

DISCUSSION. EVOLUTION: PRO ET CONTRA

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Peace for Evolution's Puzzle: The Arrival of Human Extension

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Abstract

This paper offers a paradigm shift primarily for sociology, the author's home field, but also for other four fields that have been neutralized from providing peaceful alternatives in the study of change and development for human societies, instead of succumbing to the totalizing logic of evolutionistic ideology. Human extension marks a moment of reversal with its arrival as a post-evolutionary general methodology. Instead of an evolutionary war-like approach, this paper establishes a basis for peace at the heart of change we can believe in.

Keywords: *evolution, evolutionary theory, evolutionism, universalist ideology, paradigm shift, non-evolutionary, post-evolutionary, interdisciplinary approaches, human extension, extension theory, natural-physical sciences, human-social sciences, war, peace, completed puzzle.*

General Introduction

Extension – ‘a fundamental notion concerning the nature of reality’.

A. N. Whitehead¹

The only way to achieve peace in the warring controversy over evolution is to put evolutionary theory in its proper scholarly place, refusing to allow it to be over-estimated in the academic community. The same was true with relativity theory in physics; it has only a limited conceptual transferability into human-social thought, philosophy and ethics. In making a principled categorical clarification about ‘evolutionism’, those who choose to uphold evolution as a worldview, as the primary basis for their special sciences, philosophies, or (a)theologies, can be identified for their attempt to ‘universalize evolution’, rather than limiting it within appropriate meaningful boundaries.

¹ Whitehead 1967 [1933]: 158.

In this paper, a positive alternative which is not merely anti-evolutionary is offered in the realm of social-humanitarian thought. The notion of an acceptable alternative to evolution answers Karl Popper's challenge that people will not reject one approach unless a favorable 'other' is identified.² With a new non-evolutionary way of thinking³ now available, the exaggerations of evolutionary theory⁴ into dogmatic⁵ evolutionistic ideology can be more clearly recognized and guarded against.

What is proposed in the text below is a counter-idea to evolution. This idea has been worked out into a 'general method' suitable for human-social sciences (HSSs), which is now available for use (Sandstrom 2010a). The aim is in part to ultimately deflate the value of evolutionism-as-ideology, and in the end to dislocate it from social-humanitarian thought, where dislocation means 'the process by which an established body of ideas, people, or things gives way to another' (Barnes 1996: 250). Likewise, it offers a 'reflexive sociology' (Gouldner 1970) that addresses human-social change and development in the electronic-information age (EI-age).

Evolution is indeed still a puzzling theory due to concepts within and inseparable from the grand paradigm such as 'random', 'chance' and 'unguided'. With an alternative approach, however, the lingering problems evolutionary theory poses to social-humanitarian thought can be solved and the puzzle finally completed. In seeking to pose an alternative-to-evolution, one may suggest a synthesis of the two opposing schools of thought identified in the 'western world', that is, the Anglo-American 'analytical' and the European 'continental' schools of philosophy. However, such a synthesis is deemed unnecessary to accomplish our 'other' goal.

'Pieces of Evolution's Puzzle' (Sandstrom 2008a) alerted readers to the possibility that when the Russian-American scholars Theodosius Dobzhansky and Pitirim Sorokin are compared and contrasted, it brings a unique contribution to human-social thought. Dobzhansky's position sides with Heraclitus, suggesting that 'the world is not fixed, not finished, and not unchangeable. Everything in it is engaged in evolutionary flow and development' (Dobzhansky 1967: 7). In such a point of view, even non-biological things, such as human culture and society, are said to evolve on large and small scales.

² '[W]e should always be on the look out for possible alternatives to any dominant theory' (Popper 1973).

³ 'The attempts to attain absolute clarity [in the philosophical text] and absolute unambiguity always appear incomplete, unsuccessful and hopeless. ... The road map gets more and more complicated, new roads split on new bifurcations, go farther or get lost in oblivion, so that new commentators, tired of well-trodden paths may explore them, asking themselves "Is there no other way of thinking?"' (Chernyakov 2002: 16, 17).

⁴ 'The analogy that relates the evolution of organisms to the evolution of scientific ideas can easily be pushed too far' (Kuhn 1970: 172).

⁵ 'Our nineteenth century is dying away under the hypnosis of the dogma of Evolution' (Bratt 1998 [1899]).

Sorokin, on the other hand, predicted that ‘western’ social theory would turn away from the height of Sensate culture, which he felt was defined by the evolutionary paradigm,⁶ toward an Ideational worldview⁷ that allows for super-sensory knowledge and perception of the infinite and spiritual,⁸ as well as of the finite and material.⁹ The proposed here concept ‘human extension’ can offer a new way forward.

Welcoming Human Extension

The method common to all Cultures – the only way of actualizing itself that the soul knows – is the symbolizing of extension, of space or of things.

O. Spengler¹⁰

Human extension offers a new approach to studying human-social change and development than what is currently possible using the concept of ‘evolution’. ‘Human selection’, coined by Alfred R. Wallace, already provided an alternative to ‘natural selection’, though it was not elaborated in HSS.¹¹ Now

⁶ ‘In the atmosphere of our Sensate culture we are prone to believe in the power of the struggle for existence, of selfish interests, egoistic competition, hate, the fighting instinct, sex drives, the instinct of death and destruction, in the all-powerfulness of economic factors, rude coercion and other negativistic forces. Yet we are highly sceptical in regard to the power of creative love, disinterested service, unprofitable sacrifice, mutual aid, the call of pure duty and other positive forces. The prevalent theories of evolution and progress, of the dynamic forces of history, of the dominant factors of human behaviour, of the ‘how’ and ‘why’ of social processes unanimously stress such negativistic factors as the above. They view them as the main determinants of historical events and of individual life courses. Marxism and the economic interpretation of history; Freudianism and its libidinal-destructive explanation of human behaviour; instinctivist, behaviourist, and physiosomatic theories of personality and culture; Darwinistic and biological theories of the struggle for existence as the main factor of biological, mental, and moral evolution; even the prevalent motto of the chambers of commerce that ‘rivalry and competition made America great’ – these and similar theories dominate contemporary sociology, economics, psychology, psychiatry, biology, anthropology, the philosophy of history, political science, and other social and humanistic disciplines. These ideologies have an enormous appeal to the prevalent Sensate mind, are eagerly believed by Sensate man, and are considered by him as ‘the last word in modern science’ (Sorokin 1965: 302).

⁷ ‘Ideational truth is *the truth revealed by the grace of God*, through his mouthpieces (the prophets, mystics, and founders of religion), disclosed in a supersensory way through mystic experience, direct revelation, divine intuition, and inspiration. Such a truth may be called *the truth of faith*. It is regarded as infallible, yielding adequate knowledge about the true-reality values’ (Sorokin 1941: 81).

⁸ What is at stake is ‘humanity’s unique spiritual existence from the rest of the animal and material world’ (Fuller 2006: 132).

⁹ See Sandstrom 2008b for more on Sorokin’s cultural-civilizational views.

¹⁰ Oswald Spengler. *The Decline of the West*, 1918, 1926: 60.

¹¹ ‘Natural selection’ is not and can never be a proper substitute for ‘human selection’ because they are two different categories of things; whether framed with the label ‘artificial’ or ‘human-made’ does not essentially matter. By protecting the autonomy of human selection from natural selec-

the concept of 'extension' is being elaborated in HSS, dealing with human choices in addition to space and things.¹²

The idea of 'human extension' applied sociologically contains implicit ontological meaning for interpersonal relations (*e.g.*, C. Dickens) and serves to compliment the notion of social epistemology (Fuller 1987). Human extension functions as a symbol of reversal^{13,14} to the rise of evolutionary anthropology,¹⁵ a paradigm shift that re-configures HSS. There is no reason to suggest that anthropology, especially in its linguistic and cultural varieties, necessitates or even requires an evolutionary approach or that HSS must be defined by the natural scientific paradigm of evolution.

A major strategy for human extension is to challenge the inappropriate applications of evolution in social-humanitarian thought, without necessarily denying Charles Darwin's natural scientific contributions. It makes little sense to threaten Darwinism or even neo-Darwinism when the larger problem for social-humanitarian thought is 'evolutionism', that is, evolution as a universal ideology. Though some of Darwin's ideas directly encouraged social Darwinism (*cf.* Young 1985), he was not ultimately responsible for their actual perpetration. Social Darwinism was actually due more to the theories and writings of Herbert Spencer¹⁶ than to Darwin. As Daniel Todes notes, 'Darwin's accomplishment as a naturalist was totally separable from the "false Darwinian sociology" created by western European thinkers' (Todes 1989: 39). As it is, very few social Darwinists remain active in today's academy. Thus, there is little need to challenge Darwin's social-humanitarian speculations, since they have already lost legitimacy.

The paradigm of 'evolution', on the other hand, both predates and post-dates Darwin's significant contributions to NPS knowledge. Evolutionary theory has changed and advanced considerably since Darwin's day, and a lingering problem today remains that its proponents sometimes suggest a type of Darwinian universalism for evolution as if it could represent a 'grand unified theory' (GUT).

tion, a balance is sought that allows for respectful dialogue between sovereign academic disciplines.

¹² 'What made our subject [geography] possible...[was] the extension of scientific methods of observation, classification and comparison to peoples and societies' (Stoddart 1996: 224).

¹³ 'When pushed to the limits of its potential, the new form will tend to reverse what had been its original characteristics' (McLuhan 1988: 98).

¹⁴ 'Every medium taken to its fullest extent flips to its opposite' (Neil Postman, his first and only e-mail message, 2002).

¹⁵ 'Coincident with the development of the evolutionary philosophy has been the rise of anthropology as a science' (Eiseley 1958: 337).

¹⁶ Social Darwinism: 'The fallacious idea, originated by Herbert Spencer, that social inequality is justified by evolutionary theory' (Gaulin and McBurney 2004: 380).

Up until now, however, there has been no systematic articulation of a ‘theory of extension,’ which can be applied to human-social thought. Theories of extension by Herman Grassmann (1844, 1862) and A. N. Whitehead (1929) occurred in mathematics, philology and philosophy respective. M. McLuhan’s approach to the ‘extensions of man’ (1964) focussed mainly on media, rather than delving into HSS history, theory and methodology. Thus, space is available for the current project that applies ‘human extension’ in HSS.

What we have to gain with human extension in HSS is the ‘breaking out’ (*i.e.* extension) of peace instead of the gradual and unknowing drift (*i.e.* evolution) towards war. A shift away from the Anglo-American interpretation of ‘evolution’ based on conflict (*e.g.*, Spencer 1967 [1851], Huxley 1888, Dawkins 1976) to a Russian-Canadian understanding of ‘evolution’ based on ‘mutual aid’ thinking¹⁷ and synergy (*e.g.*, Kessler 1880, Kropotkin 1902, Taylor 2004) offers a potential solution. The integration of sociological, philosophical and theological perspectives, which Sorokin began to promote through his Centre for Creative Altruism (1949), also presents a legitimate source of hope for the elaboration of an Idealistic cultural super-system.

Though western sociologists have made minimal use of its insights, we can now conclude that the Russian social-philosophical tradition has great experience, knowledge, and even wisdom to offer. It can actually serve to rescue altruism,¹⁸ via Sorokin and his latter-day proponents (Tiryakian, Jeffries, Nichols *et al.*), from the materialistic reductionism of socio-biology and evolutionary psychology. Even if only in this sense alone, the Russian sociological tradition’s rejuvenation in recent years may be able to offer significant insights and important points of clarification to the global social-humanitarian scientific community within a non-evolutionary framework.

‘[A]nother law’, writes Karl F. Kessler, ‘the law of mutual aid ... is if anything more important than the law of the struggle for existence’ (Kessler 1880: 128–129). There can thus be advantages, both material and spiritual, gained by returning to Kessler’s mutual aid thinking when modified for the contemporary human-social theorist. At the same time, one need not reject entirely the model of competitive capitalism that has emerged out of Anglo-American social ideology.

‘I do not reject the struggle for existence’, says Kessler, ‘but only affirm that the progressive development both of the entire animal kingdom and, espe-

¹⁷ ‘He [Karl F. Kessler] began his address “On the Law of Mutual Aid” by criticizing those who invoked “the cruel, so-called law of the struggle for existence” to resolve social and moral issues’ (Todes 1989: 110).

¹⁸ ‘Finding altruism and other human qualities in insects proves to be a delusion ... because they lack the freedom to decide between possible alternative courses of action ... Praise and blame have meaning only in connection with acts in which the individual is at least to some extent a free agent’ (Dobzhansky 1956: 93).

cially, of mankind is not facilitated by mutual struggle so much as by mutual aid... The law of mutual aid has played an incomparably greater role in the history of his [sic – humanity's] successes than has the law of the struggle for existence' (Kessler 1880: 134–135).

If we accept Kessler's formulation as valid, it has profound consequences for how we view human-social life, including the processes of globalization. We can today openly accept that it was Darwin's error (Allchin 2009: 116–119), in light of Malthus' population theory, to create a dogma ('struggle for life') that became a scientific slogan and also a cry for war (Todes 1989). Though Darwin himself was generally peace-loving rather than war mongering, others interpret his theories as necessitating conflict, while the centrality of 'struggle' in his writings is impossible to ignore.

At least it can be fairly said that 'Darwinism' has contributed to war-based thought in that it justifies hyper-competition, which in some cases can take the name of 'war of all against all'. The primacy of conflict ideology, even the cry for war, in the name of 'evolution', may finally be silenced with the inclusion of 'mutual aid' thinking based on human extension. In this way, non-evolutionary thinking allows for more peaceful processes of socio-cultural globalization and relationship-building.

The moment(s) of human extension is (are) something that evolutionary social theory cannot fully explain. Entering into dialogue about how our intentions lead to human-social action is an important component of social-humanitarian thought. For this reason, peace for evolution's puzzle can be found by exploring human extension as an alternative to evolution and as a methodology to be used in HSS fields. What follows is therefore an answer to A. Rezaev's call for an alternative to evolution in HSS (Rezaev 2008), which can be explored by following up on the five 'non-evolutionary' fields raised by the author as in 'Piece's of Evolution's Puzzle'.

Linguistic Aspects

There is no satisfactory general definition of evolution. 'Sustained change' comes probably as close as possible at present.

T. Dobzhansky¹⁹

Does science 'evolve'? What a strange question to ask in an age saturated by evolutionary thought. 'Of course it does', one person might answer. 'It changes, doesn't it?' This answer and the question about change tend to suffice for those steeped in an evolutionary Sensate perspective. Yet when we take a step back to get some safe distance, we recognize that the question is linguistically more difficult to answer than it first appears.

¹⁹Dobzhansky 1967: 36.

Technologies and machines cannot be said to ‘evolve’ in the same way that biological organisms ‘evolve’, despite what proponents of such a view might protest.²⁰ Human-made technology is always teleological in character; it serves a goal and has a purpose. A television, microwave oven or mobile phone does not qualify as a ‘natural’ object, unless the interpreter of reality is a universalistic naturalist or a religious fundamentalist who cannot find a third alternative to the natural/supernatural dichotomy.²¹ A microwave oven is not a god, after all! Human-social scientists and scholars know better than to conflate unlike things (e.g., mechanisms and organisms) and instead carefully discriminate between changes in one’s environment²² and the choices made by individual persons and groups to impact their surroundings.

The wilful, intentional choices and actions of individuals and groups are the focus of human extension methodology (HEM). The early-modern philosophical definition of ‘extension’ (*res extensa* of R. Descartes) was primarily about substance and the material world. The definition of mind (*res cogitans*) as ‘un-extended’ or as ‘un-extensible’ is today seen as a fallacy of the excluded middle, fit to be more widely exposed. A social-humanitarian view of ‘extension’ is one that inevitably includes both material and informational, spiritual and/or non-material elements. This move returns sociology as a HSS field to the fold of Ideational cultural types, which involves human choices, meanings, purpose and teleology. It plays on the fact that human beings can never be completely ‘objective’ about themselves (ourselves), a view that ‘reflexive sociology’ has shown.

By introducing the concept of ‘extension’ into discussions of human-social change, a positive contribution to sociology is proposed. This view acknowledges human uniqueness, both as ‘apophatic’ philosophy (*i.e.* the negative epistemological reality that human-made things do not evolve) and as ‘kataphatic’ theology (*i.e.* the positive ontological reality of human uniqueness).²³

Extension (X) goes beyond what evolution (V) was capable of providing in HSS. The linguistic discourse of evolution and extension concentrates on

²⁰ ‘The development of technology as revealed by the archaeologists and historians of applied science is as clear a case of descent by modification in terms of the survival of the fittest means to ends as could be imagined ... perhaps technology alone provides a case of genuine evolution which is in any sense universal’ (MacRae 1959: 105–113).

²¹ That is, for religious fundamentalists who strictly place ‘natural’ and ‘supernatural’ or ‘nature’ and ‘divine’ in opposition to each other, there is no room for acknowledging that something may be ‘non-natural’ and at the same time ‘non-supernatural’. Those who call themselves ‘theistic evolutionists’ often hold this position, as a result of weaving together a naturalistic idea (*i.e.* evolution) tightly into their theologies.

²² ‘Man lives in environments created by his culture and his technology, and these environments determine what selection is doing’ (Dobzhansky 1956: 82).

²³ “‘The best of all possible worlds’ implied that humanity was created in the image and likeness of God” (Fuller 2006: 128).

how these two concepts have been used in the past, how they are being used now, and how they can be used in the future, in combination with other relevant social-humanitarian ideas. Extension is thus potentially a 'disruptive innovation' in the field of social-humanitarian thought because it unsettles the continuum of frameworks that rely on evolutionary models and process-oriented linguistics.

This can easily be seen by comparing two letters in the words evolution and extension. The 'V' in eVolution represents the uni-directional (*i.e.* irreversible²⁴), forward-moving, upwards, ideological character of old evolutionary theories. The 'X' in eXtension represents the multi-directional (*i.e.* reversible), forward and backward-moving, upwards and downwards, reflexive character of the new HEM. Such a contrast reveals the challenge that HEM poses to the evolutionary social-humanitarian status quo.

Philosophical Aspects

Life must be understood backwards but it must
be lived forwards.

S. Kierkegaard

What the concept of 'extension' adds to social-humanitarian fields is the anticipatory dimension of teleology, which has disappeared from sociology's sensibility (Fuller 2006: 62). Knowledge already produced in HSS is preserved with HEM, while concepts such as 'mobility' and 'innovation diffusion' are revived and attributed with a teleological orientation that evolutionary theory lacks. Social mobility and innovation occur because we choose them, not because they 'just happen' without any choice. By both respecting teleology (*e.g.*, final causality – Aristotle, and amplification – McLuhan) and adding a negative (apophatic) perspective about human progress (*i.e.* including regress and reversal, as well as intension), the discourse of evolutionary philosophy is fundamentally challenged. No longer should NPS-centric pronouncements of what counts as 'science' be held as binding for human-social thought, which has its own sovereign scientific-scholarly realm, including theories, methodologies and paradigms of thought.²⁵ A more level communicative playing field is called for by the addition of HEM.

²⁴ 'That evolution is irreversible is a special case of the fact that history does not repeat itself ... Historical cause embraces the totality of preceding events. Such a cause can never be repeated and it changes from instant to instant' (Simpson 1953: 312).

²⁵ 'In the world of man, as in the entire organic world, progress does not consist in adaptation and victory in the struggle for existence, but is a result of an internal principle, the consequence of striving for the ideals of truth, kindness and beauty, which are profoundly rooted in the soul of man and which constitute, perhaps, but a partial manifestation of that tendency to progress which is inherent to life itself' (Korzhinskii 1899: 267).

Crucial for formulating a challenge to evolutionary philosophy is the focus on cooperation and mutual aid²⁶ instead of on competition and conflict. The notion that humanity has an inherent species-unity enables improvements in our ability to care for the earthly environment by recognizing not only that our environment shapes us (evolutionary model), but also that we shape it (anthropogenesis – the extension model). In other words, settling the warfare fallacy²⁷ is important both for human beings and for natural environment since struggling against nature in order to ‘master’ it may end up damaging human lives rather than improving them. In our EI-age, it makes more sense to cooperate and collaborate rather than to compete and engage in conflict over natural resources that are arguably ‘property’ of the entire human race, rather than being owned by a few local inhabitants.

The underbelly of evolutionary ideology also leads to the over-extension of human rights to (non-human) animals. Thus, a kind of ‘dehumanization’ lies at the heart of the ‘global ecological ethic’ (Fuller 2006) and threatens the characteristics that make human beings unique among earthly creatures. In light of Fuller's recognition of the danger posed by neo-Darwinism and natural scientific thought generally upon social-humanitarian thought, the defence of ethics as a human-made thing, or even as a divinely inspired covenant, puts pressure on evolutionary theorists to drop their pretensions to universal knowledge and to accept non-evolutionary change in HSS.

The focus on ethics²⁸ and morals goes beyond the modern evolutionary paradigm, but is welcomed by human extension sociology. What do ethics and morals extend from, what is/are their source(s) and meaning(s)? What good or harm do they bring to humankind?²⁹ Conversely, according to Dobzhansky, one of the founders of the naturalistic modern evolutionary synthesis,³⁰ ‘biological evolution has instilled in us no ethics and no ability to discriminate between good and evil’ (Dobzhansky 1963: 148). Thus, what we are left with in terms of

²⁶ ‘In the practice of mutual aid, which we can retrace to the earliest beginnings of evolution, we thus find the positive and undoubted origin of our ethical conceptions; and we can affirm that in the ethical progress of man, mutual support – not mutual struggle – has had the leading part. In its wide extension, even at the present time, we also see the best guarantee of a still loftier evolution of our race’ (Kropotkin 1972).

²⁷ The warfare model may also be seen in the caricature that evolutionary psychology and socio-biology make of social science with the so-called standard social science model (SSSM). By accusing social sciences of failure to be ‘scientific’, evolutionary psychologists are actually being disingenuous; they are discrediting themselves in their attempt to appear scientific. They are trying to have their cake (copying NPS methods) and eat it too (claiming HSS territory).

²⁸ ‘Ethics are acquired, not biologically inherited’ (Dobzhansky *et al.* 1977: 455).

²⁹ ‘The old evolution was and is essentially amoral. The new evolution involves knowledge, including the knowledge of good and evil’ (Dobzhansky 1956: 135).

³⁰ ‘[H]e who has good claim to having been the greatest evolutionist since Charles Darwin, Theodosius Dobzhansky’ (Ruse 2006: 233).

ethics according to evolutionary theory is a strong relativism that goes against any absolute or unconditional human morality.³¹ With such a stark contrast of views, it seems urgent to escape the cage of evolutionary thinking that would leave us both stripped of spirit and underwhelmed by what Albert Einstein referred to in human beings as the wonderful 'moral universe within'.

One additional point can be made by mentioning a flaw in the Darwinian view of reality that contrasts with how reality is generally perceived today. The famous tree diagram in Darwin's *chef d'œuvre* (*On the Origin of Species*) is overtaken by an approach that is coherent with the M-dimensional world (eXt) of mechanical and electronic technology. Darwin's 2-dimensional (eVo) view is incompatible with the world people live in as it is viewed by scientists, philosophers and theologians today. Looking to extension highlights the transformation of humanity's habitat from an earthly Garden (tree) to the City (network), with all of the relevant psychological implications that result from living in an artificial, asphalt-spread environment.

Sociological Aspects

The central sociological proposition of HEM is to say: everything human-made³² extends to and/or from a human decision to act or to make something. Without choices and actions, there is no human extension. This simple methodology acknowledges the reality of human-social change without needing to import the theory of evolution and its sometimes attendant biological reductionism or 'biologism'.³³ Here we can safely reject the ideological gene's-eye view (Dawkins 1976) championed by socio-biologists and evolutionary psychologists to participate more deeply in home-grown social-humanitarian thought. By invoking 'extension,' we acknowledge both the intensity and the extensity of human choices, decision-making, agency and teleology that inevitably exist across the range of HSS fields.

Human extension sociology is not designed simply to replace evolution. It provides an opportunity for HSS investigators that seek precision in describing and even explaining 'moments of change' expressed in personal and group decisions. This is done by making observations of human extensions in a vari-

³¹ 'The problem of philosophy is, for all that exists conditionally, to find a ground unconditioned and absolute' (Plato).

³² That is artefacts, theories and even the scientific method itself.

³³ 'After having overthrown the mechanistic view, we are careful not to slide into "biologism", that is, into considering mental, sociological and cultural phenomena from a merely biological standpoint. As physicalism considered the living organism as a strange combination of physico-chemical events or machines, biologism considers man as a curious zoological species, human society as a bee-hive or a stud-farm. Biologism has, theoretically, not proved its theoretical merits, and has proved fatal in its practical consequences' (von Bertalanffy 1950: 134–165).

ety of fields and contexts. First, we seek out human factors, causes and effects of human decision-making and action, not just 'environmental factors'. Then we analyze human choices in proportion with environmental pressures, some of which are non-human-made.

According to the Russian sociologist Evgeny de Roberty, sociology is a basic science about the spirit in nature, with its culmination point in perception (Kukushkina 2004). Roberty's view that sociology is meant to study or involve the (human) 'spirit in nature' raises the notion of self-awareness, both in terms of spiritual energy and the transmission of culture across space and time.³⁴ In such a view, sociology must therefore be constantly in dialogue with psychology, anthropology and other HSSs that study the 'super-organic' world of culture. Human consciousness³⁵ historically reveals, for example, the importance of ideas like 'altruism', 'cooperation' and 'solidarity', long-discussed in Russian sociology, as constructive views for social-humanitarian scholarship, in contrast to 'egoism', 'conflict' and 'parasitism'.

The sub-discipline sociology of science (SoS) sheds light on the special position of humanity in the natural world, including questions about why science is done and why understanding is sought by individuals and societies. SoS is based on sociology's notion of human distinctiveness from other entities in the world. As Fuller writes, 'from August Comte onward, sociology has based its scientific autonomy on humanity's species uniqueness' (Fuller 2006: 134). Without human uniqueness at the heart of sociology's scientific autonomy, the field runs the risk of turning into biology's handmaiden or into ecology's maidservant, with bio-liberalism and bio-prospecting potentially overtaking the importance of moral and ethical dimensions in human decision-making. Moving from evolution to human extension in sociology facilitates the study of individual and social consequences and the anthropogenesis of 'technique', which is alternately called 'art' as well as 'science' in different traditions.

To ensure sociology's sovereignty from biology and other NPSs, a boundaries and limits test is put forth for evolutionary theories. In HSS, we admit a complementary negative proposition to the one given in the first sentence of this section: 'nothing human-made evolves into being (or into having become)'. This is a similar position to Fuller's when he advocates that 'the empowerment of nature is not permitted to pre-empt the empowerment of humanity' (Fuller

³⁴ 'Transmission of culture can now occur through space, between persons who live in different parts of the world. It can occur through time, from persons long dead to living ones. Founders of religions, philosophers, poets, scientists, artists, inventors, intellectual and political leaders exert strong influence, for good or evil, centuries and millennia after their deaths' (Dobzhansky 1956: 33).

³⁵ 'As evolution came to be the reigning hypothesis among men of science it was to be anticipated that its central problem, the origin of the human mind, would demand consideration' (Anonymous 1889: 359).

2006: 181). The uniqueness of humanity requires 'special treatment', which comes with the territory not of NPS, but of HSS.

The general sociological method of searching for 'human extensions' is not something that is discovered, but rather terminologically invented as suitable for our current epoch. We have already agreed upon usages of 'extension' that function practically in our electronic-information age.³⁶ Why not then apply the term 'extension' in relation to all human-made things in order to distinguish them from natural-physical change-over-time? Such a distinction seems important in order to adjust people's vocabularies to the demands of the time and to protect people from foreign NPS ideologies being applied to humanity. From an everyday communicative standpoint, however, and in terms of advancing HSS grammar, this may be something rather difficult to achieve.

To extend something is to imply a root, a beginning of motion,³⁷ a starting point; origins. This is where evolution and extension have nothing in common.

Pedagogical Aspects

Think of life as an immense problem, an equation, or rather a family of equations, partially dependent on each other, partially independent... it being understood that these equations are very complex, that they are full of surprises, and that we are often unable to discover their 'roots'.

F. Braudel³⁸

Education is full of discontinuities, leaps, moments of realization, epiphany and discovery; it is an ideal field for HEM. Education as a series of gradual and/or punctuated extensions of human knowledge, both individually and socially, is more consistent with reality than to perceive it as a result of unintended consequences, random variations and/or goalless methods. From this point of view, education is one sphere of human existence that quite obviously strives towards a goal, that is, it must include a teleological component to avoid being counter-productive. We learn from those who know and who can point the way, in

³⁶ Some concepts and expressions which can be identified using the notion of 'extension': Extension cords, extension services, telephone extension, extension pole, hair extensions, contract extension, extension of the ballot, extending one's hand, to what extent, to the extent that ... these things are all commonplace in the English language. Examples of 'extension' can be found in the phrase 'I am extending' or 'we are extending' with its imperfective form. 'It (has) extended' is also a reputable verb in the perfective form.

³⁷ 'The fulfillment of what exists potentially, in so far as it exists potentially, is motion.' ... 'It is possible for a thing to cause motion, though it is itself incapable of being moved' (Aristotle *Metaphysics*, Book III, 201a 10, 27).

³⁸ F. Braudel. Preface to Charles Morazé, *Les bourgeois conquérants*. Paris: Librairie Armand Colin, 1957.

combination with our personal choices to listen, to study and to acquire and/or produce new knowledge.

Learning draws a distinction between biological and cultural heredity³⁹ because it is a form of cultural reminiscence, not just a deterministic behaviour. Human-cultural experience and knowledge is transmitted from person to person, resulting from human choices and decisions that echo across time and space. Human voices caring about the upbringing of their children desire a purpose for education and for their communities. This view, however, is discarded in neo-Darwinian evolutionary theories, as ideology takes over pedagogical science.

If we teach children that they differ from other animals only in 'degree', but not in 'kind', then the dramatic consequences of this teaching should be acknowledged up-front and without equivocation. Once it is recognized that evolutionary pedagogy is often used to support (scientific) atheism, as it was in public schools during the Soviet period and as it is currently taught in the USA and China, then an alternative can be sought that provides a more inspiring foundation for humanity.

The evolutionary ideology bent on 'survival of the fittest' and reproduction *uber alles*, when taught as the true meaning of life to children,⁴⁰ poses a direct threat to human self- and community understanding by warping our sense of values, ethics and beliefs. 'Survival is not the highest human value', writes Kenneth Boulding. 'One doubts, indeed, whether it is even the highest value in the biological world' (Boulding 1956: 72).

Likewise, Fuller remarks that 'as a scientific theory of life on Earth, Darwinism addresses how species manage to survive as long as they do. However, as a political theory, Darwinism makes species survival the ultimate good, even if this means sacrificing or manipulating individual members of a given species, including our own' (Fuller 2006: 174). By noting the contradictions between biological evolutionary theory and actual human experience and feeling, we are warned not to trust socio-biologists and evolutionary psychologists who would have us give away our humanity, who would 'casualize' (Fuller 2006) and HSS in the process.⁴¹

E. O. Wilson is rather blunt with his polemical socio-biological outlook. 'Which world view prevails', he writes, 'religious transcendentalism or scien-

³⁹ 'The key word ... is "learned", as it draws a clear distinction between biological and cultural heredity ... Culture is transmitted by teaching and learning. At least in principle, "the social legacy" can be transmitted by anybody to anyone, regardless of biological descent' (Dobzhansky 1956: 27).

⁴⁰ '[A]ctivities are biologically meaningful only insofar as they eventually contribute to the production of surviving offspring' (Trivers 1985: 21).

⁴¹ 'Social theory applies to all species' (Trivers 1985: 65).

tific empiricism, will make a great difference in the way humanity claims the future' (Wilson 1998: 265). The philosophy that pits science and religion against each other, invoking a warfare model, however, is now increasingly outdated and need no longer be entertained as fruitful for individual or collective human flourishing. Indeed, when it comes to educating children, if we take into account and recognize the danger of scientism and the hegemonic practices imposed by Darwinian evolutionary theories upon humanity, an alternative pathway would seem preferable.

The addition of 'human extension' as an alternative to 'human evolution' enables science, philosophy and religion to hold a collaborative, fruitful dialogue in pedagogical practices, with the latter two realms undefeated and unbowed by the ideological excesses or strivings for NPS hegemony over what counts as socially important knowledge.

Psychological Aspects

Extension is the fundamental aspect of the objective world as it offers itself to our apprehension.

G. C. Robertson⁴²

For psychology, the idea of 'human extension' offers both a holistic perspective and one that focuses on individual human persons. As an alternative to 'evolution' in HSS, it overturns biological reductionism and materialism as unnecessary ideologies in psychology and in doing so guards against 'dehumanization'. Robertson's 'psychological theory of extension' is in need of updating to cover 113 years that have passed in the field. The Cartesian dichotomy displayed in Robertson's meaning of 'psychological extension'⁴³ is no longer binding on the field, which this paper and the author's work on 'human extension' have taken steps to show.

Evolutionary psychology perpetuates a kind of 'zoocentric misanthropy' (Fuller 2006: 187) that warps people's perceptions of meaningful human identity. Evolutionary psychologists have ideologically distanced themselves from the traditional philosophical/theological meaning of human beings as 'created in the image of God' and as different in 'kind' from (other) animals. Why do evolutionary psychologists insist on treating human beings with positivistic misanthropic methods rather than with reflexive anthropic methods? This paper contends that as long as evolutionary psychologists remain stuck using predominantly NPS methods to study human beings, who are at the core of HSS, they will come up with the wrong answers.

⁴² Robertson 1888: 420.

⁴³ '[E]xtension is the one essential attribute of whatever *is* other than mind' (*Ibid.*: 420).

Once a human choice is made, 'evolution' is no longer a valid term to describe what results from it; the choice itself is the content in human psychological extension.⁴⁴ Whether or not psychology will continue to function as a 'social science' depends on how it treats human beings in comparison to other creatures on Earth. Perpetuation of evolutionistic ideology in psychology will likely continue to dehumanize individuals, whole societies and cultures rather than speaking inspirationally to their/our humanity.

One example of a natural-physical scientist presuming to have knowledge about culture, society and mind is R. Dawkins, with his idea of 'memes' (*i.e.* cultural replicators). This paper joins the significant ranks of scholars who reject Dawkins' foray into HSS. Using Dawkins' language, to spread the 'extension' meme in this case just means 'to extend extension', which then comes back to simply meaning 'extending' or 'extension' in the first place. There is thus no need for 'memetic' language on topics related to 'origins' of socio-cultural action, which cannot be 'imitated' until 'originated' in the first place. It is biologicistic to suggest that human beings are servants of (our) 'memes', under the guise that biologists-know-best on topics of culture.

The mind, as well as the body and spirit, can be extended, as contemporary theories of 'extended mind' suggest (Clark and Chalmers 1998; Logan 2000, 2006, 2007). Psychology must nevertheless be careful with HEM, not to exaggerate its uses in sovereign academic fields. It should be remembered that 'non-human-made things' do not 'extend' from human choices; there are alternative causes of change and development from outside of the human psyche that offer legitimate topics for study.

If psychologists were to re-appropriate 'human extension' into a fully quantifiable, calculable, measurable indicator of human-social status, capacity, self-identity, talent, ethics, values, beliefs or worth, then this would contradict the reflexive anthropic message expressed above. R. Logan's work exemplifies the dangers of taking a physics-oriented view into human culture, having fallen prey to Darwinian evolutionary materialism (Logan 2010: concluding section). He does not realize that McLuhan's work opened up the possibility of escaping from Darwin's evolutionary materialism, rather than miring us deeper in the dehumanizing ideology he has embraced.

HEM acknowledges that we are involved in socio-cultural processes of change and development both within and beyond our range of individual human control. It places the focus on free will, intention, choices and telic human-social action, as well as that which exceeds human understanding, thus encouraging cooperation between psychology, sociology and even theology. It thereby minimizes the role of biological evolutionary theories in human-social thought,

⁴⁴ 'The principle of the choice...is that for the sake of which it is made' (Chernyakov 2002: 101).

which suggests it will be mainly socio-biologists and biologicistic ideologues that will contest the arrival of human extension.

Whereas socio-biologists and evolutionary psychologists have sometimes dismissed the notion of free will (Pinker 2002), HEM focuses on free will and human choice as core components of human uniqueness and responsibility. Why are psychologists still stuck on Darwin, when time has already moved on significantly past him?⁴⁵

The basic presupposition for human extension sociology is that human beings have an inherent sense of meaning and purpose, something that socio-biologists and evolutionary psychology have denied and in countless cases tried to remove.⁴⁶ Self-awareness is a particularly human characteristic, though it need not coincide with self-centeredness (or with anthropocentrism) because our identities as human beings are always as individuals linked and living together in/with various groups. The sense of purpose and general human belief in a supra-rational and supra-sensory human element shows that psychology cannot depend solely on reductionistic evolutionary mechanisms to theoretically describe and explain human behaviour. Human behaviour is also influenced by our non-mechanical and non-material characters and our apparently irremovable hope in the beyond.

Concluding Remarks

It is, in my opinion, a great danger for psychology if concepts of physics are used there instead of those concepts which have developed in psychology itself.

A. Einstein⁴⁷

A neo-Darwinian evolutionary revival in HSS is the wrong answer for global humanity's needs today. First, this is because 'heritable variation' as a biological concept transfers awkwardly into the human-social realm. Heritable variation occurs at a natural-physical level between children and their parents, but this is not something that can be fully calculated or measured anthropologically using statistics and probabilities. The explanatory power of biology and population genetics is indeed bounded (Kass 2002), such that human-social scientists are free to move forward using non-evolutionary terms.

⁴⁵ 'I believe that if you strip the *Origin of Species* of its theoretical part, it still remains one of the greatest encyclopaedias of biological doctrine that any one man ever brought forth; and I believe that, if you take it as the embodiment of a hypothesis, it is destined to be the guide of biological and psychological speculation for the next three or four generations' (Huxley 2004 [1863]: 89).

⁴⁶ 'This is the cardinal tenet of scientific understanding: Our species and its ways of thinking are a product of evolution, not the purpose of evolution' (Wilson 1998: 32).

⁴⁷ A. Einstein. *Letter*, Feb. 3, 1942, in E. F. Molnar's *Human Action*, 1955: 23.

Second, the notion that ‘competition’ and/or ‘conflict’ is at the basis of human-social progress is potentially damaging rather than helpful or healing. It is born of a hyper-capitalistic, Victorian, Anglo-Saxon, Malthusian-inspired, Wall Street-motivated view of humanity. This is simply not in most cases an appropriate description of globally-oriented societies, nor is ‘competition/conflict for the sake of competition/conflict’ in most cases good for the collective health of humanity. By placing greater focus on cooperation than on competition, while not dismissing the role of competition in its proper place, an alternative approach to human-social change is made possible. This is the opportunity that extension sociology offers; a fresh vocabulary that replaces strife with harmony.

Third, the belief that HSS can ‘survive’ without a sense of teleology is fundamentally confused about the unique meaning of human personhood. Too long have human-social scientists and scholars allowed the ateleological language of ‘evolution’ breathing room to speak about human affairs. Evolution, because of its ateleological character, is logically inappropriate in a field where human decisions are inevitably involved and should thus now finally be put to rest as a vestige of a past era.

Though some sociologists believe ‘evolutionism’ absolutely must be a key part of the future of sociology,⁴⁸ this paper has considered ‘neo-Darwinian evolution’ as an outdated paradigm for human-social thought. Something new has arrived and may now be articulated as a voice for responsible anti-evolutionary expression.

Elaborating on what ‘extension’ means for HSS coincidentally also is to reclaim philosophy and theology for social-humanitarian thought, giving these spheres of knowledge a measure of breathing room from the hegemonic control of NPS methods and universalistic evolutionary ideology. By highlighting the logic of extension as conversant both with material and with non-material things, HEM offers a contribution similar to Sorokin's vision of an Idealistic civilization that combines Sensate and Ideational values. With the turning away from an extreme Sensate position, which evolutionistic ideology has come to represent, it makes sense for an alternative trajectory for human-social thought now to be discussed and potentially achieved.

Some forward-looking examples of what HEM offers come in the form of presenting ‘human selection’ as an alternative to ‘natural selection’, and of exploring the reality of ‘things that do not evolve’. These two features of extension sociology lend credibility to the field as atypical of anti-evolutionist strategies. Instead, by offering a positive, practical and partially empirical contribu-

⁴⁸ For example, Alexandra Maryanski – the head of the new section on ‘Evolution and Sociology’ (2006) in the American Sociological Association, and Jonathan Turner. Likewise: ‘I am in no doubt that neo-Darwinism has a long life ahead of it’ (Runciman 2007).

tion to human-social thought via the prospect of observing the 'extensions' of human intention and action, no longer does a merely anti-evolutionary effort suffice.

A post-evolutionary or non-evolutionary standard is thus created for the benefit of social-humanitarian thinking, that are discontent with evolutionary dehumanization. In this way, the concept of 'struggle' can be reconsidered rather in the light of 'tension' with a dual-directional or multi-directional process of 'in-tension' and 'ex-tension' revealing real human consequences of our choices. Admitting that there is tension between two or more persons or groups is not the same thing as suggesting that they inevitably must struggle or clash (with each other), because it is simply 'human nature' (according to ethologists) to do so. 'Human nature' also seems inherently bent toward cooperation when given the opportunity and right reasons, intuitions or emotions for doing so. Unifying global humanitarian moral theories support this position and allow for the possibility of re-humanization in the light of human extension.

The relevance of the concept of 'extension' for the electronic-information age is already both significant and fundamental. 'The medium is the message', wrote McLuhan. 'This is merely to say that the personal and social consequences of any medium – that is, of any extension of ourselves – result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology' (McLuhan1964: 7). The reality of new technologies intimately confronts today's human-social scientists in developed and also developing countries. For McLuhan, 'media' are extensions of humanity, technologies that are created by human beings and for human beings. They are distinct from 'nature' just as 'artificial selection' was seen by C. Darwin as categorically different from and not to be conflated with 'natural selection'.

Recognizing this is precisely what HEM provokes in sociology, allowing it to break free from the process-oriented chains of evolutionism and from naturalism that oppressively obscures human-social thought. As a concept and way of understanding reality, 'extension' is both relevant and powerful because the EI-age makes it relevant and powerful. We live in an age of 'extension', not 'evolution'.

The concept of 'extension' has gained legitimacy and widespread general usage in the realms of mathematics, linguistics, philosophy of mind, technology and media studies. Now it is time for us to consider its value as a non-Darwinian, non- or post-evolutionary contribution to human-social thought, with a new sociological imagination and a new spirit of cooperation in our mode of expression. Instead of an evolutionary war-like approach, this paper establishes a basis for peace at the heart of change we can believe in. Thus completes the disciplinary puzzle of evolution, revealing the final image in

which evolutionism is 'de-universalized' and where return is enabled to a more equitable balance of fields in the contemporary academy.

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