

# The threats and promises of Artificial Intelligence: Can big data help define an alternative transition?

Bob Thomson, draft of 5 July 2023

4700 words

## Abstract

Social media and the internet provide us with both "information" and "fake news". Our growing capacity to analyze reams of old and new economic and political data and models brings both despair and hope that we can define new low carbon models of cooperation and solidarity. Here I look at the potential for progressive use of "artificial intelligence" and "BOTS" to provide social and cooperative movements with the analytical tools to begin this huge challenge. I begin with Mike Cooley's learning curve within the exploding internet, which explains how our subjective filters of languages, gender, religions, ideologies and cultures allow us to see patterns in the clouds of data on our screens and turn them into information, then knowledge and eventually "wisdom". But Bill Rees has noted how our "cultural narratives" have stood in the path of change, and now, artificial intelligence, through chatbots and large language models search and "synthesize" millions of "pages" into "information" (documents) based on subjective filters dominated by corporate and political sources which aren't necessarily our own. The obstacles now include "big data" challenges like Google and Facebook's algorithms and sale of personal data to shape and reinforce our consumer desires and manipulate elections to maintain the status quo. But Piketty's 1% vs 99% and Vettese's analysis of the economy of half earth show how "popular" access to and analysis of historical economic, energy, climate and other data can be used to develop alternative models and behaviours for a transition. I briefly review some of these alternatives: the P2P (Peer 2 Peer) Transition to the Commons, Green New Deal(s), Degrowth and the indigenous "buen vivir", and the promise and difficulties of implementing them. Thousands of individual and confederated local, community and regional examples already exist as lived examples of alternatives and progressive social media and cooperative networks which challenge the capitalist mainstream. As pluralistic cultural, political and living alternatives and systems, they show that people can live well together and with nature. Abstract 327 words, Full text 4700 words

---

With all the hype these days about social media and the internet providing us with both "information" and "fake news", new overviews of global economics and politics bring both despair and hope that we can escape the threat of climate change through new low carbon models of cooperation and solidarity.

Thomas Piketty's 2013 *Capital in the Twenty-First Century*<sup>1</sup> and his use of big data to document the grossly unequal 1% versus the 99% is one element of these visions of hope and despair. Another application of big data is the recent New York Times presentation<sup>2</sup> of the impact of accelerated polar melting on changed planetary mass distribution on the axis of planetary rotation. Troy Vettese and Drew Pendergrass in *Half Earth Socialism*<sup>3</sup> show how colonial destruction and slavery killed off millions of southern peoples centuries ago, leaving sufficient farmland fallow and reforested to absorb carbon and create a mini ice age in Europe, thus documenting the potential for reforestation and non-capitalist agriculture to slow and eventually halt the impending global warming disaster. With this growing ability to measure and analyze global data, we have a growing capacity to analyze and project macro economic and environmental policies which could lead to alternative models which could reverse the capitalist model driving global warming and gross inequality. New models like the P2P Transition to the Commons, the Green New Deal(s), Degrowth and the Great Transition show paths away from the control and depredation of capitalism, but also set the stage for an epic battle for influence on the hearts and minds of populations and politicians. Can we overcome the "cultural narrative" of Thatcher's "there is no alternative", and start to build one?

Here I try to bring together an understanding of this challenge through a look at the potential for progressive use of "big data" to provide social and cooperative movements with the analytical tools to begin this huge challenge. First I look at Irish engineer Mike Cooley's *process of learning* as broad background for identifying patterns which both block and could lead to change. Then Bill Rees' look at "cultural narrative" patterns which stand in the path of change. I review some of the alternatives, and the difficulties of implementing them.

1 Thomas Piketty: [\*Capital in the Twenty-First Century\*](#)

2 Raymond Zhong: [How we're messing with the earth's axis](#)

3 Vettese and Pendergrass: [Half Earth Socialism](#)

To begin this process, it is important that we understand a few basic concepts about human knowledge and our learning process, to put today's overwhelming flood of "information" into a context we can deal with in our daily lives.

### Mike Cooley's Learning Curve(s)

In a presentation to the International Federation for Alternative Trade (IFAT) in Kilkenny Ireland in April 1991<sup>4</sup>, Michael Cooley presented a graph showing the process whereby we sort the raw data which comes into our lives through our eyes, ears and other senses, over time and with experience, and how each of us continuously turns this data into information, knowledge and eventually, wisdom. This is the learning process and we all use it every day.<sup>5</sup>

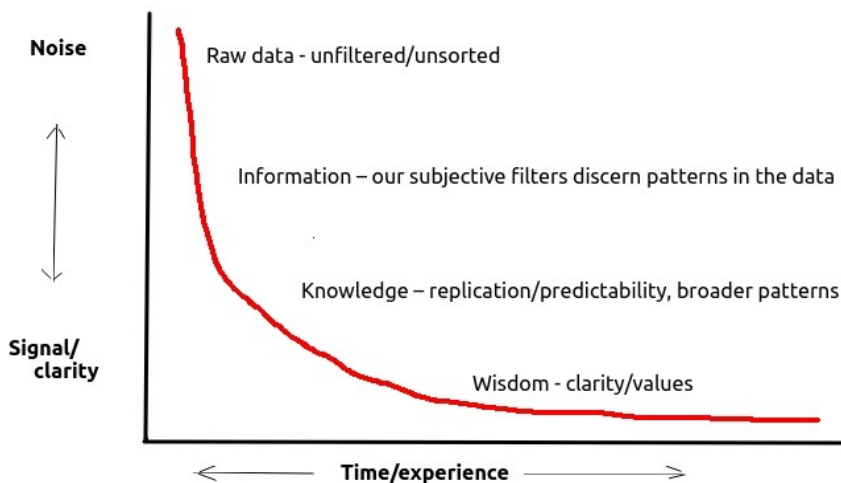
The graph below shows how we use our own individual and highly personal filters to discern patterns in a mass of unsorted data. The patterns discerned in this data in our memory "banks" becomes information, which when subjected to further broader filters and patterns, becomes knowledge, then wisdom.

The left axis of the graph shows "noise" or a measure of unintelligibility at the high end, and "signal" or clarity of understandable patterns, at the low end. The greater the "signal", the potentially more "useful" the information.

Our filters are individual, many and varied. For example: gender, race, language, religious and political beliefs, scientific methodology, and previous sets of patterns that we may have stored for future reference.

The patterns we discern in this filtered data thus become "information" in our memory banks, and when subjected to further broader filters and patterns, become knowledge, then "wisdom". The transition from data to information to knowledge and "wisdom" is a continuous, highly individual and subjective process, hence the bi-directional arrows on the x axis below.

This Cooley calls the learning curve.



The horizontal axis is also bi-directional because, at some points on our learning curves we might change our filters, and seeing different patterns derive different information from the same data. For example exposure to feminists or new languages could change our filters and thus our "information" and "knowledge".

Cooley develops this critique in what he calls the "abolition of childhood", under which our reductionist "rational" education systems focus on the "human operating unit", prepared scientifically for the "factory", bent on scientific principles and engineering precision, reducing all knowledge to rules or recipes.<sup>6</sup> He deplores the devaluation of

4 Mike Cooley: [Some notes on the learning curve](#)

5 Mike Cooley, [Architect or Bee](#): The Human Price of Technology, 1980 (Acquisition of knowledge p.12)

6 Mike Cooley, *Delinquent Genius: The Strange Affair of Man and His Technology*, Spokesman Books, 2018, p.39

childhood's marvellous complex developmental, experimental, learning-by-doing progression without any knowledge of scientific "rules", under which, for example, we learn to stand by balancing our weight from side to side with no knowledge of theories of momentum or centres of gravity. Or how we learn to talk without dictionaries or rules of grammar.

This "childhood" way of experiential vs rule based learning - a hands on grasp of sense, shape, size and form, without scientific rules, is far broader and more complex and diverse than the world where everything is supposedly "science" or rule based, predetermined, highly structured and regulated, now increasingly determined by corporate control of academic curricula and the media. Further, Cooley warns that a "child's" experiential learning might, heaven forbid, result in diversity and pluralism, creating a dangerous oppositional base and threat to "the system".

Cooley saw this corporate "educational" process as already well in hand.

*"Schooling will start earlier and earlier. Childhood will be highly structured and regimented. That destructive process of exams will start earlier and earlier. Pastimes such as they are, will be increasingly passive. Average television viewing time is now significant. Sports will be highly specialized and systematized. The capacity to make our own toys, entertain ourselves and organize our own play will go and this will be allocated to professionals who will do it on our behalf."* <sup>7</sup>

A recent Washington Post article<sup>8</sup> reviewed the sources of artificial intelligence "data" which provide the "patterns" which become "information" in the AI chatbot "learning" process.

Tech companies have grown secretive about what they feed the AI data cloud. So The Washington Post set out to analyze the "black box" of one of these data sets to fully reveal the types of proprietary, personal, and often offensive websites that go into an AI's training data. Millions of web sites are used to "train" AI's biggest chatbots. To look inside this black box, they analyzed [Google's C4 data set](#), a massive snapshot of the contents of 15 million websites that have been used to instruct some high-profile English-language AIs, called large language models, including Google's T5 and Facebook's LLaMA.

They found that the data set was dominated by websites from industries including journalism, entertainment, software development, medicine and content creation, helping to explain why these fields may be threatened by the new wave of artificial intelligence. The three biggest sites were:

1. patents.google.com No. 1, which contains text from patents issued around the world;
  2. wikipedia.org; 3. the free online encyclopedia; and 3. scribd.com, a subscription-only digital library.
- Also high on the list: b-ok.org #190, a notorious market for pirated e-books that has since been seized by the U.S. Justice Department. At least 27 other sites identified [by the U.S. government](#) as markets for piracy and counterfeits were present in the data set. Business and industrial websites made up the biggest category (16% of categorized tokens), led by #13 fool.com, which provides investment advice. Not far behind were #25 kickstarter.com, which lets users crowdfund for creative projects, and further down the list, #2398 patreon.com, which helps creators collect monthly fees from subscribers for exclusive content.

These are the subjective corporate filters and sources which "recognize" the patterns the chatbots turn into "information" for their users. They do not correspond to the personal filters of the majority of the population of our planet.

To undertake the massive changes in technologies, energy and raw material sources, new consumption and investment patterns necessary to avoid the coming climate change disaster, we have to change the existing databases of information and knowledge documenting these disasters and defining alternatives. But the corporate world and the governments they dominate are instead focusing on net-zero carbon reduction policies and technologies which have been shown by numerous models<sup>9</sup> to be incapable of halting global warming and thus potential human destruction.

The corporate mainstream cultural narrative which "helps" us "learn" is everywhere. Bill Rees has noted that:

<sup>7</sup> Cooley, op cit, p.43

<sup>8</sup> Kevin Schaul, Szu Yu Chen and Nitasha Tiku: [Inside the secret list of websites that make AI like ChatGPT sound smart](#)

<sup>9</sup> Stanford University: ['Net-Zero' Carbon Emissions Scam Is Something Humanity Doesn't Have Time For](#)

*All cultural narratives, world views, religious doctrines, political ideologies, and academic paradigms are 'social constructs.' By the time most people have reached mature adulthood they will have accepted their culture's overall 'narrative' and will subscribe, consciously or not, to any number of subsidiary religious, political, social and disciplinary paradigms<sup>10</sup>.*

Several years ago an Algonquin First Nations colleague challenged my interpretation of a situation, saying “You don’t get it because your first language is English.” She went on to explain that most of the words in English are nouns, while most of the words in Anishinaabe languages are verbs. Thus they have a view of the world based on action and process, while we have a world view based on things. Thus language is a filter and multilingualism and multiculturalism help spread more “accurate” “information”. The advance of feminist world views has made some progress in many men’s recognition of their biased gender filters and encouraged many to re-analyze the “data” and develop new sets of information and knowledge. I find this questioning quite profound and an excellent example of the importance of Mike Cooley’s explanation of the “learning process”, of how our personal filters impact the **cultural narratives** that we grow into, develop and live within, often from birth to death.<sup>11</sup> But an understanding of this process also makes reinterpretation of data with “new” or different filters easier with the new internet and computing tools now accessible at “popular” vs corporate levels.

Much of the hype about the information revolution and the information superhighway focuses only on the increased availability of data, and not on this process by which we (and they) sort, accumulate and use all this data, information, knowledge and/or “wisdom”.

A recent article on artificial intelligence and the frontiers of economic theory notes:

*Until recently, data sets were small and costly, and computers were slow and expensive. So it is natural that as gains in computing power have dramatically reduced these impediments, economists have rushed to use big data and artificial intelligence to help them spot patterns in all sorts of activities and outcomes.<sup>12</sup>*

The fact that much of the content of Wikipedia’s 6 million articles, that grand online encyclopedia of knowledge, can fit into only 21 gigabytes of memory, which can fit on a C\$9 USB memory key, is a heartening note re popular access via personal computers.<sup>13</sup>

### **Is there an alternative?**

Can we use big data to approximate how much money would be needed for a transition, where might it be invested and what models of consumer behaviour might drive a transition? Just as important, how are we going to be able to take the necessary accumulated wealth and technology away from the 1% who control it now?

Piketty’s documentation of capital accumulation and inequality show that both global and national data is now available to identify patterns in global economic, physical and human resources, as well as behaviours, which could be used to identify and promote alternative ways of human organization, as well as to expose the negative and dangerous exploitation of capital with respect to climate change, militarization and consumer manipulation. New economic, social and political models like the P2P Transition to the Commons, Green New Deal(s), Degrowth, the Great Transition and “Buen Vivir” show paths away from this control and depredation of capitalism.

In 1995 Ulrich Duchrow noted: *The argument about whether the community should be a lived example of an alternative, or means to the end of political struggle, is central to strategy discussions within the social movements. Do we want all or nothing, politically, or to live our lives differently where we are? Are rejections and small-scale, lived alternatives in a totalitarian context more important than the prophetic use of possibilities offered by limited political influence? This question will remain with us to the end of the book.<sup>14</sup>*

---

10 Bill Rees: <https://www.ineteconomics.org/research/research-papers/toward-a-sustainable-world-economy>

11 Bob Thomson, [Pachakuti: Indigenous perspectives on degrowth](#), *Development*, Vol.54 No.4 December 2011

12 Project Syndicate <https://www.project-syndicate.org/commentary/artificial-intelligence-new-economic-models-by-thomas-j-sargent-2019-11>

13 [https://en.wikipedia.org/wiki/Wikipedia:Size\\_of\\_Wikipedia](https://en.wikipedia.org/wiki/Wikipedia:Size_of_Wikipedia)

14 Ulrich Duchrow: p.247 "Alternatives to Global Capitalism: Drawn from Biblical History, Designed for Political Action", International Books/Kairos Europe, Utrecht 1995 ISBN 90 6224 976 0

It's probably safe to say that any transition to an alternative world must involve both daily lived examples *and* political action within the bowels of the monster for change. One could say we need a new 3 Rs: Renounce, Redesign, Rebuild, because Reduce, Recycle, Reuse are no longer enough.

### **So what might an alternative solidarity economy imply or look like.**

It must begin with a belief that we have to stop introducing carbon into the atmosphere to arrest the planetary and local climate changes which are creating floods, droughts, heat waves, wildfires and massive migrations due to the disruption of global warming. To do this, it must also include a restructuring of economic and social relations and tackle the gross economic and social inequalities which have accumulated over the past decades or even centuries of human expansion on the planet.

Where should this new and redirected investment go: public transport, alternative energy, local food, equitable distribution, housing, health and education? How can we overcome the expectations of lifestyle and consumption which drive the existing threatening climate disruptions? Can we change our cultural narrative that the strongest get the best deal, to the collective good and well being that guides many indigenous and communal communities?

As mentioned earlier in this article, a certain democratization of technical access to "big data" and computer analysis of patterns and behaviour can now be used to test different investment, redistributive and sustainable models, instead of calculating marketing advantages for corporate profits. The use of corporate dominated social media to manipulate political decisions however goes beyond just having number crunching computer capacity.

In traditional left-wing discourse, much is said about class differences and giving priority to the working class majority over the 1% (or 10%) of elites. But our current political and economic systems and their infrastructure do not favour the majority. Ursula Huws notes that we mustn't think that there are simple political solutions to what are, in reality, very complex problems. "Real [historical] divisions within the working classes, based on structural as well as cultural differences, cannot be wished away so simply by glib sloganising. In the longer term we will have to start the patient work of building new movement[s], not based on simplistic notions like 'the many' but on a recognition of the specificities of the positions that different groups of workers occupy in the global division of labour, their cultures and the real conflicts of interest that exist between them. This is heavy work, requiring a lot of careful listening and building from the bottom up."<sup>15</sup> The recent defeat of the UK Labour Party and the election of Donald Trump in the USA are excellent examples of this difficulty and complexity.

### ***What are some of these alternatives?***

There are many examples of alternatives. Thousands of local, community and even regional examples exist. I don't want to even pretend that this makes this difficult transition possible, but I will present here a few examples that give me some hope that there are indeed alternatives. As noted at the beginning of this paper, some of these alternatives are: the P2P (Peer 2 Peer) Transition to the Commons, Green New Deal(s), The Great Transition, Degrowth and the indigenous "buen vivir".

### **The Transition to the Commons**

The Peer to Peer Foundation<sup>16</sup> looks at how basing civil society on peer to peer (P2P) dynamics and Commons practices could enable a more egalitarian, just, and environmentally sustainable society. It began in 2005 as a network promoting open source manufacturing technologies, co-creating an open knowledge commons and a resilient, sustainable human network. It has expanded to include a Primer or Manifesto for the Transition to the Commons<sup>17</sup> as well as a research network which empirically explores and expands the theoretical work produced on commons-oriented peer production, governance and property to ascertain its viability in real-world applications.<sup>18</sup> Foundation members are active all over the world, with representatives in Europe, Asia, Oceania, Africa, South America, and North America.

---

15 Ursula Huws: Socialist Project - <https://socialistproject.ca/2019/12/the-unwoke-are-awake>

16 <https://p2pfoundation.net>

17 <https://degrowthcanada.wordpress.com/2018/02/01/the-commons-transition-and-p2p-some-links/>

18 <https://p2pfoundation.net/the-p2p-foundation/about-the-p2p-foundation>

The Transnational Institute (TNI) a member of the P2P network<sup>19</sup>, is an international research and advocacy institute committed to building a just, democratic and sustainable world. For more than 40 years, TNI has served as a unique nexus between social movements, engaged scholars and policy makers.

The P2P primer or manifesto looks at a range of paradigm shifting elements toward a commons society: a partner vs capitalist state<sup>20</sup>, distributed manufacturing<sup>21</sup>, open cooperativism, copyfair vs copyright technology licensing, cooperative contributory accounting<sup>22</sup> and platform (resource sharing) cooperatives<sup>23</sup>.

The solidarity economy network of Catalonia is a living example of a group bringing large numbers of local and regional cooperatives together across a wide spectrum of consumer, productive and social activities. One of the most interesting autonomous projects associated with the Catalan Integral Cooperative (CIC)<sup>24</sup> exists in Calafou, the self-proclaimed “post-capitalist colony” which settled in 2011 in the ruins of an abandoned industrial village in the Catalan county of l’Anoia, about 65km away from Barcelona.<sup>25</sup> Another regional example is the autonomous self-governing Kurdish enclave of Rojava in northern Syria.<sup>26</sup>

## The Green New Deal(s)

The Green New Deal (GND) is more a phenomenon than a single specific, coherent proposal or movement. Taking its name from US President Roosevelt’s 1930’s “New Deal” investments to counteract the impact of the “great depression” and WWI, it ranges from a May 2019 Congressional resolution by Democratic Representative Alexandria Ocasio-Cortez<sup>27</sup> across a broad spectrum of capitalist reformers, even the New York Times<sup>28</sup>, to Naomi Klein’s social democratic critique of capitalism<sup>29</sup> and Bernie Sanders GND<sup>30</sup>, to even more radical anti-capitalist manifestos or proposals.

There is a lot of discussion, bordering on sectarianism, about whether the GND should be supported as an initial tactical thin edge of a wedge against capitalism or is a sell out to green capitalism.<sup>31</sup> It has nevertheless attracted a large following in Canada, with Our Time<sup>32</sup>, the LEAP Manifesto<sup>33</sup>, the Green Party and parts of the NDP, the Council of Canadians and some 150 GND town hall meetings held across Canada in 2019.<sup>34</sup>

The US version of the Green New Deal as a Democratic Party resolution, however “radical” in the US context, neither calls for the cooperation of the nations of the world nor places any limits on the activities of the energy corporations. Quite the opposite, it insists on “making the United States the international leader on climate action” by calling for “investments to spur economic development [and] deepen and diversify industry and business in local and regional economies.” These investments would be allocated by means of “community grants, public banks, and other public financing.” In other words, more public funds could be handed over to the US energy monopolies and other corporate interests, the same institutions that are responsible for climate change in the first place. Any measures ostensibly aimed at reducing climate change will have to be acceptable to corporations and banks and their wealthy shareholders.<sup>35</sup> ....

---

19 <https://www.tni.org/en/publication/commons-transition-and-p2p>

20 [https://wiki.p2pfoundation.net/Partner\\_State](https://wiki.p2pfoundation.net/Partner_State)

21 [https://en.wikipedia.org/wiki/Distributed\\_manufacturing](https://en.wikipedia.org/wiki/Distributed_manufacturing)

22 <http://commonstransition.org/p2p-accounting-for-planetary-survival/>

23 [https://en.wikipedia.org/wiki/Platform\\_cooperative#Organizations](https://en.wikipedia.org/wiki/Platform_cooperative#Organizations)

24 <http://commonstransition.org/catalan-integral-cooperative/>

25 <https://degrowthcanada.wordpress.com/2016/08/04/cics-autonomous-projects-of-collective-initiative-5-calafou-p2p-foundation/>

26 <https://roarmag.org/essays/eyewitnesses-to-the-rojava-revolution-hevalti-and-dignity/>

27 [https://en.wikipedia.org/wiki/Green\\_New\\_Deal#cite\\_note-OcasioCortez\\_HR109\\_20190212-8](https://en.wikipedia.org/wiki/Green_New_Deal#cite_note-OcasioCortez_HR109_20190212-8)

28 <https://www.nytimes.com/2019/03/02/opinion/letters/green-new-deal.html>

29 <https://www.thenation.com/article/naomi-klein-green-new-deal-book-interview/>

30 <https://socialistproject.ca/2020/01/bernies-green-new-deal-stands-out-and-now-labor-must-step-up/>

31 <https://www.wsws.org/en/articles/2019/03/05/deal-m05.html>

32 <https://our-time.ca/>

33 <https://leapmanifesto.org/en/leap-news/>

34 <https://greennewdealcanada.ca/>

35 <https://www.wsws.org/en/articles/2019/03/05/deal-m05.html>

## Degrowth

The degrowth movement grew in France out of the work of Romanian mathematician Nicolas Georgescu-Roegen and his 1971 treatise on *The Entropy Law and the Economic Process*<sup>36</sup> written while a professor (and refugee) at Vanderbilt University. Translated to French in 1979 with the title *La Décroissance: Entropie – Écologie – Économie*, Georgescu-Roegen's work influenced a diverse French network of supporters which, following the first international conference on Economic De-Growth for Ecological Sustainability and Social Equity in Paris in April 2008<sup>37</sup>, expanded across Europe, with biennial international conferences in 2010 (Barcelona<sup>38</sup>), 2012 (Montreal<sup>39</sup> and Venice<sup>40</sup>), 2014 (Leipzig<sup>41</sup>), 2016 (Budapest<sup>42</sup>), 2018 (Malmo<sup>43</sup>, Mexico<sup>44</sup> and Brussels<sup>45</sup>), 2020 (Vienna<sup>46</sup> and Manchester<sup>47</sup>).

From the Research and Degrowth web site (Autonomous University of Barcelona)

*Sustainable degrowth is a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet. It calls for a future where societies live within their ecological means, with open, localized economies and resources more equally distributed through new forms of democratic institutions. Such societies will no longer have to “grow or die.” Material accumulation will no longer hold a prime position in the population’s cultural imaginary. The primacy of efficiency will be substituted by a focus on sufficiency, and innovation will no longer focus on technology for technology’s sake but will concentrate on new social and technical arrangements that will enable us to live convivially and frugally. Degrowth does not only challenge the centrality of GDP as an overarching policy objective but proposes a framework for transformation to a lower and sustainable level of production and consumption, a shrinking of the economic system to leave more space for human cooperation and ecosystems.*<sup>48</sup>

A good overview, some say even a history, of degrowth thinking can be found in the July 2010 issue of Ecological Economics, *Volume 69, Issue 9*.<sup>49</sup> You can find a *degrowth bibliography* on the website of Degrowth Canada.<sup>50</sup>

## The Great Transition

The Great Transition Initiative is a forum of ideas and an international network [of scholars] for the critical exploration of concepts, strategies, and visions for a transition to a future of enriched lives, human solidarity, and a resilient biosphere. By enhancing scholarly discourse and public awareness of possibilities arising from converging social, economic, and environmental crises, and by fostering a broad network of thinkers and doers, it aims to contribute to a new praxis for global transformation.<sup>51</sup>

Their network, funded by the Telus Institute, includes an extremely diverse mix of (mostly) scholars, with contributors ranging from the UN, the Club of Rome, academia, politicians, green growth advocates, ecological economists, trade unions, degrowth activists, a few marxists and former corporate executives. They look at policy reform but recognize the daunting task and problems of political will, and ask if we want a well engineered global

---

36 [https://en.wikipedia.org/wiki/Nicholas\\_Georgescu-Roegen](https://en.wikipedia.org/wiki/Nicholas_Georgescu-Roegen)

37 [http://www.homepages.web.ca/~bthomson/decroissance/paris\\_april\\_2008\\_contents.html](http://www.homepages.web.ca/~bthomson/decroissance/paris_april_2008_contents.html)

38 <https://web.archive.org/web/20180423114817/http://barcelona.degrowth.org:80/>

39 <https://web.archive.org/web/20160702001816/http://www.montreal.degrowth.org/index.html>

40 <https://www.degrowth.info/en/conferences/venice-2012/>

41 <https://www.degrowth.info/en/leipzig-2014/>

42 <https://www.degrowth.info/en/conferences/budapest-2016/>

43 <https://www.degrowth.info/en/conferences/conference-2018/>

44 <http://degrowth.descrecimiento.org/>

45 <https://www.postgrowth2018.eu/>

46 <https://www.degrowthvienna.org/en/documentation/>

47 <https://www.isee-esee-degrowth2021.net/>

48 <https://degrowth.org/definition-2/>

49 <https://degrowthcanada.wordpress.com/2018/08/23/an-overview-of-degrowth-research/>

50 <https://degrowthcanada.wordpress.com/bibliography/>

51 <https://greattransition.org/about/aims-and-background>

mall or a place of human fulfillment. One of their major focii seems to be a rewriting of the relationships between corporations and society and they have just opened a new GTI Forum on *transnational corporations*: from reform to redesign.

Note: There is another group called The Great Transition Collective based in Montreal<sup>52</sup> which is associated with Historical Materialism Montreal.

### **Buen Vivir/Sumaq Kawsay: Indigenous perspectives on alternatives**

Buen Vivir can be translated as ‘good life’ or ‘living well’. This ‘good life’ has always been a pluralistic concept, namely ‘good lives’: different ways of ‘living well together’. This is therefore not about opening the gates to a single, homogeneous, unrealisable good life, but far more about people living well together in a community, different communities living well together, and individuals and communities living well with nature. In some indigenous communities, there is no concept analogous to the ‘modern’ Western concept of development. There is no concept of a linear life with a former and subsequent state (in this case underdevelopment and development). Nor are there concepts of wealth and poverty based on the accumulation or lack of material goods.<sup>53</sup>

Uruguayan scholar Eduardo Gudynas notes that: “With buen vivir, the subject of well being is not [about the] individual, but the individual in the social context of their community and in a unique environmental situation.”<sup>54</sup> It is ironic of course that this quote comes from a Guardian article under the topic of sustainable business!

### **CONCLUSION**

I argue here that modern computer and communications technology gives us an opportunity to collect, analyze, collate and synthesis alternative economic, technical, population and political alternative scenarios to the existing grossly unequal world “systems” which have produced a potential doomsday future based on a fossil fuel dominated resource and technological base. Such an admittedly simplistic conclusion is based on a process of learning presented by Michael Cooley, which shows us how to examine the framework of filters which we use to identify information and then knowledge and wisdom from the mountains of data now available to us, and to propose alternatives based on different filters and priorities from those of the creators of these existing world “system(s)”.

I have presented a few examples of alternatives. But thousands of local, community, regional and international examples exist. I don’t want to even pretend that this makes this difficult transition possible, but I have presented here a few examples that give me some hope that there are indeed alternatives. As noted, some of these alternatives are: the P2P (Peer 2 Peer) Transition to the Commons, Green New Deal(s), The Great Transition, Degrowth and the indigenous “buen vivir”. There are many, many more.

Access to the research, technologies, debates and lived experiences of many of these thousands of local, community and regional examples are widely available because of modern computer and communications technology and the greater multi-lingual and multi-cultural sharing that has been facilitated by decades of international travel and communications.

I recognize however that the internet and big data are both a promise and a threat in this context, given the grossly unequal access to resources and the existing technology, infrastructure and capital investments of the “system”.

We too can think big however, and contrary to Margaret Thatcher, there are alternatives.

---

52 <https://thegreattransition.net/>

53 <https://www.degrowth.info/en/dim/degrowth-in-movements/buen-vivir/>

54 <https://www.theguardian.com/sustainable-business/blog/buen-vivir-philosophy-south-america-eduardo-gudynas>