

# “H+ers” (Humanity Plus-ers) and the Artilect : Opinion Poll Results

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## Abstract

*This is my second essay on the theme of opinion polls on the issue of species dominance, i.e. “Should humanity build godlike, massively intelligent machines in the coming decades?” This essay reports on the third such opinion poll I have taken, but this time to a highly selected group of people, i.e. attendees of the “Humanity Plus” conference, that took place in Hong Kong, Dec 3-4, 2011. These people were sufficiently motivated in their beliefs that human beings should augment themselves with artilectual capacities that they chose to attend this conference. Hence this opinion poll ought to reflect what such people think regarding the “species dominance debate.” The actual results were more than **surprising**. This essay also reinforces the need for the creation of a new branch of sociology called “**Artilect Sociology**” that will investigate the sociological/psychological aspects of the “Species Dominance Debate.”*

## 1. INTRODUCTION

As I mentioned in the introduction of the first opinion poll essay (<http://hplusmagazine.com/2011/11/29/species-dominance-poll-results/>), I have been complaining for years in the media, e.g. ([http://www.youtube.com/watch?v=vDZc9QJU\\_Hg](http://www.youtube.com/watch?v=vDZc9QJU_Hg)) that the level of optimism of people like Ray Kurzweil, concerning the rise of massively intelligent machines (artilects = artificial intellects) this century, is irresponsibly high. To counter this (in my view) excessive optimism, I came up with the idea to use *opinion polls* with the general public, to benefit from the “wisdom of the crowds.” If the “pollyannists” could see that a substantial proportion of humanity thought that the negative scenarios should be taken seriously, then maybe they would tone down the level of their optimism and become more realistic, more balanced, i.e. more pessimistic.

So, in the second half of 2011, I started taking opinion polls, by creating questionnaires. This essay reports on the results of the third such poll. The results of the first two were given in the first “polls essay” (<http://hplusmagazine.com/2011/11/29/species-dominance-poll-results/>).

## 2. The QUESTIONNAIRE

The questionnaire used in this third poll was identical to that used in the second. This questionnaire, in the actual format that was distributed to the people who filled it in, can be found at (<http://profhugodegaris.files.wordpress.com/2011/11/hugo-degaris-questionnaire.docx>). On one side of the single page questionnaire were definitions of the three main philosophies concerning the species dominance debate. These definitions were needed so that people who were new to the debate could familiarize themselves with the main viewpoints. The other side contained the questions.

In December of 2011, I gave a talk to the Humanity Plus (H+) conference in Hong Kong, where I handed out the questionnaire. I handed out an identical questionnaire previously to a group of (largely) designers and architects (DAers) at the “Applied Brilliance” meeting (<http://www.appliedbrilliance.com>) in October of 2011 in Jackson Hole, Wyoming, USA.

I thought it would be interesting to compare the replies of these two groups (the H+ers and the DAers) since the H+ers are “committed” adherents of the philosophy that humanity should augment itself into super humans, i.e. “humanity plus” or H+. I was curious to see if such a selected group would differ greatly from a “non techie” group such as the DAers. Well, not unexpectedly, they did, as can be seen in the next section, but there were some real surprises that I did not expect.

Specifically, the DAers consisted of 42 respondees, 10 of them labeled themselves “Cosmists”, i.e. they believed that humanity should build artefacts (“artificial artefacts”, massively intelligent machines), 7 labeled themselves “Terrans,” i.e. they believed that humanity should NOT build artefacts, and 9 labeled themselves “Cyborgists”, i.e. they believed that people should modify themselves to become artefacts. 16 were not sure.

The H+ers consisted of 36 respondees, 4 of them labeled themselves “Cosmists”, 0 labeled themselves “Terrans,” and 29 labeled themselves “Cyborgists.” 3 were not sure.

### *Summarizing :*

#### ***DA Respondees*** : 42

Males 24, Females : 18

Theists : 20, Atheists : 22

Youngies (<50) : 23, Oldies (>50) : 19

Cosmists 10 (24%), Terrans 7 (17%), **Cyborgists 9 (21%)**, Not sure 16 (38%)

#### Raw Data

(<http://profhugodegaris.files.wordpress.com/2011/09/artbrilliancequestionnaireexcel.xls>)

#### ***H+ Respondees*** : 36

Males 26, Females : 10

Theists : 3, Atheists : 21, blank : 12

Cosmists 4 (11%), Terrans 0 (0%), **Cyborgists 29 (81%)**, Not sure 3 (8%)

Raw Data (<http://profhugodegaris.files.wordpress.com/2011/09/hkpoll.xls>)

Note the dominance above (in **red**) of the Cyborgists amongst the H+ers. This is not surprising, since Cyborgism is the dominant idea of the H+ers. They want to add the “+” to their humanness (e.g. greater intelligence, greater memory, immortality, freedom from disease, etc).

### *Notes on the Questionnaire*

The questionnaire consisted of 19 opinions that respondees were asked to give a 1 to 5 score to. 5 meant strongly agree, 4 moderately agree, 3 not sure, 2 moderately disagree, 1 strongly disagree. The number of people who scored 5 or 4 were said in the percentages below, to have “agreed”. Those who scored 3 were said to be unsure (?). The number of people who scored 2 or 1 were said, in the percentages below, to have “disagreed.” For the raw scores, see (<http://profhugodegaris.files.wordpress.com/2011/09/copy-of-hplusexcel.xls>).

The results are formatted as follows, taking one of the opinions as an example :-

#### **Q10 There should be a law limiting the intelligence of computers and robots.**

(H+: **a 17%**, ? 25%, d 56%)

(DA: **a 02%**, ? 21%, d 69%)

*Comments: The DAers disagreed a bit more than the H+ers on this.*

The opinion statement should be straightforward. (H+: **a 17%**, ? 25%, d 56%) means that 17% of the H+ers agreed, 25% weren’t sure, 56% disagreed. The abbreviations used were H+: for the Humanity+ conference attendees, DA: for the designers and architects of the Applied Brilliance meeting. If the two groups differed by more than 15 percentage points the percentages are given in **red**, for emphasis. The percentages are followed by comments that summarize in words, the main results of the opinion.

### **3. POLL RESULTS (at Humanity Plus Conference, Hong Kong, Dec 3-4, 2011)**

#### **Q1 Scientists should try to build computers that are smarter than people.**

(H+: **a 78%**, ? 19%, d 0%)

(DA: **a 57%**, ? 21%, d 17%)

*Comments: H+ers agreed a lot more than the DAers on this.*

#### **Q2 People should be allowed to implant computers into their bodies.**

(H+: **a 89%**, ? 08%, d 00%)

(DA: **a 55%**, ? 33%, d 07%)

*Comments: H+ers agreed a lot more than the DAers on this.*

**Q3 Highly intelligent computers will be risky to human survival.**

(H+: a 56%, ? 25%, d 19%)

(DA: a 31%, ? 26%, d 38%)

*Comments: H+ers agreed more than the DAers on this. It is scary that half of H+ers think this. See below, for general comments.*

**Q4 It is against God and nature to build computers smarter than people.**

(H+: a 00%, ? 11%, d 89%)

(DA: a 02%, ? 12%, d 81%)

*Comments: Both H+ers and DAers disagreed strongly.*

**Q5 Building computers smarter than people should be against the law.**

(H+: a 06%, ? 14%, d 78%)

(DA: a 00%, ? 17%, d 79%)

*Comments: About 80% of both groups disagreed.*

**Q6 It is against natural law to build robots that are part human.**

(H+: a 06%, ? 03%, d 86%)

(DA: a 19%, ? 24%, d 50%)

*Comments: The H+ers disagreed a lot more than the DAers.*

**Q7 A war between robots and humans is likely to happen in the future.**

(H+: a 11%, ? 39%, d 47%)

(DA: a 14%, ? 38%, d 43%)

*Comments: About 40% of both groups weren't sure about this. Scary.*

**Q8 If superhuman robots are built, they may not care about humanity.**

(H+: a 50%, ? 28%, d 22%)

(DA: a 38%, ? 38%, d 17%)

*Comments: About half of the H+ers agreed with this. Alarming for humans.*

**Q9 No one should be allowed to implant a computer in his or her body.**

(H+: a 03%, ? 00%, d 97%)

(DA: a 07%, ? 19%, d 64%)

*Comments: The H+ers overwhelmingly rejected this.*

**Q10 There should be a law limiting the intelligence of computers and robots.**

(H+: a 17%, ? 25%, d 56%)

(DA: a 02%, ? 21%, d 69%)

*Comments: The DAers disagreed a bit more than the H+ers on this.*

**Q11 I am frightened about the possibility of robots taking over the world.**

(H+: a 22%, ? 25%, d 53%)

(DA: a 21%, ? 12%, d 60%)

*Comments: A few more H+ers did not disagree with this.*

**Q12 It would be a great achievement to build robots smarter than humans.**

(H+: a 92%, ? 06%, d 00%)

(DA: a 50%, ? 31%, d 12%)

Comments: The H+ers greatly supported this by a whopping 42 percentage points.

**Q13 There is a real danger that super-intelligent robots will wipe out humanity.**

(H+: a 47%, ? 22%, d 31%)

(DA: a 07%, ? 31%, d 55%)

Comments: Half of H+ers agree with this. *This is highly significant!*

**Q14 It is human destiny to build entities smarter than ourselves.**

(H+: a 44%, ? 28%, d 19%)

(DA: a 48%, ? 14%, d 29%)

Comments: Almost half of both groups agree on this.

**Q15 Scientists should leave the human genome as God and nature created it.**

(H+: a 00%, ? 03%, d 94%)

(DA: a 17%, ? 29%, d 48%)

Comments: The H+ers utterly rejected this.

**Q16 Genetic engineering should be used to cure diseases and improve crops.**

(H+: a 89%, ? 06%, d 03%)

(DA: a 67%, ? 19%, d 07%)

Comments: The H+ers really wanted this.

**Q17 Tiny robots should be built to enter the human blood stream and cure diseases.**

(H+: a 94%, ? 06%, d 00%)

(DA: a 67%, ? 19%, d 07%)

Comments: H+ers really want this.

**Q18 A species-dominance war (Terrans vs. Cosmists/Cyborgists) is coming.**

(H+: a 08%, ? 44%, d 44%)

(DA: a 14%, ? 29%, d 50%)

Comments: Very few H+ers agreed, but more than 40% weren't sure. But, what about H+ers replies to Q3 and Q13 ??? See general comments below.

**Q19 Human beings and artifacts can peacefully coexist.**

(H+: a 64%, ? 33%, d 03%)

(DA: a 48%, ? 31%, d 12%)

Comments: Two thirds of H+ers agreed, but a third didn't.

#### 4. GENERAL COMMENTS

What particularly struck me about the results of this questionnaire was the apparent contradiction of the H+ers between “pro artifact” questions 1, 2, 5, 6, 9 on the one hand and “existential risk” questions 3, 8, 13, 19 on the other. I got the impression that H+ers prefer to build artifacts even if it means that humanity's welfare is threatened, or even if

humans are exterminated by the artelects.

This strikes me as odd, since the basic philosophy of the H+ers is to “improve humanity” i.e. to improve the capabilities of *humans*. My impression is that H+ers are advocating to a lesser degree the “*augmentation* of humanity” than they are advocating the “*swamping* of humanity” by a vastly superior artelectual capacity, whether via pure artelects or advanced cyborgs. It looks as though the H+ers care more about becoming advanced cyborgs than they do about the fate of humans (and Terrans in particular.)

If this is so, then it seems likely in my view, that the Terrans (anti artelecters) will treat the H+ers (who are overwhelmingly Cyborgists) as much the enemy as they treat the Cosmists. From the perspective of a Terran, there is negligible difference between a pure artelect and an advanced cyborg. (Remember a grain of sand of 1 mm cubed, that has been nanoteched, with one atom manipulating 1 bit of information, and switching in femtoseconds, can outperform the switching speed of the human brain by a factor of a quintillion ( $10^{18}$ ), i.e. a million trillion times. Integrating just one grain of nanoteched sand into a human brain, would convert the human into an artelect (“in human disguise.”)

Another apparent contradiction I felt was between the H+ers answers to Q18 (on the likelihood of an “artilect war” between the Terrans and the Cosmists/Cyborgists) and their answers to “existential risk” questions 3, 8, 13, 19. It seems to me that if the H+ers really feel that these existential risks to humanity are as strong as they say, then it would be logical that the Terrans would want to go to war to stop these risks from materializing. Hence the likelihood of an artelect war ought to be judged higher by the H+ers. My feeling is that the H+ers have not fully digested the political implications of their answers to the existential risk questions. Perhaps this might change as the implications sink in, and the whole species dominance issue is more discussed in the media over the next few years.

As I mentioned in the first poll results essay, there is a lot of detail in these answers that merits deeper study.

## **5. A NEW BRANCH OF SOCIOLOGY : “ARTILECT SOCIOLOGY”**

I repeat here the appeal I made in the first “poll results” essay, since I feel it is so important.

Given that the rise of the artelect will probably prove to be this century’s dominant global political issue, it makes sense to suggest that the sociologists and psychologists need to get interested in this huge issue and apply their respective skills to its elucidation.

I’m hoping that these two “species dominance” opinion poll essays will inspire ambitious young graduate students or young tenure track professors in these two fields to undertake more comprehensive and more scientific studies on the species dominance issue. Once enough studies of this type are undertaken, we will be able to talk about the establishment

of a new branch of sociology or psychology, namely “artilect sociology” or “artilect psychology”. Once it is established, professors can write textbooks and teach courses at undergraduate and graduate levels on the topic.

Once the “wisdom of the crowds” is used in the “species dominance debate” (i.e. “Should humanity build artilects this century?”) then a more realistic, more balanced scenario of what is likely to happen can be created, instead of the naively and irresponsibly optimistic scenarios of the “pollyannists.”