



The Astrosociological Imagination and the Space Renaissance Initiative.
A Discourse Analytical Perspective.

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This text forms an abridged introductory section from a dissertation I am undertaking on the Space Renaissance Initiative (SRI). The research dissertation is titled, 'The Astrosociological Imagination and the Space Renaissance Initiative- A Discourse Analytical Perspective'. The work shares some of the essentially humanist themes of C. Wright Mills' 1959 classic text 'The Sociological Imagination' and seeks to integrate social, personal and historical elements into a discourse analysis of the SRI, as I am on the organisation's current Board of Directors. The work is portioned into chapters addressing key elements of the SRI manifesto and discourse in relation to modern environmental political theory. This introductory chapter forms a précis of my literature review and explores traditional debates inherent within sociological critique regarding the environmental crisis, in context of the conceptual precepts offered by Max Weber on rationalisation in contemporary industrial society. The SRI's philosophies clearly present a radical departure from the polarities and inherent limitations of existing schools of thought on both environmental and socio- cultural developmental issues. The Space Renaissance Initiative is an organisation that challenges the parameters of our thinking in regard to human scientific, technological evolution.

Chapter One. 'The SRI: A Radical Approach to Re-rationalisation in Response to the Ecological Crisis of Postmodernity'.

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Abstract.

The philosophies of the nascent Space Renaissance Initiative (SRI) represent a radical departure from conventional approaches to a diversity of contemporary ecological and economic issues that characterise the current post modern political agenda. In this resume I will appraise the context and political goals of the SRI, as articulated through their manifesto¹. Essentially the Space Renaissance Initiatives' diverse epistemological roots can be traced back to the cultural evolution of the Renaissance in the 1500s towards the subsequent Age of Enlightenment in the 18th century. The SRI cite the influential writings of Descartes and constitutional thinkers Voltaire and Jefferson as important landmarks that inform their own egalitarian principles, asserting the equality of all and that freedom and liberty are paramount, with political power therefore residing with the people. It is on this basis that the SRI established their foundation in proposing social action orientated toward the extension of our current physical and philosophical limitations, promoting space travel and the utilisation of monetary and human investment in space to secure a 'new Renaissance'. Key theorists drawn upon by the SRI include Prof. Gerard O'Neill, Tsiolkovsky and Ehricke in the formation of the concept of 'astronautic humanism', or the notion of progress in science

¹ http://www.spacerenaissance.org/papers/The_Space_Renaissance_Manifesto.pdf



and technology as significant components in creating a transformational unifying vision applicable to the modern world.

The philosophical manifesto and objectives of the SRI on a first reading would appear to be permeated by rather idealistic, utopian goals. Despite their unconventionally radical approach to some of the most consistently challenging ecological, social and economic questions of our time, the issues which they address are fundamentally linked to a series of traditional sociological and scientific debates. There would seem to be an apparent lack of fully dimensional discussion both in the public domain and within the SRI upon comparative ecological perspectives and in essence, questions of rationalisation raised through the work of Max Weber. I will attempt to re-address a number of key issues, subsequent to an overview of the SRI manifesto. It is my belief that the SRI represents a diverse working group of humanitarian thinkers and academics who have a potentially evocative role to play in proposing a fundamental re-conceptualisation within ethical parameters of our relation to nature and technology. A greater level of focussed reflexivity upon the strengths and weakness of their own discourse would be beneficial in both strengthening their ethos and making the group's proposals potentially more viable. The substance of my methodology in conducting a discourse analysis of the SRI will take into consideration the precepts of transdisciplinary methodology- a holistic methodological approach that reflects the diverse composition of the Space Renaissance Initiative as a working group.

For the sake of clarity in the structure and title of this resume essay, I have sought to demonstrate the centrality of ecological debates as crucial to the SRI's discursive manifesto. In essence, the persuasive appeal of the organisation's literature is in the promised benefits not only to the space industry through their proposals, but also the potential contribution promised by their manifesto to ease the ecological crisis and to create improvements in the allied spheres of employment, the economy, culture, education and world peace. These aims are essentially very ambitious and the SRI is indeed increasingly attracting a range of both academic and corporate interest. The group is an open-membership volunteer organisation comprising 81 space- related organisations internationally including: - The Moon Society (USA), Advanced Technology Working Group, (USA), Space Future (UK, Japan) and Technologies of the Frontier, (Italy). In August 2010, the SRI registered as an incorporated under the new name of 'Space Renaissance International' offering a cosmopolitan flavour to their ethos. I feel the organisation's original title is more synonymous with the objectives of the SRI and have therefore referred to the 'Space Renaissance Initiative' throughout my discussion.

Key concepts: -

Renaissance culture, Astronautic Humanism, rationalisation, scientific naturalism, paradigmatic evolution, sustainable development, technocentrism, ecocentrism, ecofeminism.

Key Theorists: - Prof. Gerard O'Neill, Max Weber, Raymond Murphy, Thomas Malthus, the Frankfurt School.

The SRI Manifesto.

Central to the Space Renaissance manifesto (2009) is a conviction in the necessity to 'complete the Copernican revolution', in view of a continuing conceptual and practical evolution in relation to space exploration. The SRI asserts that a full-scale space utilisation



program focused on reducing the cost of space travel has the potential to revitalise the global economy and to precipitate the “greatest economic revolution of all time”. Some of the key issues discussed encompass the observation of the potential for greater employment via broadening our parochial focus beyond Earth’s atmosphere; this development would require advances in space research, development and funding. Humanity’s first priority is cited as settlement and industrialisation of the Earth-Moon space - indeed the resources of the Solar System are seductive and promise clean, renewable energy, providing a greater standard of living for the growing population. In ‘Space: The Answer’, further pandemic issues such as natural disasters, environmental decay and the increasing scarcity of terrestrial resources are addressed through the notion that Space development can provide not only employment, but solve our energy and material needs, contributing to global political stability through a growing economy and growth markets. For the SRI, space technology is a vital component in facilitating global communications and transport systems, enabling an understanding of the ecology of Earth, mitigating the effects of natural disasters. The continuing primacy of technology is in fact a key subject for debate at the first Space Renaissance Initiative Congress in 2011 in relation to societal evolution. Ultimately the SRI are keen to promote a more outward looking ‘open world’ construct of our role in the Solar System. The conclusion of the promise of the SRI’s manifesto is that expansion into space has the capacity to “save humanity from the possibility of extinction” and render us less vulnerable to unanticipated natural or anthropogenic disasters.

The Space Renaissance Initiative has a series of interrelated goals therefore within the philosophical, cultural and political realm combined with educational aspirations and the desire to establish an SRI Academy. The SRI academy is associated with the goal of developing a Humanist philosophical and ethical system to enlarge our world view and to effectively analyse cosmic and terrestrial ecologies and humanity’s role. The identification, investigation and support of astronautic, humanitarian, environmental and educational activities are advocated within a broader political framework. Liaising with government and private enterprise would be necessary to actualise the goals and visions of the Space Renaissance Initiative successfully. Funding, appropriate regulation and a positive public perception are all necessary for the space industry to diversify. Investment of government funds, a business friendly tax climate and improved public awareness are all cited as central in the development of feasible new space-related markets.

Ultimately the SRI is committed to the establishment of low-cost civilian space transportation, space tourism, solar power and settlement on the Moon and in Earth orbit. Scientifically, the SRI would need to work with governments and the scientific community to encourage research on human flight and the possibilities of deep-space living. One of the most evocative scientific goals of the SRI is their proposal to focus on life sustaining systems involved in human space flight and missions. The SRI would encourage the cross fertilisation of different research fields, conducting long-term experiments with large artificial ecosystems in true extraterrestrial environments, initially through the International Space Station. This proposal is especially pertinent as NASA are about to celebrate the tenth anniversary of the International Space Station in November 2010. The station was designed as an orbiting science laboratory and researchers have already carried out more than 400 experiments related to human research, biology, physics, both earth and space orientated research and education. (1) The station is forecast to be orbiting Earth for at least another five years, theoretically offering the SRI sufficient time to liaise with governments to begin their research utilising the ISS and ultimately, to continue work using lunar laboratories.



The Visions of Prof. Gerard O'Neill.

Professor Gerard O'Neill extends the utopian visions of the SRI further in his work and proposals for the expansion of humanity toward hermetically-sealed colonies in space. In 'The Encyclopaedia of Space Travel and Astronomy', John Man offers a succinct overview and begins with O'Neill's primary suggestion for the utilisation of mining moon materials such as metals, titanium, aluminium and iron. He goes on to suggest the construction of a solar power satellite and the establishment of colonies inside surfaces of giant spherical cylinders, within which humans could reside. O'Neill was keen to stress the potential of space colonisation in addressing fundamental ecological issues and asserts that his concepts could well contribute to a greater standard of living, protecting the biosphere from damage caused by transportation and industrial pollution. In fact O'Neill broaches a series of crucial issues including over population and the search for clean, practical energy sources and the prevention of overload on Earth's heat balance in his 1974 paper, 'The Colonisation of Space' (a work later developed into 'The High Frontier: Human Colonies In Space'.)

Undoubtedly O'Neill's humanitarian agenda is paramount to the appeal of his transformative concepts, although by and large his suggestions have as yet not been realised. The viability of his vision is illustrated through a step by step cumulative process, beginning with a small mining base on the moon, toward a whole colony, capable of housing some 10,000 people on the inner surface. In theory, the colony comprising a hermetically sealed cylinder would rotate twice a minute and provide Earth-normal gravity at the equator- natural dangers such as radiation and micrometeorites could be shielded from by a protective layer constructed from processing the lunar soil. Essentially this sci-fi colony is based on the principles of sustainable recycling of all air, and water; food would also be self- sufficient with the inhabitants working on further power satellites and lunar industry. Overall, O'Neill's concept is guided by a parallel notion to that of the SRI regarding the future safety of humankind, away from any natural disasters that might befall Earth.

In assessing the ambitious, challenging school of thought encompassed in the proposals of the Space Renaissance Initiative and their theoretical forefathers, it is necessary to re-contextualise the group's philosophies within the sphere of eco politics. Certainly theorists within ecological politics such as Raymond Murphy have shown an increasing awareness of the contribution of Weber's concept of instrumental rationality and the dominance of technical reason within capitalist societies. An assessment of the relative position of the SRI in this debate via the review of some important papers exposes a range of anomalies in their epistemological base. Further, many authors within environmental sociology offer some important words of caution regarding the concept of utopian, technocentric ideals. The position of the SRI would nonetheless appear to offer a refreshing alternative to the polarities and theoretical limitations inherent within conventional solutions to our current environmental crisis.

Key Ecological Debates in Context of the SRI Manifesto.

In the summary text for Clive Ponting's 'A Green History of the World', the hyperbole implicit in this précis imparts a skilful summary of some key themes in environmental social and political thinking regarding ecological irrationality, addressing the historical patterns consistent with the demise of cultures. Ponting locates patterns throughout human history from Rome to ancient Egypt related to the human exploitation of natural resources until they are unsustainable, and societal collapse then becomes inevitable. These processes in contemporary society are invariably linked with the rise of urban growth, the effects of



industrialisation and uneven distribution of wealth. It is immediately possible to identify that the Space Renaissance Initiative are therefore offering a reversal of this rather deterministic role ascribed to humanity in relation to the technocentric exploitation of Earth's resources. The SRI wish to reconsider an advancement of sustainable development theoretical constructs, utilising a 'garden' vision of man's relationship with the biosphere in space and propose further improvements in technological resources to enhance quality of life.

In 'Rationality and Nature' (1994), Raymond Murphy summarises effectively some of the key 'green options' under which central strands of thought within ecological politics can be analysed. He forwards the categories of the intensification of rationalisation under the premise of greenness, re-rationalisation and de-rationalisation. Underlying these alternatives is the idea that the intensification of rationality involves a certain 'plastic' view of our interactions with nature through an anthropocentric manipulation process, leading further toward hierarchical domination, economically and politically of humans over other humans. The conceptual background to this classification system is the application of Weber's theory of instrumental rationality or goal as opposed to value-orientated reason, in association with an increasingly bureaucratic society, suffering from the destructive dominance of technical reason. The intensification of rationality involves ecological goals still connected to the maintenance of a high standard of living for humans. The now familiar ideas of reduction of waste, reuse and recycle are therefore a form of ecological rationality and part of a dialectical relationship between social action and the processes of nature. In this 'garden vision' the consequences of technology upon the environment are calculated so as to produce an ecological improvement towards the next stage of societal development.

In this context, the visions of the SRI can be seen as extending the remit of sustainable development beyond our own atmosphere. Neo- Malthusians have attacked sustainable development ideas on the grounds that nature is not in fact malleable and our capacity to sustain population and consumption may be more limited than assumed implicitly by sustainability theorists. This equation has almost certainly been considered within the manifesto of the SRI, who unlike conventional sustainable development theorists do not ignore more fundamental equations and instead suggest a need for reassessment of economic and environmental issues through an 'open world view', extending our concept of society from the parochial remit of Earth. Whether the SRI have appraised the origins of our present societal crises within a sufficiently critical standpoint regarding the role of capitalism and bureaucratic processes is however unclear and a point I will return to later.

Theorists such as Bookchin (1985) have proposed an alternative perspective, advocating a form of re-rationalisation involving direct action, where individuals and communities take environmental concerns into their own hands. This working model seeks to maintain small scale social organisations, utilising more environmentally friendly technology and is a system fundamentally based on the retention of a more ethical form of both instrumental and value rationality. Historically, such small scale communities have not necessarily lead to a reduction of hierarchy or domination. In 'The Roots of Modern Environmentalism', (1993) David Pepper evaluates 'The Ecologist's Blueprint for Survival', a key work that he notes has been translated into the fiction of 'ecotopia' (Callenbach 1978). This perspective places inherent value on enhanced quality of life and greater harmony between 'man and nature'. Central aims including conservation of energy, recycling and an emphasis on personal happiness; further priorities include control over technology and society, the importance of education, creativity, art and spirituality. It is certainly the re-rationalisation model that would in my view resonate with the utopian visions of the Space Renaissance Initiative, considering



their allied emphasis on improvement of quality of life, education, creativity and the re-conceptualisation of community via an 'open world' model. The SRI preference however is definitely upon humanitarian rather than solely ecological considerations in relation to for example, the proposed development of space colonies- such colonies would also be essentially based on a change in perceptual emphasis toward a form of decentralisation. A healthy caution is offered by Pepper in regard to the potential for fascist elements inherent to such models as Callenbach's 'Ecotopia' however. Whilst socialist traits can be found in the notion of decentralised production and the control of technology through the people, the antecedents for a form of anarchic 'social ecology' are certainly a latent reality- it is debatable as to whether such regimes would result therefore in socialist utopia or fascist dystopia. In the context of space colonisation, social ethics are therefore paramount to the successful development of such sci-fi communities.

The SRI manifesto is though, more radical than any form of social ecology that has been attempted on Earth and is necessarily concerned with further, a redefinition of the stereotypical view of 'technocentrism'. In the second chapter of 'The Roots of Modern Environmentalism', John Perkins progresses toward 'The Roots of Technological Environmentalism', thus defining 'technocentrism' as the official, dominant set of attitudes to the environment, interconnected to the exercise of power. Rationality and the manipulation of nature for man's own ends are therefore often justified by technocentrists through their belief in objectivity. The scientific revolution of the 16th to the 18th century and the subsequent growth in capitalism historically gave rise to classical science and in essence the 'technocentrism' perspective. Technocentric thought seeks to resolve problems from rational science, using the laws of physical science and is connected to belief in the superiority of high over lower technology, the management of the environment and is further defined through an unfortunate 'irrational faith' in the ability of advanced capitalism to maintain itself. In fact, the ideological framework utilised in the definition of 'technocentrism' and the converse manifestation of 'ecocentrism' are shown by Pepper to be not mutually exclusive classifications, with some groups displaying elements of ecocentrism and technocentrism.

The characteristics of these tendencies are illustrated further through a descriptive chart by O'Riordan, 1981. Ecocentric traits that resonate to an extent with the SRI include value on the humanitarian importance of nature, the development of small scale communities and improvements in work and leisure, (in context of space settlements.) Technocentric traits might include optimism regarding man's ability to improve the lot of the world's people and belief that 'man' can always find a way out of any difficulty either political, scientific or technological. In reality, the SRI probably possesses more clear-cut technocentric beliefs, but have certainly incorporated the spirit of ecocentric virtues into their humanitarian ethics. It is within this context that I would suggest the SRI standpoint could be allied to not only 'astro humanism', but a form of 'techno humanism', in combining elements of traditional technocentrism with a level of social egalitarianism not envisaged within conventional critiques of technocentric rationality. Aspects of such 'techno humanism' can be found too, within the work of scientist and ecologist James Lovelock, who although controversial, shares some elements of common ground philosophically with the SRI in his advocacy of science and technology.

An argument has been forwarded in response to non-technological paradigms, such as deep ecology that are characterised as a response to our techno-centric post-Cartesian society. In 'A Critique of Deep Ecology' (1986) William Grey questions the claim that a science-based view inevitably leads to manipulative and exploitative attitudes to the natural world and



instead argues that non-technological cultures do not necessarily provide superior models for relating to our natural world. Grey's view is linked to a form of 'scientific naturalism' that he suggests is capable of unifying us with the natural world- his view is similar in essence to my notion of the SRI's affinity with a form of technocentrism informed by humanistic values. Grey argues that there are however, significant internal tensions within some common articulations of the deep ecology paradigm. In particular, he takes exception to the denigration of the "systematic, empirical approach to a study of the natural world". Contrary to deep ecologists' assertion of the shallowness of a science based analytical approach, Grey does not consider that this view need present an objectionable way of interacting with the natural world and may instead be essential to the development of a satisfactory conception of its nature. The logical corollary to Grey's perspective is that an adequate understanding of the negative implications of technological society and the development of more suitable alternatives based on renewable resources can only be founded on systematic, scientific conceptions.

Grey's second key point is that not all primitive resource-use is wise and that not all technology is destructive. Ultimately, Grey suggests scientific understanding is not a sufficient condition for wisdom, but the insights of science are necessary for formulating concepts to act wisely. The final key facet of Grey's argument is the re-examination of the legacy of the Cartesian conception of minds as the sole source of intrinsic value; Cartesian notions consider material objects as being of no moral consequence and there has been a subsequent set of objectionable anthropocentric values that have resulted from this legacy. The resolution for Grey is to reject the Cartesian presupposition and to attempt to develop a secular alternative to provide the basis for non-anthropocentric values. He suggests that the temporary, stable and dynamic structures of living systems as studied by modern physics, chemistry and biology, can provide use with a wholly satisfying basis for a sense of unity with the natural world.

Conclusion and Themes for Further Analysis.

In conclusion, within this resume I have primarily examined the manifesto of the Space Renaissance Initiative as an evocative summary of their key philosophies and modus operandi. Throughout this process I have attempted to assess the viability of their ambitions and the utopian 'promises' that interrelate to some key areas of ecological debate. In essence, the sociological and scientific considerations I have evaluated would appear to be only partially addressed in their library of philosophy position papers.

One of the more central inherent tensions in my selection of Max Weber's work on instrumental rationality applied to the SRI's manifesto, is the divergent position taken by Weberian theory and 'astro humanism' on industrial capitalism and technical reason. The SRI may well lack a fully dimensional grounding in the political economy of the global ecological crisis or simply be less concerned with the detrimental effects of capitalism through the cultural aspects of their own epistemological heritage. This assumption may not necessarily be the case and it is a point that I can return to in further work examining the SRI in greater depth. Technology and industrialisation are in fact topics for discussion at the SRI's first International Congress. For the SRI the central question is not that of technology 'v' nature, but rather the establishment of improved quality of life, resources and continued technological evolution, (2). Essentially Weberian theory on rationalisation is suffused with dismay and pessimism in the face of the negative consequences of instrumental rationality as



opposed to substantive, value based or affective forms of rational action. Using Weber's conceptual schemata, 'calculability', 'efficiency' and 'impersonality' are thrown into tension against fraternity and equality in his definition of capitalist formal rationality and therefore, his approach would not incorporate the 'techno- humanist' premise of the SRI. Further, as illustrated by writers such as Gronow (1988), Weber's work and focus on the processes of rationalisation, secularisation and intellectualisation offers a conscious critique more broadly of the Enlightenment project, to which the roots of the SRI can be traced, although the Space Renaissance Initiative also show an awareness of the ideological limits of Enlightenment philosophies.

The divergence in emphasis between the Weberian and SRI conceptualisation of the dilemmas of contemporary capitalistic cultures has essentially been addressed in an SRI philosophy fragment paper posted via Google groups titled, 'Why is Astro Humanism Necessary?' Autino et al. (2009). This paper draws once again from Julian Simon by not perceiving population growth as merely a Malthusian equation involving people as numerically calculated inanimate entities, but rather for their intrinsic qualities and intelligence. Autino et al. quote from Simon's work in illustrating the converse perspective that the more people on Earth, the more intelligences there are to potentially reach solutions and to foster new cultural concepts. Moreover, Autino et al. reiterate and extend Simon's argument further and suggest that the manifest presentation of crisis socially provides a fertile context for technical and economic evolution.

Weber and the SRI do share a common concern for the well being of humanity, but I doubt that Weber would have advocated the utopian visions of the Space Renaissance Initiative without expressing a level of scepticism. Wert rational goals would seem to resonate with the ethos of the SRI, as a value-orientated organisation with ethical objectives; those objectives are however, not without consideration of the consequences or Zweck rationale chosen to actualise their logistical aims. This element of the Space Renaissance Initiative's manifesto is somewhat partial at this stage, with an overall assumption of the beneficial consequences of growth in the space industry and the colonisation of space. Although there are overtones of a plurality of ecological perspectives in the SRI's discourse, I would suggest that their manifesto is an attempt at re-rationalisation via a radical change in the schemata of human thinking and assessment of ourselves, in relation to a new perspective extending beyond the remit of Earth. This conceptualisation is therefore not based on a 'limits to growth' principle, but that of fundamental expansion. One of the SRI's aims is to foster a greater understanding of cosmic and terrestrial ecologies and of humanity's role in this process. This goal would doubtless require not only greater assessment of some of the literature addressed in this paper, but a considerable shift in psycho-social adjustment in our common cultural norms in the context of the increasing complexity of technological development. Work in this area has been attempted by theorists such as Nardi (2001) who have examined the societal implications of nanotechnology and the psychosocial impacts of nanotechnology.

In defining the identity of the Space Renaissance Initiative further, I have observed that the SRI might be thought of as essentially both astro and 'techno- humanists' in their theoretical stance. As noted, there is however a curious rhetorical appeal reminiscent of ecofeminist values in the group's literature, which calls for the establishment of an affinity of human kind to nature. This rhetoric is doubtless influenced by the work of Lovelock's 'Gaia hypothesis' first proposed in the mid 1960's, which views the biosphere and Earth metaphorically as complex, interacting cybernetic systems and is a controversial theory now revised and accepted within ecological scientific precepts- the term 'Gaia', is taken from the Greek



primordial goddess of Earth. In this light, the SRI describe the transition of humanity toward a liberating existence beyond our own 'Mother Earth' as a natural process, akin to a pregnancy and labour in our evolution toward space. The inherent appeal is for a linear, natural paradigmatic shift, promoting the next stage in Rostow's 'Stages of Economic Growth' (1960) as a form of advanced economic and technical growth 'taking off' sky bound!

Overall, rhetoric aside, the SRI's philosophic and didactic developmental goals are an attractive proposition that avoid some of the traditional limitations inherent in many strands of existing philosophical and ecological thought. The organisation are advocating the evolution of new cultural beginnings, the apparent benefits of space expansion in resolving economic issues, energy/ resource shortages and forecasting theoretical improvement to global social conditions through their manifesto. I myself am on the Board of Directors precisely because I feel the initiative evokes entirely valid practical and philosophical questions, although the logistics of these aims needs further consideration and to also be more carefully articulated to ensure credibility. In relation to reflexive research issues, the nature of my own enquiry therefore is not necessarily value-free, but presented from a standpoint of genuine engagement with the issues and concerns addressed. I have a desire for the development of divergent standpoints in response to the ecological crisis, voiced from within a contemporary democratic, ethical context.

Footnotes.

1. Sample, Ian. 25/10/2010 '*Life in Orbit- What life is like on the International Space Station.*'
The Guardian
2. Kramer, B. 3/9/2010 '*The SRI 1st Congress- some discussion themes.*' The Renetta Newsletter, Volume 1.

Discursive issues for the next SRI paper: - The astro-sociological perspective/ outline of discourse analysis on selected Space Renaissance Initiative papers and consideration of transdisciplinary approaches to methodology.

About Stephanie Lynne Thorburn.

I am a freelance writer, researcher and Reiki Master. I write on a range of subjects, primarily focussed on nascent areas of social and scientific study, including Astrosociology, Environmental Sociology and Parapsychology.

I hold an MA in Sociology Qualitative Research from Goldsmiths College, London UK and a BSc. (Hons) in Sociology/ Psychology from City University. I believe in vocational professional development and have undertaken a series of vocational diplomas, ranging from Parapsychology to Computing. I am currently completing a Holistic Health Practitioner certification programme.



I joined the Space Renaissance Initiative Board of Directors in July 2010 and have recently become a faculty member at the University Of Alternative Studies (UAS). UAS is committed to the promotion of science and technology, offering a progressive, affordable education in alternative fields utilising an online format. Programmes are designed for writers, researchers and educators who wish to explore scientifically based courses on parapsychological phenomena. I am currently assisting founder Dr. Theresa M. Kelly through the establishment of a more diverse curriculum and research into emerging fields of study within the social sciences, including Astrosociology. I believe in a methodological balance between the application of qualitative and quantitative approaches. I have focussed predominantly on discourse analysis and transdisciplinary methods in my Space Renaissance Initiative related post-graduate research papers.

For more information on Stephanie Lynne Thorburn's, see the faculty page for *the University of Alternative Studies*: -

<http://qpsychics.com/university/faculty.html>

Publications and C.V. –

<http://qpsychics.com/pthindex.html>

Stephanie Lynne Thorburn Homepage: -

<http://stephaniethorburn.webs.com>

The Space Renaissance International homepage can be found at: -

<http://www.spacerenaissance.org/>

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