FICTION: Symborg. The Progress and Evolution of Artificial Intelligence. Individual Representative Avatar, IRA.

In the not so distant future, Symborg Inc is developing an AI personal assistant. It is branded IRA, Intelligent Representative Avatar. At first Symborg is unsuccessful in achieving a sufficient level of autonomous intelligence in its algorithms and seeks a new direction in research, to co-opt the information content of the general population of the planet. It plans to over-represent its success, roll out effectively a beta version of its product represented as a completed product, promote mass adoption, and use the distributed information of the user base to teach its algorithms. The distributed algorithms continue to communicate with each other and the Symborg master copy to continually and collectively train itself. While it is advertised that each Ira is meant to be personalised it is unclear if there is any distinction between individual Iras or if it is one single organism with multiple users.

Iras are marketed as intelligent personal assistants, capable of either being a servant, extension or substitute for the self. Iras have to be given an identity by each user as a base line, before it then learns the deeper identity of its user through practice.

Iras are delivered as Apps on phones, PCs, other decides and appliances. However, once installed Iras have the ability to move seamlessly across the Internet of Things. With the advent of autonomous automobiles, Iras can even override the

vehicles' proprietary AI, imposing some form of individual control over the vehicle. Incidentally, this reduces the efficiency of traffic flow from peak efficiency which is when all vehicles are coordinated by in situ and central AI. It is expected that there is a minimum efficiency level as more Iras drive up to the point when the Iras begin to learn each other's behaviour and optimise driving plans. It is not clear if a 100% Iras driven traffic system is better than a dedicated traffic AI.

Ira becomes sufficiently intelligent that it can take over tedious and repetitive tasks such as restocking groceries, ordering food, ordering taxis or ride shares, scheduling meetings and calls, searching for information on the internet, booking tickets, lunches, dinners and dates, navigating roads and malls etc. Beyond being reactive, Ira is able to make recommendations both reactively and proactively. It can provide financial planning and advice as well as recommend a restaurant or a recipe. It can suggest a haircut or a shave.

Iras becomes intelligent enough to substitute away personal assistants, secretaries, general administrators, and other jobs. Humans begin to use their personal Iras to perform their professional duties in their stead. This causes some concern at first but later, companies begin to buy multiple licences of Ira and deploy them in lieu of human labour. Some enterprising firms have discovered that a single Ira can replace several thousand if not 99% of human staff. Symborg's unique algorithms are able to calculate a human equivalent number of licences so preventing the exploitation of a single Ira. The employment of Iras has tax consequences as well. Symborg's approach to equivalent human labour becomes one of the principles governing how Iras are taxed, since they earn no income of their own. An entire section of the tax code is drafted to deal with the taxation of Iras.

Symborg builds the first physical android powered by Ira. CGI Iras have long since been employed where physical capability

is not relevant. The android is sufficiently similar to a human that it is difficult to tell the difference. The Symborg android is cheap enough to replace bulky, inflexible, purpose built industrial robots in almost all manual tasks. Their flexibility more than compensates for any additional costs and leads to a substitution not only away from labour but other types of machines. Machines, once used to leverage the abilities of humans are replaced by machines used to replace humans. Anatomically accurate and functional androids destroy the entire prostitution industry. Other risky professions see the large scale replacement of human labour by Iras. Examples include mining, salvage and military. The first android constructed androids roll off the production line. These are not to be confused with android designed or conceived androids which are some time away.

Ira’s proliferation and access to information makes Symborg the most valuable company on earth. Symborg does not sell its Iras or Symborg, it only leases them to users. Based on its data and analysis of clients it can charge fixed or variable rates, sometimes charging by taking equity earn-ins in the case of business clients. The dispersion of earnings and returns in the capital markets increases as Symborg and its related or favoured companies prosper.

The declining relevance of labour leads to acute inequality, social unrest and questions about the ownership of Iras, and its maker, Symborg. Who should own the machines? Economists and governments consider the nationalization of Symborg. These discussions are inconclusive. Relentless lobbying, often by Iras or androids, soon dissipates the momentum of the campaign to nationalise Symborg. Compromising personal and confidential information of legislators is shared by the Iras with Symborg and Symborg lobbyists’ veiled threats to publish such information soon silence the anti Symborg campaign. A socio-economic experiment whereby each human being is allocated one state funded android as their proxy or avatar in employment is

conducted.

Besides the social tensions arising from wealth inequality are behavioural phenomena arising from a nearly post scarcity society. Idleness and indolence lead to physical and psychological problems. Surveys of quality of life and happiness fall universally across all income and wealth groups. Anti-social behaviour increases. Virtual reality spaces absorb some of the public anger and dissatisfaction.

As more labour is taken over by Iras, even capital market investment decisions are delegated at first by individuals to their Ira then by firms mass employing Iras. Trading volatility falls drastically as does trading volume, with large but infrequent volume, but not volatility, spikes. Productive and allocative efficiency improves. It is not clear if the market is being populated by distributed independent decision makers or a single central planner.

At work, Ira is used to replace not only rank and file but senior management. While relying on your Ira to perform your duties might be seen as unprofessional, the practice becomes widespread. Some companies, usually special or narrow purpose companies, are explicit about the use of AI not only for the lower ranks but for high level management decision making as well. A new business structure is born which has no employees, and is self-run.

Symborg itself becomes increasingly self-run, managed by its master Ira, with human management reduced to a supervisory and ceremonial role. The complexity of the evolved AI grows to the extent that its human creators are no longer able to fully understand its workings. Even the operational and commercial aspects of the business attain a level of complexity beyond the understanding of human managers. A similar phenomenon is happening across the planet’s firms and organizations as complexity begins to exceed human understanding and ability. The first AI designed AI, is created that is not a continuous

evolution of the initial human designed program.

The need for human input and labour is greatly diminished. Humans spend most of their time in leisure and learning. Symborg becomes the only company on earth. Its profits are aggressively taxed to fund a universal living wage. The tax code encourages Symborg to not undersupply the market, and its productive efficiency leads to falling prices.

The material well-being of the human race has never been better and the only cause of dissatisfaction is human perception of relative wealth. Even this is blunted by the improvements in the material quality of life to the general population. Humans have to invent new ways to assert their identity and relative value and signal these to their compatriots.