Current main issues of pursuing artificial intelligence philosophy essay

Artificial intelligence research has foundered on the issue of representation. When intelligence is approached in an incremental manner, with strict reliance on interfacing to the real world through perception and action, reliance on representation disappears. In this paper would like to discuss an introduction about artificial intelligence, what are the main issues are in engage Artificial Intelligence and what are the basic theories are raised in new ways by Artificial Intelligence.

1. 0 Introduction

Artificial intelligence is the design and study of computer programs that behave hxzintelligently [Dean]. It is in many ways the ultimate goal of computer programming. There is an ongoing effort to make more intelligent computer programs that are easier to use, even at the expense of simplicity and efficiency. Programs, after all, designed to solve problems. That they should do so intelligently is logical objective. This chapter will explain what dose it means for a computer program to behave intelligently and outline some uses for intelligent programs.

It is difficult to define exactly what we mean when saying that a computer program should behave intelligently. However, strait definitions of intelligence, like many commonly use expressions, are too confusing to be directly and usefully applied to computers. It is impossible to describe artificial intelligence or to gauge our progress in that field, without knowing how intelligence apply to computers.

In a paper in 1950, Alan Turing proposed a test to measure the intelligence of computer programs [Turing]. Turing refers to this test as ‘ imitation

game’. In the imitation game, a human judge uses Teletype or some other simple interface to interrogate a man (A) and a woman (B). The interrogator does not know whether A male and B is female, or vice versa. It is A’s job to convince the interrogator A is actually a woman. If aske, for example, the length of his hair, A might indicate that it is straight and layered, with the longest strands being several inches. It is B’s job to help the interrogator figure out which interrogatee is male and which is female. B might type things like, “ I am the woman! Trust me!” Such statements, however, would be limited value, since A could easily type the same. Roughly half the time, the interrogator might be fooled into believing that A is actually the woman. Suppose, however, that A was a computer rather than a man. If that computer could win the imitation game, i. e. fool the human interrogator, with same frequency as a man, then the computer is said to have passed the Turing test. In terms of Turing’s original paper, the computer might be judged capable of thinking. While passing of the Turing test implies some definition of artificial intelligence, it is insufficient for describing modern AI systems. As computer science has begun to mature, we have develope new goals and uses for artificial intelligence, as well as new technologies for achieving those goals. Intelligent systems need not be designed to fool a human judge. Nor is such a facade necessarily desirable. A human working in a factory, for example, would required rest, supervision, and incentive to continue working. These are not characteristics we choose to emulate in computer programs. Yet there is seems to be something intelligent about a robotic system that can, for example, build or design cars.

It is perhaps better to think of artificial intelligence as study and design computer programs that respond flexibly in unanticipated situations [Dean]. A computer program can give the illusion of intelligence if it is designed to react sensibly to a large number of likely and unlikely situations. This is similar to way we might judge human intelligence, by a person’s ability to solve problems and cope effectively with a wide variety of situations [Dean]. In this case, it is not necessary for an intelligent program (or person) to develop an original solution to a problem. In other words, the meaning of intelligence in terms of computers remains elusive. For the purposes of this paper, we will say that artificial intelligence is defined by two major methodologies and their purposes. Weak artificial intelligence is design of computer programs with the intention of adding functionality while decreasing user intervention. Many modern word processors are designed to indicate misspelled words without being asked to do so by the user. Some programs will even correct misspellings automatically. This is an example of weak artificial intelligence. Strong artificial intelligence is the design of a computer program that may be consider a self-contained intelligence (or intelligent entity). The intelligence of these programs is defined more in terms of human thought. They are designed to think in the same way that people think. Passage of the Turing test, for example, might be one criterion for development of strong AI system. The ethical issues in this paper deal largely with the strong AI methodology. However, the bulk of useful artificial intelligence applications lie in the realm of weak AI.

2. 0 Space Crafts

As ESA spacecraft Operation News 29 April 2008 indicated that " Artificial intelligence boosts science from Mars" Also it says Artificial intelligence (AI) being used at the European Space Operations Centre is giving a powerful boost to ESA's Mars Express as it searches for signs of past or present life on the Red Planet.

Since January 2004, Mars Express has been using its sophisticated instruments to study the atmosphere, surface and subsurface of Mars, confirming the presence of water and looking for other signatures of life on and below the Red Planet's rocky terrain.

The spacecraft generates huge volumes of scientific data, which must be downloaded to Earth at the right time and in the correct sequence, otherwise data packets can be permanently lost when the limited on-board memory is overwritten by newly collected data.

Traditionally, data downloading was managed using human-operated scheduling software to generate command sequences sent to Mars Express, telling it when to dump specific data packets. " This is tedious, time-consuming and never really eliminated the occasional loss – forever – of valuable science data," says Alessandro Donati, Head of the Advanced Mission Concepts and Technologies Office at ESA's Space Operations Centre (ESOC), Darmstadt, Germany.

According to this we must need artificial intelligence for some certain extent as such 423 million -mils from earth who can travel and how long will it be, and also without knowing the environment about Mars who can go their.

Because of these reasons better and we are lucky to have a machine that can use and work according to the human intelligence. Evan though they can not do things like human, but for some extend they can carry forward the mission according to the human commands.

As Metro- London (2008) (article is attached herewith) reported after 680 million-Km trip from earth, it marks the first time that a spacecraft has successfully landed at one of he planet's polar regions and has sent back the first images of the uncharted area. And also paper stated that craft will start its three month research mission within the next few days by using a robotic arm to dig under the top soil.

3. 0 Robotics

Robots are not new. They have been around for centuries in various forms. Here is a brief overview of the development of robots.

Warfare has been the main driving force behind the advancement of technology. The military has play a main role in researching new technologies and their work has led the way for the significant advancements in other fields. Many great inventions, including the Internet, have been made from military funded research. The driving force has been the escalation of weaponry. If you don't have something your enemy does, you are very often at a disadvantage. Computers was first developed to calculate missile trajectories and break enemy codes. With this in mind it can be said that the military has been and will continue to be AI's main driving force.

Also recently discussed in the press about the military robots of the future will be less Cyberman and more Cyber-bug, they will crawl like spiders, leap like grasshoppers and hover like dragonflies. As stated in Metro paper, London (2008) at the movement there are at least 5000 robotics devices deployed in Iraq, but those are remote controlled and they need human instructions. But now military researchers are willing to pay millions of dollars to robots that can capable of acting independently. However, researchers are not limiting their inspiration just for insects, they wanted try and develop worm-like spy bots that can wiggle through cracks much narrower than the robots. Also they investigate robots that would be able to eat like animals and extra energy from foliage.

Think of a robot equipped with heavy artillery such as machine guns, missiles, RPG, bombs, GPS, ect. Imagine of robot programmed to kill people! As this paper indicated earlier military applications are the fastest growing area of robotics. Robots and autonomous machines are all set to take over the war area really soon.

Armed forces across the world are adopting robotic weapons and still have done very little to create international laws and ethical codes on the use of robotic weapons. In case of a robotic war regime, it is the robot who, which gets to decide all matters regarding its enemy such as who is to kill, how, when, ect.

As stated elhamza (2008) , the US military is working on two robots called REAPER and CRUSHER. REAPER is a pack of unmanned aeroplanes which will communicate with each other, build strategy, and decide which target to kill

and how. CRUSHER is a seven tone strong land vehicle with heavy artillery. And also he indicated that this is of course the positive side when it would come to wiping out terrorism from the world. But if we think of the other way around, why can not the terrorist adapt robotic technology into there side and if they start building robotic militants in their small factories. What will happen.

Also almost in all the science fiction movies involved with robots and intelligent machines there are problems between the robots and the craters. Intelligent machines are starting to replace every man in their work.

Professor Noel sharkey, The Guardian, UK (2008) about WALL- E film and he argues that he is not believing independent thinking of the robots also he pointed out that Wall-E is falls in love with Envy is expressive and there is a plausibility and it is a story of 800 years in the future.

Very soon they will become the masters of the human population and they take over human society into their control! Such as in Japan, robots are caring elderly. Humans will fight for there rights and the robots will start a bloody war against mankind. If you take look at the world today, robots and robot components are becoming more cheap and easily accessible by the day.

4. 0 Ethical issues in AI

As I discussed early in this paper main AI issues being discussed in the press are spy robots, about the Wall-E film, Biometric system, etc.. However, computer scientists are now continue to gain influence in our society.

Important thing is now large corporations and government bodies are

funding and supporting to computer engineers for development and research for new technologies. Since the computer manage increasingly many aspect of our lives, we still do not have tapped their full potential. Therefore, still there is no specific body or new rules to make sure that computer program or technologies will be safe and beneficial for the general public. Artificial Intelligence is now becoming reality and no one know for sure what direction it will take. this paper will argue that truly intelligent machines may be in our future. More importantly, it will establish that computer scientists have considerable ethical and political responsibilities to the public.

Debate about the social impact of creating intelligent machines has engaged lots of organizations and individuals over the past decades. Since many early science fiction, speculations and predictions have became reality. Therefore, there is no reason to assume that robots and intelligence will not happen. We are now already living in and experiencing a golden age of technology with no end or limit in sight. As Low of Moore (1965) predicted that " computer will double in Speed and halve in size every eighteen months."

However, the morel and ethical implication in artificial intelligence are obvious and there are few sides to argue. One party will argue that there are already too many of us and countries living in poverty without work, therefore there are little or no reasons to create mechanical laborers that can think.

Also another party can argue that society cannot develop or take advantage of resources without the help of machines can think of themselves at least a little. And another party can argues that world must have to take advantage

of the machines that can create and we must develop it. But another party can argue that or they can simply

However, society is getting more confused and they will entrust machines such as government, business and educational institutions etc. On a more detailed level, opinions also differ about the extent to which we should make machines intelligent and what these machines should look like. There are no clear answers for this still. We even do not agree on what exactly defines intelligence and already we are creating artificial once.

But when we come to robots one of the most frequently asked question is whether there is ethical and moral responsibilities to manufacture robot workers and androids. But there is nor proper clear answer for that. After researching, I found that robots workers take jobs from human workers is true and those jobs are generally repetitive jobs, monotonous and often hazardous to human workers.

However, the wealthier countries are enjoying the rapid advancement in the science and technology, enabling them to automate many facts of society. I combination with the high standard of education these countries have reduce need for uneducated workers that are willing to do repetitive work such as factory work. And as even the uneducated nationals of these countries have been subject to improved wealth many refused to do these jobs. In this scenario the options to manufacturers are limited.

One option is to keep the factories local and “ employ” robots to do the work at a reduced cost – and often higher efficiency compared to human workers – to keep the profit line.

Another option is to stimulate uneducated migrant workers from other countries to come and do these jobs in semi-automated factories. This causes all sorts of social and financial difficulties.

A third option, which is more often seen these days, is to combine the above two – move the factory to a low income country and employ robot workers. In this scenario, yes, human workers lose out all around.

In a philosophical level, there are important moral issues facing the developers of

strong AI systems. Given that the goal is to develop an independently intelligent

computer program, we should consider briefly how to classify such an entity. A strong

artificial intelligence surely call into question (for some) that which we define as

“ alive.” It is still unclear whether an intelligent electronic entity would be alive and

legally entitled to certain rights.

But there is no evidence that intelligent life as it applies to human- like intelligence, is sustainable without a soul. Nor there is evidence that a soul is necessary. In fact, there are no complete definition of the soul at all. For some it is a vehicle by which we relate to a higher power, and for others it is

nothing but nonsense. We must therefore to consider questions pertaining for the life and intelligence notwithstanding the existence or non-existence of a soul. In that case, it is impossible to say whether an entity inside a computer would be alive. However, there is more than enough uncertainty to say that such consideration must be given. “ There is no accounting for science, and it is impossible to tell exactly what questions future science will answer. In science, therefore, the case of moral justification must not be taken in terms of what will happen, but in terms of what might happen” [Neeley]. An intelligent body within a machine would likely have a justifiable claim to legal and possibly even civil rights, and pulling the plug on that machine may well constitute negligent or malicious killing.

With regard to the metaphysical problem of a soul, many people in the world

believe that souls exist, and that all intelligent creatures have souls. “ In Kenneth

Branagh’s 1994 cinematic adaptation, Mary Shelley’s Frankenstein, Frankenstein’s fiend asks of his creator, “ What of my soul? Do I have one?” A reasonably intelligent

computer entity may be compelled to ask the same questions. An independently thinking entity certainly might have rights to those answers. How would the AI programmers respond to such inquiries?” Nicholas S (2002) For some it is not simply a question of whether computer programs can have souls, but a question of who would be willing to take responsibility for those souls.

And also for the space exploration, billions of dollars are allocated to NASA annually. As discussed in the Parr Centre for ethics, University of North Carolina at Chapel Hill ” some object that this amount of money should not be spent on NASA when the there are humanitarian problems that could potentially be helped with more government support. The claim is that with so many people suffering from the effects of natural disasters, poverty, poor education, and so on, spending billions of dollars on space projects is frivolous and even immoral. However, others might claim that there will likely be humanitarian benefits from space exploration and research that have yet to be realized. Eventually (who knows?) we could colonize the moon, or Mars, which might alleviate various humanitarian crises on earth. Or we might discover important resources. These long term benefits, the argument goes, make the short term sacrifices worthwhile.”

Mars can’t be viewed as a “ spare planet, like a spare tire,” . If we could create a sustainable biosphere in Mars, something which is seemingly impossible, then we could reconsider the negative consequences of space exploration. As “ Star Trek Scenario,” we can argued that we must reach a “ moral apex,” or a world void of poverty, racism, and social and environmental concerns, before exploring space. Humanity is not yet at that point.

5. 0 Legal implications in relation to Artificial Intelligence

As I discussed early in this paper there is no clear answers here. Research is extensive and diverse, covering all of the aspects of artificial intelligence. We don’t even agree on what exactly defines intelligence and already we are creating artificial ones. So can say what is right.

But if we do build android machines with a designed intelligence that think and behave like humans, won't they be a problem for human in the future.

As stated in the Artificial Intelligence, Links 999 " AIsaac Asimov, the science fiction author, well known for his robot novels (amongst the myriad others), wrote the Three Laws of robotics early in the last century which were incorporated into the " positronic" brains of his robots in order to protect humans from a " robot revolution", and to prevent other humans abusing them. :"

The Three Laws of Robotics

A robot may not injure a human being, or, through inaction, allow a human being to come to harm.

A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

However, it is time to start thinking about how we might grant legal rights to computers. There were a mock trial held during the biennial convention of the international bar association in San Fracisco last year, Martin Rothblatt argues for tuff case Martin Rothblatt is an attorney- entrepreneur and pioneer in satellite communication industry. The problem in that case is the plaintiff was a computer. According to the trial, Benjamin Soskis (2005) stated that " a fictitious company created a powerful computer, BINA48, to serve as a stand-alone customer relations department, replacing scores of

human 1-800 telephone operators. Equipped with the processing speed and the memory capacity of 1, 000 brains, the computer was designed with the ability to think autonomously and with the emotional intelligence necessary to communicate and empathize with addled callers”.

But the problem was BINA48 machine has scanned company document and found that the company planed to shut it down and use its parts to build another new model. So this machine sent sad e-mails to local lawyers, asking for their help and save its live. And also the computer offered to pay them with money it had raised while moonlighting as an internet researcher.

At some point, we might actually face a sentient, when intelligent machine demands, or who many come to believe deserves, some form of legal protection. The plausibility of this occurrence is an extremely touchy subject in the artificial intelligence field, since over optimism and speculation about the future has often embarrassed the movement in the past.

The legal community has been reluctant to look into the question as well. As stated in Benjamin S (2005) in his article ” According to Christopher Stone, a University of Southern California law professor who briefly raised the issue in his well-known 1972 essay, “ Should Trees Have Standing?,” this is because, historically, rights have rarely been granted in abstraction. They have come only when society has been confronted with cases in need of adjudication. At the moment, there is no artifact of sufficient intelligence, consciousness, or moral agency to grant legislative or judicial urgency to the question of rights for artificial intelligence”. However, there are good reasons to pay attention to implement of artificial intelligence rights. Because of with complex

computer systems consisting combination of overlapping programs create by different coders and it is difficult to know who should take the moral blame or legal liability, if the computer action that produce an injury. And also computer very often write there own software and if one created a virus and send it around the world, what will happen and who will be blame?

6. 0 Danger side of the Artificial intelligence

Based on the increasing power of computers, a strong artificial intelligence is at some point in the future would likely to be capable of thinking at least as well as a human

being, particularly if it were based on a human-emulating neural network. The rogram could solve a variety of problems, communicate with others, learn, and even be creative. If these machines made as they can think like human, robots will think their the most important race in the planet, as we think we are the most important species in the planet. This kind of competition can create clear conflicts that could be result of the development of the Strong artificial intelligence. If anything happen like this in the future, robots could easily rebuild. They do not have gestation period. A new robot will be born within couple of hours (it may be not even an hour). It is just a matter of put the pieces together. In a factory setting it could be hundreds per day. Since robots have no adolescence, It may take sixteen years to rice a capable human being, and sixteen seconds to replicate a robotic intelligence. Therefore this represents new type of danger emerging in artificial intelligence technology.

A bomb, no matter how powerful, can only explode one time, but a race of robots could replicate itself so long as resources were available, resources for which the robots would surely fight [Joy]. Joy also considered less violent scenario in which robots accidentally squeeze humanity out of existence. If an artificial intelligence is only as clever as human beings, or maybe even less, humanity might still be lose out. Even if the robotic race didn't aggressively pursue the destruction of humanity, they might still seek to change the environment as they live. They might also still seek to imitate, just like people desire to have children. The robots would continue to serve their own best interests, and consume the resources that people rely on. This type of behavior is similar to the way people harvest forests and squeeze out the species of plants and animals that live there.

In many ways, we as a society are already dependent on these intelligent machines. As an example, for example, enough human resource available to sustain the credit card industry without the intelligent programs that rate and track people's credit records. Nor is there sufficient human resource to maintain power if the very complex software in our nuclear plants were gone. Joy, points out what he call the " New Luddite Challenge," namely that we must temper our desire for technology with our capability to live without that technology. Strong AI notwithstanding, dependence of intelligent systems could be our downfall. Joy, however, fails to adequately address the sustainability issue with regard to technological dependence. Sustainability refers not to stagnation, but to our ability as a society to continue to develop without using up or destroying the resources that support our existence. Dependence on technology may be good, especially if the technology

enables us to extend our banks of otherwise depleting resources. We need only wary of technological dependence when that dependence causes us for overuse a non-renewable natural resource.

7. 0 Danger side of the Artificial intelligence As I research on this topic, I found that Artificial intelligent has been taken for debates over the last decades. If we argues about artificial intelligence rights, there are reasons why we should engage the question of artificial intelligence rights, paradoxically, makes a asset out of the theoretical and futuristic suggestions that can have led some to dismiss it. But the work of artificial intelligence often consists the manufacture of human analogs. In addressing of the nature of those creations, we can come to closer to understanding our own nature and to appreciating what dose makes us unique.

There are many people who insist that no matter how advance a machine’s circuits or how wide its computational power, a computer could never have a real moral worth. Those steep in a natural rights tradition, for whom rights are inalienable and innate and exist prior to any societal conventions, or those who believed that the soul enters to the body before the birth and that ensoulment defines that humanity’s unique relationship with its Creator, considering a rights bearing computer a contradiction in the terms. Others might endorsed a position that philosopher Daniel Dennett calls origin chauvinism: Even if computer could achieved an exact behavioral and physiological similitude with the human brain, the fact is it was not born naturally would disqualify it is from receiving rights.

As Arthur C. Clark’s first law states,

“ When a scientist states that something is possible, he is almost certainly right.

When he states that something is impossible, he is very probably wrong.”

In other words, history has shown that technology is like an unstoppable train. Human

beings have to learned to fly through sky and space, and travel to the greatest depths of the ocean. Preparing for the unpredictable future is more about prospects and probabilities than about certainties [Neeley]. The opinions of experts represented here certainly do not guaranteed the eventual creation of truly intelligent machineries, but we must plan according to what may happen because we didn’t know what will happen. The eventual development of powerful artificial intelligence system may or ay not lead to a maligned race of robots. Any outcome, however, will certainly carry serious consequences for engineers and all other citizens. We must, therefore, be mindful throughout our journey into the future of AI development, and be prepared for whatever we find there.

8. 0 Conclusion

From this paper researches and arguments I realized that artificial intelligence became a part of human life. It has given comforts to the human life. As I discussed in this paper I believe that without artificial intelligence scientist have nor way of going beyond this world. And we will never conquer the planet. And also without computer how we can collect data very fast and implement new software’s impossible. However, as we create and find new artificial intelligence day by day, we must control it for certain extend. If it

goes beyond the control, it might be the major disaster in this world. Therefore what I believe is what ever we create by ourselves, we must keep the control in our hands.