment of life leaves open the fundamental problem of economics: the relationship of economic development (cause), and net societal gains (effect). Equating the level of consumption with well-being becomes more and more problematic, standard social indicators have a strong bias towards services money can buy: education, health care services, pensions for the retired and the like, subjective approaches (happiness, quality of life and subjective well-being) all carry the conceptual ballast of their Western hedonistic origin.

The global society faces the triple dilemma of sustainability: that of non-renewable resources, that of the human carrying capacity of climatic and environmental burdens and the limits of social tolerance. Enhanced sustainability and the better of human life seem to be mutually exclusive given the limitless pursuit for economic growth and the finiteness of any earthly resource. A growing body of research (Max-Neef, 1995; Easterlin et al., 2010, Layard, 2010) cast doubt on the validity of the economic output = final human good equation.

The theoretical foundations of limitless development as a final good descend from the marriage of Smithian classical economic theory and Comtian positivism. The underlying postulate is positive incrementalism: the more (knowledge, work, production, services, technology and Western style civilization) the better. More human impact on planet Earth the better. The very idea of sustainability begs for the opposite: a non-infinite approach of the human quest for the betterment of the amenities of life.

Infinite development of the human endeavor interpreted as the endless growth of material consumption, mobility, life-easing services and entertainment is a thermodynamical, ecological, evolutionary biological, and social-psychological nonsense.

Economically viable resources for the biological sustenance, dense energy and industrial inputs are all finite, as well as the capacity of the earth as the sink of waste. The intricate symbiotic interdependencies of life delimit the malleability of the human species. Unalterable biologically founded needs, the close relationship dependence (Granovetter, 1985) of the human being and the limited carrying capacity of environmental burdens beg for a non-finite conceptualization of the human good.

Present paper attempts to develop a non-infinite conceptual framework for the human good, striving to make both ends, human well-being and sustainability of the earthly ecosystem meet.

## **The need of reorientation**

Postwar scientific research yielded a complex depository of myriad partial results about the nature of the human being. The disciplines delivering positive knowledge include evolutionary biology, ethology and the study of primates, anthropology, psychology and the social sciences. The general understanding that emerges from scientific quarters is a contradiction to the idea of the potentially infinitely intelligent, malleable and instructable man inherited from the age of enlightenment.

Ecology, the science of symbiosis underpins the coevolution and coexistence of the planet, the coexistence of human societies, cultures, communities and human individuals with all other forms of life, viruses, bacteria, protozoa, plants, insects, birds and mammals. Coexistence negates subjugation.

Life is not man-made, and the fast and final replacement of ecosystems by ecologies of man-made artifacts (Allenby, 2000) faces a colossal failure (Gullone, 2000).

Big industry, power-centralizing governments and big science deceive the greater public by their short-term success. One must remember that human history is a small fracture on the evolutionary time scale of mankind of which the last two centuries of industrialization, statism and monetization are another fracture.

Human being, intertwined with all other life forms on Earth depends on remained, and will remain fundamentally the same. Modernity lost from sight the ontological relationship of being human and producing human artifacts. Public discourse, economic and political in the first line claims an ontological priority for human production, with the underlying conviction that human power, production and control enables life.

One must bear on mind, that human communities lived, strived and flourished perhaps two million years without industrial and governmental services. Economy, all-pervading as we see it today, is new and mundane. Is it true, that market, big business and state are unavoidable institutions and the best conceivable ways of improving the human lot or is the economic and institutional order parasitising on human being? Do humans live due to or in spite of the massive systemized artificial intervention into being human?

Mainstream economic theory and state-based welfare ideology claim universal validity (Foregard et al, 2011, p.79-80). Development measured in monetary terms brings betterment for the entire humanity: this bold claim is rarely validated. Rising per capita GDP does not correlate ad infinitum with happiness (Easterlin et al. 2010), perceived security (Cunningham et al, 1990; Saad, 2011), health status (Deaton, 2008) or longevity (Olshansky, 2005).

Growth and affluence brought about the institutionalized free market and the resource-centralizing state may bring countless benefits while envelop acute human burdens and ecologic destruction on their flipside. Neither growth nor development is the final human good per se. As a fundamental basis for reorientation, weal is proposed.

### **One-sided infinity or multidimensional unity?**

The ontological relationship of positivistic indicators of development, such as wealth, the standard of living or material well-being is always that of production for consumption: the increasing levels of the human good are attained by the production of goods and services offered by private or public actors as private businesses, corporations and governmental agencies. Facing the scarcity of resources and the limitless need for the produced amenities for human life, the cause of improvement of the human condition is the improvement of volume, quality, or distribution of products and services.

Socioeconomic development aims the achievement of the twin fundamental values of modernity: (individual) freedom and (material) consumption, both to be met at ever higher levels in the course of time. The following approach, on the other hand, relies on the literature indicating that the final good is attained as a 'tertium datur', delimited between the extremes of vital factors.

Beyond the classic liberal economic and political paradigm, the non-infinite conceptualization of the human good can reach out for another rich source of European thought, Heideggerian and Schützian phenomenology. In this veneer good life is postulated as something being there

prior to any academic, industrial or social endeavor, prior to the development of money, market, positive science, state or history. What makes up for good human existence is shared by all humans as the fundamental factors of paramount reality. Humans grasp the same fundamental factors regardless acculturation, historical period and geographical relatedness. This is a whole, non-dividable and unalterable oneness that human communities with actual livelihoods approach by the course of their social (economic and technical) evolution.

Understanding and knowledge comes a posteriori of this good living. Descriptive understanding yields aspects that are indispensable for well-living. Whereas the number of aspects increases, the object of this knowledge remains the same, thus being lived before being known. The delimited aspects that are subjects of scientific inquiry serve the reorientation of human endeavor instead of being the enablers of analytical production of welfare. A limited set of aspects will suffice to map this human wholesomeness. The construct obtained via this 'reduction' is *weal*, the missing link between economic or social pursuits and subjective or individual well-being. As often stressed well-being is depending on individual traits and life circumstances, as well as quality of life as led under personal and societal constraints, following internalized values and institutionalized requirements.

Weal is conceived as an oneness approachable by eight cardinal needs, each satisfiable by two elementary satisfiers. The needs, isolated as aspects instead of analytically conceived factors do not require mutually exclusive definitions.

The descriptive approach to weal, mapping it under the guidance of discrete scientific disciplines reveals a limited set of cardinal aspects, the cardinal needs. Cardinal expresses the fundamental reorientation weal can bring about.

To serve the purpose of reorientation, weal is operationalized as a multidimensional space, each dimension encompassing an optimal availability of the fundamental satisfiers between the two extremes of drastic insufficiency and harmful excess. Optimal availability offers the highest probability of well-being for human interest groups, families, clan-type or otherwise organized communities. For weal the individual is not the relevant unit of reference, it characterizes communities with a given livelihood pertaining to a specific location.

Cardinal needs derive from a careful a meta-analysis of the abounding literature of human needs, with an omnipresent tendency of selecting similar sets of needs.

The "back to the thing" approach of phenomenology intends to replace the indicative lists of "objective" human needs. The "need for needs" (Doyal-Gough, 1991) may be satisfied with a rigorous review of the need literature in the light of primatological, archeological, anthropological, physiological, psychological, social-psychological and ecological evidence.

### **Weal: a non-infinite approach to the human good**

As often stressed wellbeing is depending on individual traits and life circumstances, as well as the quality of life as led by the individual (White, 2008). Well-being is and remains a multifaceted phenomenon escaping definition (Deci-Ryan, 2001; Gasper 2004; Tay-Diener, 2011). Instead of well-being, the construct in general use, weal is proposed as the underlying foundation of well-being interpreted differently over the ages, cultures and disciplines. Weal stands for the totality of socialized reality as framing well-being for the individual beyond the possibility of deliberate change or choice. The descriptive approach to weal, mapping it under the guidance of discrete scientific disciplines reveals a limited set of cardinal aspects, labeled here the cardinal needs. Cardinal expresses the fundamental reorientation weal can bring about, needs deliver the sense of sine qua non. Weal is conceived as a oneness mapped along eight cardinal needs, each satisfiable by two elementary satisfiers. The needs, approached as aspects instead of analytically isolated factors do not require mutually exclusive definitions. To serve the purpose of reorientation, weal is operationalised as a domain in multidimensional space, each dimension encompassing an optimal level of availability of the fundamental satis-

fiers between the two extremes of drastic insufficiency and harmful excess. Weal seeks a balance among material and social aspects and allows for cultural and individual uniqueness in attaining human flourishing.

Life is a self-sustaining arrangement. One may say that the substance of life is life, and not materials, products, and services converted into life. Human being remains subject to evolution. Homeostasis is the conceptual framework (Cannon, 1932) of this self-sustaining aspect of life, shared in a way or other with all living creatures. The human organism manages a multitude of highly complex interactions to maintain balance by keeping all parameters vital to life within a normal range. These interactions within the human organism entail compensatory changes supportive of its physiological functioning. This process is essential to the survival of the individual and the human species.

Genetic studies and fossil evidence show that modern humans share an East-African origin, from where human groups gradually spread and interbred with more archaic humans over a period of one to two million years. Until the beginnings of animal husbandry, agriculture, of industrialization, kingdoms and empires their evolutionary fitness rested on a shared core of physical, cognitive and emotional peculiarities acquired at the African origins (Tattersall, 2009).

The self-enacted maintenance of living is homeostasis. In the narrow, more conventional sense homeostasis is often regarded as an automatic mechanism of keeping vital parameters around a set point. This approach is inherently cybernetic and fits well into the methodology of biometrical medicine.

The more extended approach of allostasis implies the physiology of change by the behavioural and physiological anticipation of future events (Sterling and Eyer, 1988; McEwen, 2005). The cephalic anticipatory regulation of the internal milieu ensures the adaptation of optimal ranges maintained to the actual environment. Serving the maintenance of life various aspects of allostasis include the mental, emotional and physiological balance of the human being. As the human being is inherently social, the Aristotelian zoon politicon, capable of living within social bonds only, anticipatory regulation of the social and the internal milieu is a core feature maintaining the social bonds that are preconditions of the well-being and fitness for survival (Schulkin, 2011).

There is a shared human experience about the phenomenon of being human. This shared human experience (partly conscious and under cognitive control) includes having needs, caring about the needs (of oneself and others those who matter to one) and satisfying the needs. There is an inborn awareness of the needs and the urge of satisfying these needs motivates humans to action similarly to other living beings. The satisfaction of fundamental needs is the product of communities having livelihoods in liveable environs instead of an individual achievement. The sum-total of individual evolutionary fitnesses is less than the fitness of a liveable community.

The entire mankind has hunger, thirst, defecates and is sleepy. Every man and woman makes use of materials and objects, requires new and stimulating sensory experiences. All humans require an atmosphere for breath, clean water, a thermal range within which they feel comfort, limited radiation, and a sinking capacity for their excrement, and waste. The life of any human being enfolds in a natural setting, with its meteorological, geological, virological, botanical and zoological boundary conditions for human life. All human beings need other human beings to be around. Humans are born in families, belong to groups and communities, and live in a place with given boundaries and territorial conditions. Each human being wants to be someone, having an identity, making a meaning of his/her life and is striving for maintaining his/her life as it becomes habitual for him/her within the social embeddedness.

The artificial products, amenities and cultural artifacts are always superimposed upon this imminent setting without ever being able to replace its substantiality. Below this variety of additive amenities and large scale institutions there is the fundamental phenomenon of being human.

The cardinal needs of present paper are indebted to the concept of universal needs. Whereas human desires or wants are infinite and insatiable, universal human needs may potentially be satisfied. The thwarting of the needs inflicts serious harm and possibly profound suffering, they are preconditions of any human action or interaction (Doyal-Gough, 1991, p.49). The psychological needs are essential nutriments (Baard-Deci-Ryan, 2004) similarly to physiological nutriments.

Several researchers have proposed an underlying unity under the various constructs or approaches to human well-being. All human share a vital core of needs (Alkire, 2002). Need development involves material, relational and subjective domains of the unity of actual local well-being (White, 2010), and the sustainable life of future mankind is encapsulated in a 'doughnut' (Raworth, 2012).

An overall satisfaction of human needs take place whenever an integral unit of society, the community, the consanguine group or family attains the highest level of fitness for survival. In this cell of the multidimensional space of the needs continuum the perception of living well will also be the highest. In this domain the balance between effort and yield, the hedonic and eudaemonic is at its best for life.

The cardinal needs are underlying any human existence, quasi-invariantly of place, ethnicity, culture and historical period. and in the human the core ofThis is the core of having human needs.

Cardinal needs derive from a careful review of the abounding literature of human needs, relying on the omnipresent tendency of selecting similar sets of needs by scholars of dissident schools and disciplines (Alkire, 2002; Gasper 2004).

The cardinal needs are briefly presented as found fundamental by corresponding research, with some elementary references illustrating their non-infinite nature.

#### SBS - Subsistence

Human subsistence is possible within a narrow range of a series of known physical and atmospheric factors including temperature, radiation, vibrations and oxygen content. The two major aspects of human sustenance are food and water, their cardinal role for all human beings is hardly contested. Humans subsist on a balanced diet of proteins, fats, carbohydrates, micronutrients and vitamins. Balanced body composition and fitness are achieved by an energy intake and corresponding to expenditure, mainly determined by cultural factors and individual lifestyles. Human metabolism fundamentally involves an unconscious regulation of food preference and intake following the changes of lifecycle, season, climate and stress in life. Culturally induced diversions from balanced patterns of nutrition are rampant and the effects magnified by mass media influences (Srinivasan 201). Binge eating and food addiction may have an etiology similar to drugs or other harmful addictions (Rogers-Smit, 2000):

Protein-energy malnutrition (PEM), the primary form of macronutrient undernutrition causes decomposition of the muscular protein reserves, cutaneous disorders, wasting or stunting characterized by low body mass index (weight for height). The majority of children mortality as well as bodily underdevelopment is related to PEM (Grover, 2009). Excessive protein intakes impose a metabolic burden on the bones, kidneys, and liver. High-protein (meat) diets may also be associated with increased risk for coronary heart disease or even cancer (Metges-

Barth, 2000; Delimaris 2013). The excessive energy intake is the central civilisatory mediator to overweight and obesity, resulting in epidemics of several serious health conditions including type 2 diabetes, and cardiovascular diseases (Wellmann-Friedberg, 2002).

The other major facet of human sustenance is access to clean and abundant sweet water. Every third human community suffers water stress due to overpopulation, competing usages (mainly agriculture and industry) and human induced climatic stress (Gleick, 1996). Personal human hygiene and sanitary use generate perceived new demands and enforce the transport of water from distant regions (Falkenberg, 2008). The same time water is an essential element of the local ecosystems (Baron, 2001). As water scarcity increases, a portion of the population may be chronically mildly dehydrated. Dehydration of as little as 2% loss of body weight results in impaired physiological and performance responses. Research indicates that water can have an effect on diseases and cancers of the breast, colon, and urinary tract; childhood and adolescent obesity; and overall health in the elderly (Kleiner, 1999).

#### MAT – Materiality

The material need is understood as the need of the human community to flourish on the basis of materials and stimuli.

Living systems, including ecosystems as well as economic systems are dependent on a throughput of materials and energy. Sustainability implies that the throughput of matter-energy remains within the regenerative and assimilative capacities of the ecosystem (Daly, 1991, 1996).

The material flow and the need of producing and using human artifacts is universal as attested by anthropology (Reynolds, 1981; Ger-Belk, 1996). Humans extend their bodies and express themselves and their social relations by means of objects. Material needs are of three distinct categories: the material flow (e.g. fuel, salt, raw materials for durables, etc.), human extension (tools and machines, protection against climatic extremities etc.) and “positional” goods (Hirschman, 1986, p. 65).

Material extensiveness will not grant proportional contribution to weal, whereas the exaggerated introjection of social benefits into material advantage or possessions is detrimental to weal in its mental aspects (Kasser et al, 2014), displaces the activity level, the need for physical exercise, social bonds and thereby vitality and motivation (Deci-Ryan, 2000). Any culturally homogeneous human community needs to strike a balance between exerting human efforts and capacities and employing extraneous labor, animal or mechanical power.

Weal requires access to materials that enable a socially viable life. Optimal access is a favourable combination of choice, effort and meaning. One has access to the right material good, with a reasonable effort for a meaningful aim. Living in poverty entails forced choices and unmet demands, or efforts out of proportion for some materials, living a too restricted capacity for meeting all the other needs.

A too easy access to material goods leads to disinterest in effort, physical and mental harm, a dependence on ever-changing variety and permanent anxiety of losing this easy abundance. Many researches report the loss of relationships, and belonging (Kasser et al, 2014).

Variation of experiences in early life is a prerequisite of the healthy development of brain and cognitive function. The human being requires stimulation obtained from the environment or through internal means at intermediate level different for every individual.

The optimal level of human stimuli is regulated by the behaviour of the human being. Optimal stimulation level theory maintains that individuals will attempt to increase or decrease

stimulation. When the stimulation is too high, individuals will attempt to decrease stimulation. Subjective pleasantness is highest at the level of stimulation at which a person feels most comfortable (Raju, 1980; Steenkamp-Baumgartner 1992).

Stimuli are provided by presence instead of access, available and unavoidable in most human environments. They come as sensory information in the broadest sense, (visual, auditory, gustatory, olfactory and tactile senses as well as cognitive and kinesthetic functions). The activities performed to maintain the ideal stimulation level may be regarded as a homeostatic function (Zentall, 1975). Too much stimulation leads to sensory overload. Information overloads give rise to psychophysiological effects entailing behavioural and somatic pathology. Research on sensory overload is scarce, symptoms of sensory overload may include withdrawal, overexcitation, light hypersensitivity, and a lack of concentration ability ((Lipowski, 1975).

Sensory deprivation precipitates devastating effects. Its psycho-physiological impact on incarcerated individuals is similar to torture techniques in their impact on one's physical and emotional well-being (Wilson, 2009; Grassian, 2006).

#### LOC - Locality

Places play an integral part in the lives of human beings. Territory is the essential links between communities, people, and the natural setting (Gottmann, 1973, ix.). Human communities are accommodated in space, identity, privacy and security all enfold in locations. Humans control and defend their territories as a complex social phenomenon in the absence of a simplistic biologically founded urge (Storey, p. 20.).

People form bonds with place and in this sense, territory is vitally important to people and serves as an integral component of self-identity. Territory provides an essential link between society and the space it occupies through its impact on human interaction and the development of spatial group identities (Soja, 1971, p. 33.)

Human individuals tend belong to a domesticated locality. The place where one belong has the combined functions of shelter, accomodates daily living, offers privacy ans serves as an abode (Sommerville, 1992). As attested by empirical evidence based on biophilia theory human localities must remain man-inhabited biomes (Kuo, 2010).

The access to places may involve settled as well as nomadic forms with all conceivable societal forms of control or ownership (Sack, 1983). Access entails continuity spanning over long life periods or generations.

The lack of access to place dispenses all suffering and related with homelessness. Final homelessness results in anomia, mental disorders, and heavy morbidity, contributes to extreme poverty, may involve a loss of identity as well as social disorientation (Zack, 2014). Hypermobility of the glorified "jet set" of globalization endangers the social ties to family, locality and community with substantial health costs, personal and societal consequences (Cohen-Gössling, 2015).

#### ACT - Activity

The human being is an organism lives through self-initiated activities (Ryan-Deci 2000). The need of activity seeks fulfilment as an appropriate level of physical exercise as well as the agency to achieve goals and improve the human condition of the actor and the ones he or she cares for (Alkire, 2008). Activities ensure homeostasis and survival by maintaining the functionality of organs. Exercise alleviates stress and other symptoms of disorders, and prophylactically reduces their occurrence.

Children are born with an intrinsic motivation to be physically active (Whitehead 1993). This intrinsic motivation may be kept alive in the adult by positive feedback from the environment, or give way to a gradual learning of physical or practical inertia (Dishman et al., 2006; Greenwood-Fleshner, 2008).

Light-to-moderate physical activity is associated with positive physiological outcomes (Livingstone et al, 2003). An extreme dependence of physical exercise, on the other hand, constitutes the psychic syndrome known as vigorexia among gym goers and body builders (Soler, 2013).

Autonomous action is based on the organismic desire to integrate experience and behavior in concordance with one's self. Autonomous human agency is associated with a wide range of positive outcomes. Autonomy requires a nurturing social environment (Ryan-Deci, 2000). The concept of learnt helplessness highlights malleability of human nature regarding autonomy seeking behaviour (Abramson et al, 1978).

#### DST - Destination

The human being is driven by an intrinsic need to achieve meaningful goals and master his or her environment. Purpose in life is posited as a major factor of mental health (Ryff-Singer, 2006). The meaning of life is central in the humanistic tradition as well as in positive psychology (Foregard et al., 2011, pp. 84-85.). Humans often pursue "higher" or altruistic goals regardless their self-interest or happiness (Baumeister, 2005, p.395.).

Having a destination in human life precludes an enabling social fabric (Twenge, 2007). The two major satisfiers of the need for destination are employment and mastery. Unemployment is known for a wide range of detrimental psychosocial and health outcomes (Ferrie, 2002). A responsible place in the social fabric is a prerequisite of mental stability. Rewards and dutifulness may turn work engagement into a harmful addiction (Schaufeli, 2008).

Mastery involves intrinsic satisfaction with tasks performed efficiently. Flow theory (Csikszentmihalyi 1996) suggests that intrinsically motivated behaviour requires optimal challenge. Too much challenge leads to anxiety and disengagement, whereas too low challenge leads to boredom (Deci-Ryan, 2000).

#### KIN - Kinship

The major social patterns of relationships among humans are parenting, the family and the various hierarchies. To be parents and having parents are prerequisites of human continuity in the generative and the qualitative sense alike. Families serve a multitude of basic social functions, economic support, nurturance and socialization, protection of the vulnerable as well as self-actualization for its members (Patterson, 2002). The elementary functionality of the family is very similar notwithstanding all cultural differences (Enrique, 2007).

Children with a disrupted family are disadvantaged in many respects. Parental divorce and marital discord affect the socioeconomic attainment, marital and relationship stability of the offspring and predicts lower levels of psychological well-being in adulthood (Amato, 2001 and 2005). Unmarried individuals report lessened SWB, grown-ups without children are more prone to depression, become aimless and neglected as seniors.

#### DST - Destination

Following the general social patterns of their evolutionary forerunners humans create hierarchies. Hierarchy and organization is needed to maintain order and the culture of breeding (Ramsden-Adams, 2009, p. 30-32.). Status is a major determinant of the well-being of primates via the access to food and mates (Vugt, Tybur, 2014)). Inequality in status may benefi-

cially maintain motivational pressure to strive for higher status, if individuals with higher status help others (Becker et al, 2003). Status is a precursor of well-being for dominant males in primate groups (Chapais, 1995) and empirical evidence supports similar inferences for humans (Cummins, 2006).

The extremely skewed distribution of status is expected to decrease well-being, provided, that both extremes of status involve detrimental outcomes. Low status is associated with poor health and the high prevalence of unhealthy habits, addictive drinking tobacco dependence, and low physical activity (Pampel, 2010). In developed free market driven societies high status is largely correlated with amassed wealth or fame. Happiness is found to correlate negatively with wealth (Layard, 2010). As attested by surveys conducted in the USA the ultra-rich has a strong inclination to anxiety, is insulated and self-centered, uneasy about their offspring, mistrusting in the honesty and acceptance by the people surrounding them (Wood, 2011, Piff, 2014). Celebrities are believed to be prone to a distortion of their self, loss of privacy, mental disorders and isolation (Meyer et al., 2007; Rockwell, Giles, 2009).

#### COM - Companionship

Belonging infers the desire to feel connected to others (Bowlby, 1958, Baumeister-Leary, 1995). Many researchers argue that relatedness to other humans is a fundamental need (Ainsworth, Blehar, Waters, & Wall, 1978). Social isolation may have deleterious effects, as a morbidity and mortality risk factor comparable to other major health risks (Cacioppo et al, 2002). The pain of loneliness seems to serve the evolutionary purpose of keeping hunter-gatherer groups together, thus fostering the success of reproduction (Cacioppo et al, 2006).

The reliable access to human companions is a precondition of the psychic and social development of the human child (Bowlby, 1958). Early social isolation results behavioural and cognitive dysfunction in the adult. Alterations in the brain in prefrontal cortex and myelination do not recover later on (Makinodan et al, 2012). Studies on social isolation in prisons and among the elderly underline the primary importance of human relationships. Solitary confinement leads to mental aberrations, cognitive dysfunctions causing a suffering comparable to cruel physical torture (Wilson, 2009; Grassian, 2006). Isolation in mature age may impair the quality of life (Victor et al, 2000).

Humans similarly to their primate predecessors evolved in limited size (Lehmann et al, 2007) groups (tribe or clan), therefore the continuous exposure to high numbers of people (overcrowding) may have detrimental effects on humans. Overpopulating animal colonies show dramatic deterioration and collapse (Calhoun, 1962), analogous speculations over an optimal human settlement density does not find experimental support (Ramsden, 2009). Overpopulated neighbourhoods show an increased prevalence of specific mental health disorders, particularly schizophrenia, dementia and major depress (Srivastava, 2012; Lederbogen 2013). The excess of exposure to human company is perceived as psychic threat, the actual stress is mostly mitigated or exacerbated by culturally available strategies of control (Epstein 2010). The increased risk of mental disorders due to higher stress exposure in urban areas outweigh pollution or noise (Adli, 2011).

#### SFT - Safety

Living in safety is commonly understood as the continuity of being. The human being can be safe in an absolute, in a perceived and in an agentive sense. Absolute safety is nonsense and an antithesis of living as an adventure open to death. External threats and risks involved in living itself change with life cycle and the way communities exist and flourish, livelihoods are developed and maintained. Perceived safety includes the aspects of dignity or interpersonal safety. Agentive safety means an access to resorts, self-help or institutional in case of dra-

matic and pervasive threats to person, community, livelihood or territory, the vital core of human being (Alkire, 2003).

Weal implies a viable balance between culturally accepted risks and absolutised cultural values, an agentive safety and a resilience of human being in essential symbiosis with nature (Tidball, 2012).

As critical keys to culturally varying approaches to safety serve fundamental civilisational values like that of the individual human life, freedom, private property, or sovereignty as well as ties with the living, kinship or bonds with the ancestors. Safety must be perceived within communities as a service of cultures or civilisations.

The lack of perceived safety for food, employment, neighbourhood or environment involve anxiety, somatic symptoms, increased morbidity and (Seligman et al, 2010, Ferrie et al, 2002; Booth et al 2002). The excess of safety inhibits societal flexibility, learning by experience and play, autonomy of action and (Chen et al, 2014).

### **Literature**

- Max-NEEF, Manfred 1995. Economic growth and quality of life" a threshold hypothesis. *Ecological Economics* 15 (1995) 115-118.
- ABRAMSON, L.Y., SELIGMAN, M.E.P., TEASDALE, J.D. 1978. Learned Helplessness in Humans: Critique and Reformulation. In: *Journal of Abnormal Psychology* 1978, Vol. 87, No. 1, pp. 49-74
- ADLI, M. 2011. Urban stress and mental health. In: *Cities, health and well-being*, Hong Kong, November 2011
- AINSWORTH, M. D. S., BLEHAR, M. C., WATERS, E., WALL, S. 1978. Patterns of attachment. Hillsdale, NJ: Lawrence Erlbaum.
- ALKIRE, S. 2002. Dimensions of Human Development. In: *World Development* Vol. 30, No. 2, pp. 181–205.
- ALKIRE, S. 2003. A Conceptual Framework for Human Security. *Centre for Research on Inequality, Human Security and Ethnicity*, CRISE, WP2
- ALKIRE, S. 2008. Concepts and measures of agency. In: Basu, K. and Kanbur, R (eds). *Arguments for a Better World: Essays in Honor of Amartya Sen . Volume 1: Ethics, Welfare, and Measurement*. Oxford University Press. pp. 355-474.
- ALLENBY, B.R. 2000. Earth Systems Engineering: The World As Human Artifact. In: *The Bridge*. Spring 2000, Vol. 30, No. 1., pp. 5-11.
- AMATO, P.R. 2005. The Impact of Family Formation Change on the Cognitive, Social, and Emotional Well-Being of the Next Generation. In: *The Future of Children* (Fall 2005), Vol. 15., No. 2.
- AMATO, P.R. SOBOLEWSKI, J.M. 2001. The Effects of Divorce and Marital Discord on Adult Children's Psychological Well-Being. In: *American Sociological Review* No. 66 (2001), pp. 900–21-
- BAARD, Paul P., Edward L. DECI, Richard M. RYAN. 2004. Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings. *Journal of Applied Social Psychology*, 34, 10, pp. 2045-2068.
- BARON, J.S. et al 2002. ESA Report. Meeting ecological and societal needs for freshwater. ESA Report. In: *Ecological Applications*, (2002)Vol. 12. No. 5., pp. 1247-1260.

- BAUMEISTER, R.F. 2005. *The Cultural Animal : Human Nature, Meaning, and Social Life: Human Nature*. Oxford University Press. ISBN: 978-0-195-16703-0.
- BOOTH, J., AYERS, S.L. , MARSIGLIA, F.F. 2012. Perceived Neighborhood Safety and Psychological Distress: Exploring Protective Factors. In: *Journal of Sociology & Social Welfare*, December 2012, Vol 39, No 4
- BOWLBY, J. 1958. The nature of a child's tie to his mother. *International*
- CACIOPPO, J. T., HAWKLEY, L. C., CRAWFORD, L. E., ERNST, J. M., BURLESON, M. H., KOWALEWSKI, R. B., et al. (2002). Loneliness and health: Potential mechanisms. *Psychosomatic Medicine*, 64, 407–417.
- CACIOPPO, John T. 2006. Loneliness within a nomological net: An evolutionary perspective *Journal of Research in Personality* 40 (2006) p.1054–1085
- CALHOUN, J. B. 1962. Population Density and Social Pathology, In: *Scientific American* Vol. 306, pp. 139-148.
- CHAPAIS, B. 1995. Alliances as a Means of Competition in Primates: Evolutionary, Developmental, and Cognitive Aspects, *Yearbook Of Physical Anthropology* Vol. 38, pp. 115-136.
- CHEN, B. , ASSCHE J.V., VANSTEENKISTE, M., SOENENS, B., BEYERS, W. 2014. Does Psychological Need Satisfaction Matter When Environmental or Financial Safety are at Risk? In: *Journal of Happiness Studies*, Springer. Published online 10. May 2014.
- COHEN, Scott, Gössling, Stefan 2015. A darker side of hypermobility. *Environment and Planning A 2015*, vol 47, pp. 000 – 000 doi:10.1177/0308518X15597124
- CSÍKSZENTMIHÁLYI, Mihály 1996. *Creativity: Flow and the Psychology of Discovery and Invention*, New York: Harper Perennial, ISBN 0-06-092820-4
- CUMMINS, D. 2006. Dominance, Status, and Social Hierarchies. In Buss, D.M. (ed) (2006). *The handbook of evolutionary psychology*. Wiley, pp. 676-697).
- CUNNINGHAM, W. C., VANMETER, C.W. , STRAUCHS, J.J. 1990. *Private security trends, 1970 to 2000: the Hallcrest report II*. Butterworth-Heinemann, Boston, ISBN 978-02-0528-680-5
- DALY, Herman E. (1991) [1977]. *Steady-State Economics* (2nd ed.). Washington, DC: Island Press.
- DALY, Herman E. (1996). *Beyond Growth: The Economics of Sustainable Development*. Boston: Beacon Press.
- DEATON, A. 2008. Income, Health, and Well-Being around the World: Evidence from the Gallup World Poll. In: *Journal of Economic Perspectives*. Vol. 22, No. 2, Spring 2008, pp. 53–72.
- DECI, E., RYAN, R.M. 2000. “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, Vol. 11, No. 4, pp. 227–268.
- DELIMARIS, I. 2013. Adverse Effects Associated with Protein Intake above the Recommended Dietary Allowance for Adults. In: *ISRN Journal of Nutrition* (2013) No. 18; Epub 2013 Jul 18
- DIENER, Ed, Eunkook SUH, and Shigehiro OISHI. 1997. Recent Findings on Subjective Well-Being. *Indian Journal of Clinical Psychology*, March, 1997.
- DISHMAN, R.K. et al. 2006. Neurobiology of Exercise. *Obesity* (March 2006), Vol. 14 No. 3., pp. 35-356.

- DOYAL, Len, GOUGH, Ian. 1991. *A theory of human need*. New York: Palgrave.
- DUNBAR, R.I.M. 2003. The Social Brain: Mind, Language, and Society in Evolutionary Perspective. In: *Annual Review of Anthropology*. Vol. 32, pp. 163-81.
- EASTERLIN R.A., MCVEY L.A., SWITEK M., SAWANGFA O., ZWEIG J.S. 1010. The happiness-income paradox revisited. In: *Proceedings of the National Academy of Sciences USA*. Vol. 107. No. 52., pp. 22463-8.
- ENRIQUE, J., HOWK, H., & HUITT, W. (2007). An overview of family development. *Educational Psychology Interactive*. Retrieved 2.2.2015, from <http://www.edpsycinteractive.org/papers/family.pdf>
- EPSTEIN, Y. M. 2010. Crowding Stress and Human Behavior. In: *Journal of Social Issues*. (04/2010) Vol. 37., No. 1. pp. 126 – 144.
- FALKENMARK, M, WIDSTRAND, C.. Population and Water Resources: A Delicate Balance. In: *Population Bulletin*, Population Reference Bureau, 1992
- FALKENMARK, M., 2008. Water and Sustainability. A reappraisal. In: *Environment*, (March/April 2008), Vol 50, Nr 2, pp. 5-17.
- FERRIE, J.E., SHIPLEY, M.J., STANSFELD, S.A., MARMOT, M.G 2002. Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric-morbidity, physiological measures, and health related behaviours in British civil servants: the Whitehall II study. In: *Journal of Epidemiologic Community Health* (2002) No. 56, pp. 450–454
- FORGEARD, M. J. C., JAYAWICKREME, E., KERN, M. & SELIGMAN, M. E. P. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, Vol. No1., pp. 79-106.
- GASPER, D.R. 2004. Subjective and Objective Well-Being in Relation to Economic Inputs: Puzzles and Responses. ISS Staff Group 2: *States, Societies and World Development*. WeD WP. No. 09.
- Ger, G. and BELK, R. W. 1996. Cross-cultural Differences in Materialism. *Journal of Economic Psychology*, 17, 55–77.
- GLEICK, P.H. 1996. Basic Water Requirements for Human Activities: Meeting Basic Needs. In: *Water International* (IWRA) (1996), No.. 21, pp. 83-92.
- GOTTMANN, J., 1973. *The Significance of Territory*, Charlottesville VA, University of Virginia Press, 169 pp., ISBN: 0-8139-0413-7, 1973.
- GRANOVETTER, Mark 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology* 91:481-510. 1990. The Old and the New Economic Sociology:
- GRASSIAN, S. 2006. Psychiatric Effects of Solitary Confinement. In: *Journal of Law & Policy* Vol. 22, p.325.
- GREENWOOD, B.N., Monika FLESHNER, M. 2008. Exercise, Learned Helplessness, and the Stress-Resistant Brain. *Neuromol Med* (2008) No. 10, pp. 81–98
- GROVER, Z. 2009. Protein Energy Malnutrition. *Pediatric Clinics of North America*. Volume 56, Issue 5, October 2009, pp. 1055–1068

- GULLONE, E. 2000. The biophilia hypothesis and life in the 21st century: increasing mental health or increasing pathology? In: *Journal of Happiness Studies* Vol. 1 (2000), pp. 293–321.
- HALLAL, P.C. et al. 2012. Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet* Vol. 380, No. 9838, pp. 247–257.
- HIRSCHMAN, A.O. 1986. *Rival Views of Market Society and Other Recent Essays*. Harvard University Press. ISBN: 0-674-77303-9.
- Journal of Psychoanalysis*, No. 99, pp. 265–272.
- KASSER, T. 2002. *The High Price of Materialism*. MIT Press, 2002
- KASSER, T. et al. 2014. Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment. In: *Motivion and Emotion* No. 38, pp. 1–22.
- KASSER, T. et al. 2014. Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment. *Motivion and Emotion*. 38, 1–22.
- KLEINER S.M. 1999. Water: an essential but overlooked nutrient. In: *Journal of American Dietary Association* (1999 Feb), Vol. 99., No. 2., pp. 200-6.
- KOHL, H.W., CRAIG, C.L., LAMBERT, E.V., SHIGERU I., ALKANDARI, J.R., LEE-TONGIN, G., KAHLMEIER, S. 2012. The pandemic of physical inactivity: global action for public health. *The Lancet* Vol. 380, No. 9838, pp. 294–305.
- KUO, F.E. 2010. *Parks and Other Green Environments: Essential Components of a Healthy Human Habitat*. Reserch Series 2010. National Recreation and Park Association
- LAYARD, Richard. 2010. Measuring Subjective Well-Being. *Science* 29 January 2010: Vol. 327 no. 5965 pp. 534-535 DOI: 10.1126/science.1186315
- LEDERBOGEN, F., et al., Urban social stress e Risk factor for mental disorders. The case of schizophrenia, In: *Environmental Pollution* (2013), No. 1.
- LEHMANN, J, KORSTJENS, A.H. DUNBAR, R.I.M. 2007. Group size, grooming and social cohesion in primates. In: *Animal Behaviour*. (December 2007) Vol. 74, Nr. 6, pp. 1617–1629.
- LIPOWSKI, Z. J. 1975. Sensory and Information Inputs Overload: Behavioral Effects. In: *Comprehensive Psychiatry* Vol. 16, No. 3., pp. 199-221.
- LIVINGSTONE M.B., ROBSON P.J., WALLACE J.M., MCKINLEY M.C. 2003. How active are we? Levels of routine physical activity in children and adults. *Proceedings of the Nutrition Society* 2003 Aug; Vol. 62., No. 3., pp. 681-701.
- MAKINODAN, M. et al. 2012. A Critical Period for Social Experience–Dependent Oligodendrocyte Maturation and Myelination In: *Science* Vol. 337, No. 1357 (2012).
- MCEWEN, Bruce S. 2005. Stressed or stressed out: What is the difference? *J Psychiatry Neurosci*. 2005 September; 30(5): 315–318.
- METGES, C.C., BARTH, C.A. 2000. Metabolic Consequences of a High Dietary-Protein Intake in Adulthood: Assessment of the Available Evidence. In: *Journal of Nutrition* (2000) No. 130., pp. 886–889.

- MEYER, Björn et al. 2007. Happiness and despair on the catwalk: Need satisfaction, well-being, and personality adjustment among fashion models. *The Journal of Positive Psychology*, January 2007; 2(1): 2–17.
- N.J., BARTELS, J.M. 2007. Social Exclusion Decreases Prosocial Behavior. *Journal of Personality and Social Psychology* (2007) Vol. 92, No. 1, pp. 56 – 66.
- OLSHANSKY S.J., PASSARO D.J., HERSHOW R.C., LAYDEN J., CARNES B.A., BRODY J., HAYFLICK L., BUTLER R.N., ALLISON D.B., LUDWIG D.S. 2005. A Potential Decline in Life Expectancy in the United States in the 21st Century, In: *New England Journal of Medicine*, Vol. 11. No. 352, pp. 1138-1145.
- PAMPEL, Fred C., Patrick M. KRUEGER, and Justin T. DENNEY. 2010. Socioeconomic Disparities in Health Behaviors. *Annu Rev Sociol.* 2010 Aug; 36: 349–370. doi: 10.1146/annurev.soc.012809.102529
- PATTERSON, J.M. (2002). Understanding family resilience. *Journal of clinical Psychology*, Vol. 58, No. 3., pp. 233-246.
- PIFF, Paul K. et al. 2012. Higher social class predicts increased unethical behavior. pp. 4086-4091. PNAS March 13, 2012 vol. 109 no. 11
- RAMSDEN, E. 2009. The urban animal: population density and social pathology in rodents and humans. In: *Bull World Health Organ.* (2009 Feb) Vol. 87, No. 2, p. 82.
- RAWORTH, Kate (ed.) 2012. For humanity. Can we live within the doughnut? Oxfam Discussion papers.
- ROCKWELL, Donna, David C. GILES. 2007. Being a Celebrity: A Phenomenology of Fame. *Journal of Phenomenological Psychology* 40 (2009) 178–210
- REYNOLDS, Peter C. 1981. On the Evolution of Human Behavior: The Argument from Animals to Man. Berkeley, CA: University of California Press.
- ROGERS, P.J. & SMIT, H.J. 2000. Food Craving and Food “Addiction”: A Critical Review of the Evidence from a Biopsychosocial Perspective, In: *Pharmacology Biochemistry Behavior* (2000), Vol. 66, No.3.
- RYAN, R.M., DECI, E 2001. On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. In: *Annual Review of Psychology* 2001. No. 52, pp. 141–66.
- RYFF, Carol D. and Singer, Burton H. 2006. Know Thyself And Become What You Are: A Eudaimonic Approach To Psychological Well-Being *Journal of Happiness Studies* (2006) © Springer 2006 DOI 10.1007/s10902-006-9019-0
- SAAD, L. 2011. Most Americans Believe Crime in U.S. Is Worsening. Gallup. WELL-BEING. October 31, 2011. Accessed at: <http://www.gallup.com/poll/150464/americans-believe-crime-worsening.aspx>
- SACK, R.D. Human Territoriality: A Theory In: *Annals of the Association of American Geographers* (Mar., 1983) Vol. 73, No. 1, pp. 55-74.
- SALLIS, J.F., PROCHASKA, J.J., TAYLOR W.C. 2012. A review of correlates of physical activity of children and adolescents, In: *Medicine & Science in Sports & Exercise*, June 2000
- SCHAUFELI, W. B., TADS, T. W., VAN RHENEN, W. 2008. Workaholism, burnout and engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review.* (2008), No. 57., pp. 173-203.

- SCHULKIN, Jay 2011. Social allostasis: anticipatory regulation of the internal milieu. *Front. Evol. Neurosci.*, 31 January 2011 | doi: 10.3389/fnevo.2010.00111
- SELIGMAN, H.K., LARAIA, B.A., KUSHEL, M.B. 2010. Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants. In: *Journal of Nutrition* (2010 Feb) Vol. 140, No. 2. pp. 304–310.
- SOJA, E.W. 1971. *The Political Organization of Space*, Association of American Geographers, Washington . ISBN: 978-0892910557
- SOLER, P.T. 2013. Vigorexy and levels of exercise dependence in gym goers and bodybuilders. *Review of Brazilian Medical Sports* (Sep/Oct, 2013), Vol. 19, No 5
- SOMMERVILLE, P. 1992. Homelessness and the Meaning of Home: Rooflessness or Rootlessness? In: *International Journal of Urban and Regional Research* Vol. 16, No. 4, Dec. 1992, pp. 529–539.
- SRIVASTAVA, K. 2009. Urbanization and mental health. In: *Industrial Psychiatry Journal*, (Jul-Dec 2009), Vol 19, No. 2. pp. 75-76.
- STERLING, P., and EYER, J. 1988. Allostasis: a new paradigm to explain arousal pathology. In: *Handbook of Life Stress, Cognition, and Health*, eds S. Fisher and J. Reason (New York: John Wiley and Sons), 629–649.
- STOREY, D. 2012. *Territory: The Claiming of Space*, Routledge, NY, 2012 ISBN 978-0-582-32790-0
- TATTERSALL, Ian. 2009. Human origins: Out of Africa. pp. 16018 –16021 # PNAS # September 22, 2009 # vol. 106 # no. 38
- TAY, L., DIENER, E. 2011. Personality processes and individual differences. Needs and subjective well-being around the world. IN: *Journal of Personality and Social Psychology* (2011 Aug), Vol. 101, No. 2, pp. 354-65.
- TIDBALL, K. G. 2012. Urgent biophilia: human-nature interactions and biological attractions in disaster resilience. In: *Ecology and Society* Vol. 17. No. 2. p. 5.
- TWENGE, J.M., BAUMEISTER, R.F., DEWALL, C.N., CIARROCCO. 2002. Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83, 817-827.
- VICTOR C., SCRAMBLER, S., BOND, J. and BOWLING, A. (2000). Being alone in later life: loneliness, social isolation and living alone. In: *Reviews in Clinical Gerontology*, Vol.10, pp. 407-417.
- VUGT, Mark van, Joshua M. Tybur. 2014. Mark van The Evolutionary Foundations of Hierarchy: Status, Dominance, Prestige, and Leadership. In: D. M. Buss, *Handbook of Evolutionary Psychology* (Second Edition) August 2014
- WATERMAN, A. S. 1993. Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678–691.
- WELLMAN, N.S., FRIEDBERG, B. 2002. Causes and consequences of adult obesity: health, social and economic impacts in the United States Asia Pacific In: *Journal of Clinical Nutrition* (2002) 11(Suppl): S705–S709.
- WHITE, S.C. 2008. *But what is Wellbeing?* Paper for Regeneration and Wellbeing: Research into Practice. University of Bradford, 24-25 April 2008

- WHITEHEAD, J.R. 1993. Physical Activity and Intrinsic Motivation. *PCPFS Research Digest* Vol. 1, No. 2.
- WILSON, Gary I. 2009. *Bad Bad Juju: Sensory Deprivation and Solitary Confinement*.
- WOOD, Graeme. 2011. Secret Fears of the Super-Rich. *The Atlantic*, April 2011.  
<http://www.theatlantic.com/magazine/archive/2011/04/secret-fears-of-the-super-rich/308419/>
- ZACK, N. 2014. Denial of Universal Human Material Needs and Aversion to the Homeless. *What is Materialism?* conference at the University of Oregon, May 2014.
- ZENTALL, S. 1975. Optimal stimulation as theoretical basis of hyperactivity. In: *American Journal of Orthopsychiatry*, (Jul 1975) Vol 45., No. 4., pp. 549-563.