



University of
Salford
MANCHESTER

Beyond black and green : children visioneering the future

Whitaker, EM

Title	Beyond black and green : children visioneering the future
Authors	Whitaker, EM
Type	Book Section
URL	This version is available at: http://usir.salford.ac.uk/id/eprint/46510/
Published Date	2015

USIR is a digital collection of the research output of the University of Salford. Where copyright permits, full text material held in the repository is made freely available online and can be read, downloaded and copied for non-commercial private study or research purposes. Please check the manuscript for any further copyright restrictions.

For more information, including our policy and submission procedure, please contact the Repository Team at: usir@salford.ac.uk.

1 **Beyond Black and Green: Children visioneering the future**

2 **Dr Emilie Whitaker**

3 **Chapter to be published as part of the *Future of Social Epistemology* edited**
4 **Collection, Jim Collier (ed.), Rowman and Littlefield.**

5
6 **Introduction**

7 Steve Fuller (2013) has written extensively in recent times on what he foresees to be
8 a 'ninety degree revolution' in politics away from the traditional left/right distinction
9 towards a politics where proponents divide along heavenly or earthly orientations.
10 Here, he describes 'upwinging Blacks' and 'downwinging Greens.' Such binaries are
11 presented as schemata, yet the implication for Fuller's own theologically-imbued
12 epistemology is clear. The Blacks are the future with their proactionary, risk-taking,
13 embracing of science and technology, pushing humanity out of a stasis. The Greens
14 are dismissed in the main as earthly luddites. Yet, Fuller (2013) presumes not only
15 the evident status of these binaries, but states on this political shift, "so far I have
16 portrayed this ideological rotation from the standpoint of a younger generation that
17 accepts it as a given." The question at hand for this chapter is simply, is this the
18 case? Do young people align more or less with these orientations and the presumed
19 adherence to proactionary or precautionary approaches particularly with regard to
20 science and technology? How do they 'visioneer' their futures? Visioneering is where
21 young people both describe their vision of the future and posit the 'engineer' aspects
22 of the neologism, to answer how we got there (McCray, 2012).

23
24 **Methodology**

25 To investigate the visioneering activity of young people, the author and Steve Fuller
26 have undertaken exploratory ethnographic and inductive work with groups of young
27 people. The pattern of this burgeoning study has been to undertake semi-structured
28 group interviews with groups of children aged 12 - 16 as part of existing events
29 themed around science and technology. These group conversations utilise the
30 settings, the props and the talks already given to open up discussion on what the
31 future may hold and how they come to understand it in this way. In addition, to
32 informal, digitally-recorded interviews, we devised visual methods creating a
33 "postcards from the future wall" where participants describe a potential future and
34 send it back to the present. The study is exploratory in scope and takes its ethical
35 orientation from the new sociology of childhood which places emphasis on the
36 participatory and agential focus of work with children and young people (Jenks,
37 2004; James and Prout, 1990). The interpretive lens adopted takes children and
38 young people actors in their own right, as meaning-makers, albeit enmeshed in
39 temporal conditions not of their own making.

1 The small snapshot of data provided here is taken from an event whereby over 75
2 children interacted with us either in group conversations or through utilising the
3 “postcards from the future” wall. We have accumulated over 6 hours of group data
4 from the event, so all that can be presented here are the very initial themes that
5 punctuated the day. Interestingly, in Fuller’s schemata themes were predominantly
6 ‘green’ rather than ‘black.’ In the main groups were concerned with near-future
7 visioning within their lifetime and placed emphasis on the Anthropocene over the
8 heavens.

9 Two group discussions are presented here as crudely encompassing what at first
10 glance appear to fall neatly into the ‘upwinger’/‘downwinger’, Black/Green
11 classifications charted by Steve Fuller (2013) in a widely read piece for *Aeon*
12 magazine. Both discussions focused on the kinds of existential threats that form the
13 backbone of dystopian futures - one on the impacts of environmental disaster
14 wrought by climate change, the other on the potential impacts of a range of common
15 transhuman proclivities — augmentation, genetic engineering, and artificial
16 intelligence. But they complicated Fuller’s undulating poles. In his original formulation
17 he implies not only an earthly or celestial/trans orientation, but links such orientations
18 to an embrace of or resistance to technologies. Thus, downwingers are cast
19 somewhat disparagingly as resistant to transcendence of many kinds - preferring
20 instead to cling to some Aristotelian essentialised human nature, the mark of which
21 is our biological encasing on earth. They embody the precautionary principle
22 enshrined in legislation following the atrocities committed in the twentieth century.

23 In contrast, upwingers receive much more favourable treatment as the bringers of
24 Humanity 2.0, creatively destroying old mores to pull us out of our current ideological
25 stasis. Upwingers are those which enact the proactionary principle (More, Fuller and
26 Lipinska, 2014), they are ‘proactionaries’ taking calculated risks as part of a
27 programme for human progress, where the capacity for progress is taken to define
28 us as a species.

29

30 **Technology to remake, remould and regrow the natural**

31 *Why do nature and technology have to be in competition, combat? Why don't*
32 *we use what we know about biology to rebuild nature? I mean we can grow*
33 *skin, map and alter our genetic code, grow modified crops, why not turn that*
34 *to support the natural. It's all living.*

35 *Yeah. Why is it that environmental concerns are ignored or put back all the*
36 *time? I mean it's pretty arrogant to think we can just up and leave on some*
37 *imaginary spaceship, we are here and now.*

38 These quotes were taken from a group discussion with three fifteen year old girls.
39 Two wanted to go into medicine and one was undecided although she was

1 interested in the interplay between “biology and engineering.” The three young
2 women were all concerned about climate change and the impact of this not only on
3 our natural environments but our geopolitical engagements with each other. One of
4 the group told us,

5 *It's not just about companies and coal, it's about what the effect is of disasters*
6 *in one part of the world on another. So I can see real issues with...like...*
7 *environmental refugees because their villages have flooded or a tsunami has*
8 *knocked out their industry.*

9 In the visioning work undertaken by young people on the day, such concerns
10 about climate change, environmental crisis and poverty were not marked by a
11 technological resistance. There was no talk of a quest for holism which can only be
12 realised in ‘returning to nature’ and rejecting the malevolence that science has
13 wrought. Indeed given the patriarchal narrative which has historically aligned women
14 with nature to serve a politics of oppression, this is an important point to make.
15 Plumwood points out (1997:19), “feminine ‘closeness to nature’ has hardly been a
16 compliment”.

17 In fact in the accounts given by this group, these ‘downwingers’ were comfortable in
18 harnessing the power of technology to protect the earth, to almost instigate a second
19 natural flourishing, not dissimilar to some of the ambitions espoused by ‘Living
20 Architect’ Rachel Armstrong (2010). When asked about the potential for synthetic
21 biology one of the young women responded,

22 *You know, why not harness all that we know about biology and synthetic*
23 *environments and use that to repair the planet? I just don't see why there's*
24 *'man made' in one corner and 'the natural' in the other. And we just abandon*
25 *nature.*

26 Their accounts shared commonalities with the rise of eco-modernity as an alternative
27 to environmentalism. The ways in which the young women emphasised the human
28 consequences of environmental degradation point not to an abandonment of science
29 but rather its interspersion with reflexive modernisation. That is under
30 ecomodernism, “science should be demonopolised and democratised and redirected
31 toward a social rationality” (Bäckstrand, 2004:700). Befitting such a humanity-
32 oriented greenness, they were not afraid to make a political case for living differently;
33 this was a rarity as the data collated so far indicated an absence the role of the state
34 in these future dystopias:

35 *You've got the government to do more, I mean, people keep saying it's going*
36 *to take a long time but if you don't start you never finish. If you start now we'll*
37 *be done in 15-20 years. We need scientists to get into politics, they have the*
38 *knowledge, if they go into politics they can spread that knowledge. They need*
39 *to stop being scared, their insecurity is less important than what's going on in*
40 *the world. They need to stop thinking of themselves and think about all the*

1 *people that would benefit. People are too selfish to think about the bigger*
2 *problems.*

3 Those young people who were passionately concerned about climate change
4 described a human-centred rather than geo-centred world; there was no mention of
5 animal sentience and the bestowing of rights to non-human creatures. In the group
6 discussion where downwinging played a central role, the young women making the
7 case for climate-interventionism seemed to be making it on a vitalistic rather than
8 Darwinian premise. Such a vitalism may form a better entry point into the
9 cartography being mapped by these young people, as their lives are complexly
10 mediated by the blurring of the body with technology, the ecological with the
11 manufactured. Their sophistication seemed to contest the Green/Black binary by
12 refusing to oppose nature to culture, environment to society, art to science. The
13 creative approach to sustainability, of utilising technology to remake the natural
14 undermines the sharp distinction between 'black and green' as somehow indicative
15 of a proactionary or precautionary stance to the science and technology.

16

17

18 **Embodying risk: anti-fragility and resilience through gaming**

19 SF: So how do you see the future?

20 *Very dark really, things going down. Underdeveloped countries,*
21 *pollution, resource crises...*

22 SF: You sound pessimistic about the future!

23 *Yeah I think there are a lot of big problems.*

24 Such dystopian visions emerged most readily in references to gaming which
25 emerged as a dominant theme this group of young men. Notable mention went to the
26 cyberpunk-styled game *Deus Ex: Human Revolution* set in a near-dystopian
27 future. *Human Revolution* tackles transhumanist themes through the eyes of the
28 protagonist, an employee of a biochemical human augmentation firm, as he
29 considers whether humanity's reach has exceeded its grasp. Its societal setting is
30 cataclysmic, corporations have greater power than states, corruption is rife and
31 rebellion put down with brutal violence.

32 *I play a game set in the future, Deus Ex: Human Revolution. There's global*
33 *terrorism and someone releases a virus. People are getting synthetic arms,*
34 *nano technology all kind of augmentation. It'll happen, you know. I've seen*
35 *these things in the news already, well something like that. The thing is, if we*
36 *do get these augmentations then it's going to be a taboo to be normal. That is*

1 *a realistic possibility. Also, in the game you need money or access to*
2 *resources, there's no NHS you know. So only rich people benefit.*

3 Another game mentioned was the post-apocalyptic game *Fall Out*.

4 *I think a possible future is like Fall Out because of wars and resource*
5 *shortages.*

6 SF: Do you really think nuclear war is a possibility?

7 *Definitely. Nuclear war is a possibility for the future; it'll just be started over*
8 *different issues than before. Like Russia invaded Georgia and no one cared,*
9 *militias are growing in Crimea. In the future these little skirmishes become*
10 *more important as resources shrink.*

11 These young men spoke of the gaming experience as a tool to furnish their
12 visioning activity alongside their interest in the practice of formal scientific enquiry
13 and their own personal hopes and ambitions. The gaming activity offered up a
14 language and a set of tests – to consider difficult ‘what if’ scenarios. It was as though
15 the practice of gaming enabled a relationship with risk and the ethics of risk to be
16 contemplated and explored. It offered a visceral window into visioning practice as
17 gaming was described as something experienced and embodied not merely thought
18 or seen.

19 Qvortrup (2003) uses the concept “hypercomplex society” to describe how digital 2.0
20 communication technologies enmesh the local intimately with the global. In this
21 hypercomplex society culture becomes, according to Poster (2004), a heady mix of
22 multiple meanings which young people seem to negotiate, from the early analysis of
23 our findings, with a great deal of ease. The interaction of mobility with information,
24 social movements with geographic space through the politics of the hashtag proffers
25 a very intimate yet global hypercomplex society. The four fourteen year old boys
26 considered the consequences of flooding in Bangladesh, the fall out of genetic
27 experimentation and the ethics of epidemic through their avatared prism of gaming
28 through near-future contexts provided by *Deus Ex: Human Revolution*. Global
29 themes experience locally. Whilst such visions have been presented as evidence of
30 a dystopian generation, weary already with the atrocities and unfairness of the world,
31 perhaps these themes are present in accounts because the world reaches into and
32 mediates so many spaces experienced by young people. Moreover, they reach back.
33 From smart phones, to Second Life, twitter to rolling 24 hour news there is a degree
34 of ‘hyperreality’ (Baudrillard, 1983) in the visioning accounts presented to us. The
35 four young men in this group all owned smart phones and tablets, two had twitter
36 accounts and all were using online apps and platforms to interact with friends and
37 share information across time and space. One told me, “I could not live without it
38 [smart phone]. So much of my life is on it and through it.” In the case of many
39 participants engaged with in this session, information and communication
40 technologies have become “arenas for social experience” (Stone, 1995:15). In this

1 regard, the Baudrillardian hyperreality (1983:11) of distractive symbols and codes
2 also holds the potential for extension of the self into the world. This interpellation
3 may be enabled young people to equip themselves with cognitive and experiential
4 tools to understand and experience risky visions under terms of relative safety.

5 It is in this interactive reaching in and out that the duality of the 'real' and 'virtual'
6 begins to disintegrate, as Lévy put it (1998:23), "Consider the simple and misleading
7 opposition between the real and the virtual." The dystopian experiences navigated
8 through gaming held corporeal significance within the hyperreality, one of the
9 participants simply stated,

10 *You feel it as you get used to being him [Adam Jenson - protagonist]. The*
11 *noise of it, it like speeds your heart rate up, you know something's going to*
12 *happen and you know you need to respond. Fight or flight isn't it?*

13 Thus, it would be erroneous to posit a neat distinction between an embodied
14 'present' body and a disembodied, gaming body. Rather, gaming offers scope to
15 experiment with the limits and dimensions of the self, including material and
16 corporeal sensations.

17 Increasingly, sophisticated interactive gaming cultures enable transgression and
18 transmutation of the self and body through visioneering settings and
19 experiences. Risk can be felt, experienced, mitigated and accelerated, opening up
20 new worlds of cognitive consideration and vision. The expansion of experience
21 encountered through digital worlds is supportive of Ong's (1982) argument that the
22 appropriation of new forms of expression alters the very horizons for human thought
23 and cognition. Here, the boys' use of gaming enables them to work through in a
24 pseudo-embodied sense, alternate conceptualisation of the future and their attitudes
25 toward it. In this regard, perhaps Fuller and Lipinska's (2014) call for a 'proactionary'
26 imperative for public policy could find utility in gaming cultures as sites for trial and
27 error, risk taking and risk making. Such a programme would take the idea of the
28 'cyborg citizen' quite seriously (Gray, 2001) as young people are encouraged to take
29 risks as part of a dual programme of 'anti-fragility' and inoculation. With regard to
30 children and young people in particular, we can only understand risk in relation to
31 resilience (Ungar, 2011; Daniel, 2003). Bolstering resilience through exposure to
32 managed risk has been put forward as a method for supporting the adaptive quality
33 of resilience in young people (Empson and Nabuzoka, 2004). Addressing resilience
34 in young people Daniel (2003:7) describes, "Resilience is not simply an absence of
35 psychological symptoms despite having experienced adversity, it is the possession
36 of a positive adaptive ability that enables a person to feel competent despite risky
37 living conditions." Masten *et al* (1990:426) defined resilience in children as, "the
38 process of, capacity for, or outcome of successful adaptation despite challenging or
39 threatening circumstances." Thus it is not the absence of risk that undermines
40 resilience, but the managed exposure to and successful negotiation of the
41 encounter. Here Taleb's (2012) concept of 'anti-fragility' may help us to understand

1 the utility of visioning activity through gaming culture. In Taleb's
2 conceptualisation, the 'anti-fragile' agent does not merely withstand challenge as it
3 arises, she seeks to improve her current condition as the environment changes,
4 without clinging to any preordained sense of normality. The anti-fragile agent
5 engages in both spread-betting - ensuring multiple options are covered - and
6 visioning, exploring the action and consequences of routes taken and not taken.
7 The inoculation approach encompassed in idea of 'anti-fragility' (Taleb, 2012)
8 captures the active conceptualisation of resilience as adaptive and learnable quality.

9 In addressing Fuller and Lipinska's (2014) demand for a policy programme
10 supportive of risk taking in a risk anxious culture epitomised by fears about and for
11 young people, digital spaces may provide a test case. In the sense of a programme
12 for proaction, gaming enables a vicarious yet embodied engagement with the
13 experience of risk-taking without the fear of existential precarity. Avatars become
14 less a representation, a symbolic extension of the digital self and more a site for
15 potential embodiment, particularly as gaming culture and technology advances to
16 become still more corporeal.

17

18 **Conclusion**

19 The visioning work of these young people rejects the kind of political generational
20 talk as filibuster arguing instead that, "we need to think differently in order to live
21 differently" and "more scientists need to get into politics." Their accounts challenge
22 common kinds of epistemological boundary work, the policing of the possible from
23 the impossible, by collapsing the now with the almost-now, the existent with the
24 becoming. In this regard, whether exploring the scope of synthetic biology to literally
25 rebuild nature, or considering geopolitical manoeuvres in cyber space, the accounts
26 of young people indicate a sympathy with Haraway's "natureculture" (2003). In this
27 vein, young people as digital natives and cyborg citizens in-the-making denote
28 Turkle's (1995:21), "transgressive mixture of biology, technology, and code." In
29 talking about their experiences in the social realm of gaming they consider
30 alternative dystopian futures and confront technological advances within an ethical
31 and social framework. Some of the mechanics and poetics of this visioning are
32 also akin to Kelly's (1979) "double-edged vision". This concept speaks of the power
33 of hybridising lucid argument with political and personal passion leading to the
34 creation of alternative social blueprints. In taking an agential focus to the visioning
35 work of the young participants, the burgeoning data suggests the importance of
36 epistemological humility in the subtleties of visioned potentialities; subtleties that
37 challenge our neat constructions of Black and Green, Up and Down, Trans and Post-
38 humanity.

39

40

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

1 **References**

- 2 Armstrong, R., (2010). "Living Architecture". *News in Conservation*, International
3 Institute for Conservation, 20, pp.4-5.
- 4 Baudrillard, J. (1983). *Simulations*. New York: Semiotext[e].
- 5 Daniel, B. (2003). "The Value of Resilience as a Concept for Practice in Residential
6 Settings." *Scottish Journal of Residential Care*, 2 (1), pp. 6-15.
- 7 Empson, J.M. and Nabuzoka, D. (2004). *Atypical child development in context*.
8 London: Palgrave Macmillan.
- 9 Fuller, S. (2013). "Ninety-degree revolution Right and Left are fading away. The real
10 question in politics will be: do you look to the earth or aspire to the skies?" *Aeon*
11 *Magazine*, 24 October.
- 12 Fuller, S. and Lipinska, V. (2014). *The Proactionary Imperative: A Foundation for*
13 *Transhumanism*. London: Palgrave Macmillan.
- 14 Gray, C. H. (2001). *Cyborg Citizen – Politics in the Posthuman Age*. London:
15 Routledge.
- 16 Haraway, D. (2003). *The Companion Species Manifesto. Dogs, People, and*
17 *Significant Otherness*. Chicago: Prickly Paradigm press.
- 18 James, A., & Prout, A. (Eds.). (1990). *Constructing and reconstructing childhood*.
19 London: Falmer.
- 20 Jenks, C. (2004). "Constructing Childhood Sociologically" in Kehily, M. (2004) *An*
21 *Introduction to Childhood Studies*. London: Open University Press
- 22 Kelly, J. (1979). "The Double-edged Vision of Feminist Theory." *Feminist Studies*, 5
23 (1), pp. 216 - 277.
- 24 Lévy, P. (1998). *Becoming Virtual. Reality in the Digital Age*. New York: Plenum
25 trade.
- 26 McCray, P. (2012). *The visioneers: How a group of elite scientists pursued space*
27 *colonies, nanotechnologies, and a limitless future*. Princeton: Princeton University
28 Press.
- 29 Masten, A.S., Best, Garnezy, N., (1990). "Resilience and Development:
30 Contributions from the study of children who overcome adversity." *Development and*
31 *Psychopathology*, 2, pp. 425-444.
- 32 Ong, W. J. (1982). *Orality and literacy. The technologizing of the word*. London:
33 Routledge.
- 34 Plumwood, V. (1997). *Feminism and the Mastery of Nature*. London: Routledge.

- 1 Poster, M. (2004). "Perfect Transmissions: Evil Bert Laden." In: P. Hernwall (ed.)
2 *Envision. The New Media Age and Everyday Life. Digital Thoughts, 2 & ViS reports,*
3 Stockholm University.
- 4 Qvortrup, L. (2003). *The Hypercomplex Society*. London: Peter Lang Publishing.
- 5 Sagy S, Dotan N. (2001). "Coping resources of maltreated children in the family: A
6 salutogenic approach." *Child Abuse and Neglect*, 25(11), pp. 1463-1480.
- 7 Stone, R. A. (1995) *The War of Desire and Technology at the Close of the*
8 *Mechanical Age*. Cambridge, Massachusetts: MIT Press.
- 9 Taleb, N.N. (2012). *Antifragile: How to Live in a World We Don't Understand*.
10 London: Allen Lane.
- 11 Turkle, S. (1995). *Life on the Screen. Identity in the Age of the Internet*. London:
12 Weidenfeld & Nicolson.
- 13 Ungar, M. (2011). "The Social Ecology of Resilience: Addressing Contextual and
14 Cultural Ambiguity of a Nascent Construct." *American Journal of Orthopsychiatry*, 81
15 (1), pp. 1–17.