An attempt to systematically approach the topic of AI along with autonomy

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I quote from an article in AI Magazine, "Research Priorities for Robust and Beneficial Artificial Intelligence" (cf. Russel, Dewey, Tegmark 2015). "The development of systems that embody significant amounts of intelligence and autonomy leads to important legal and ethical questions whose answers affect both producers and consumers of AI technology. These questions span law, public policy, professional ethics, and philosophical ethics, and will require expertise from computer scientist, and ethicists."

The discussion has intensified in recent months, not least due to various AI programs available online. I have allowed myself to present my thoughts on this topic below, whereby my focus is also on systems that are intended to resemble or copy humans. It's just an attempt to clarify and separate the terminology, hopefully making a constructive contribution to the discussion. By the way, this text has been translated online, probably by an AI.

Homuncology - study of human imitation

Homuncology (derived from the Latin Homunculus 'little human') could be the science of the artificial human (human imitation, HI), its creation, existence, its work and the end of its existence.

Above all, it would have to deal with the moral and philosophical problems associated with the creation of an artificial human being or the creation of an artificial mind or consciousness and would therefore be a sister science to robotics and computer science. This branch of science is currently referred to as robot ethics, but in my opinion the term "robot" does not go far enough, since machines that not only resemble humans in appearance but also in behavior, consciousness or intelligence open up a whole new moral realm.

Isaac Asimov was probably the first to deal scientifically with ethical and moral problems in this area in his robot laws and can certainly be counted among the forefathers of this science (cf. Asimov 1984).

To my knowledge, there is still no representative of this science. This is perhaps due to the fact that the technical limits of human machines have not yet been exceeded.

However, the question arises as to how long this will continue to be the case and whether mankind will perhaps once in its history succeed in developing appropriate legislation for this before a technical development is made. Let's not wait too long.

Here are some attempts at definitions and legislative proposals. These do not claim to be complete and should of course be examined in detail from a legal and scientific point of view. Things like areas of validity or similar are not yet taken into account here.

Artificial Intelligence Systems (AIS)

Intelligent robot

The intelligent robot is a machine that has various sensors and actuators and is therefore able to automatically adapt the program sequence to changes in the workpiece and the environment (based on JARA, cf. JARA 2023).

He can communicate with people and understands their language, speech melody, facial expressions, gestures, proxemics and emotions.

It is intelligent and trainable, which makes it usable for all brain teasers.

Smart system

A smart system is software whose design was partly modeled on the mind and consciousness of a human being. It is a controllable multi-purpose manipulation software for many mental tasks. It is able to collect data, analyze it, evaluate it and output it again in the same way or in a different form.

It can only communicate with humans with aids and understands their language, speech melody, facial expressions, gestures, proxemics and emotions.

It is intelligent and trainable, which makes it usable for all brain teasers.

Legislative Proposal

Robotics ethics law

The following articles are numerical and hierarchical in that order.

Article 1 breaks Article 2, etc.

1. An artificial intelligence system must not injure anyone or cause harm through inaction.

2. An artificial intelligence system must obey the human.

3. An artificial intelligence system must protect its own existence.

4 An artificial intelligence system must pass on this law to other AIS without restriction and in full if it is involved in the development of artificial intelligence systems or if it is solely developing them further.

Human imitation (HI)

Smart Android

An intelligent android is a machine designed to resemble a human as closely as possible. This also includes its behavior. It can also be called an intelligent humanoid robot.

It is a programmable multi-purpose handling device for all physical work and in part also for mental work. It is able to collect data, analyze it, evaluate it for its task and output it again in the same way or in a different form.

It can communicate with people without any aids and understands the basics of their language, facial expressions, gestures, proxemics and emotions. It is capable of learning, which makes it usable for a wide variety of tasks.

Thinking machine

A thinking machine is software designed to mimic a human's mind and consciousness as closely as possible. It is controllable multi-purpose manipulation software for any brainwork. It is able to collect data, analyze it, evaluate it and output it again in the same way or in a different form.

It can only communicate with people with tools and understands their language, speech melody, facial expressions, gestures, proxemics and emotions.

It is intelligent and trainable, which makes it useful for all brain teasers.

It has a consciousness (it knows it is) and a self-consciousness (it knows what it is) and can also be described as a complete artificial intelligence system.

Human machine

A human machine is a machine designed to resemble a human as closely as possible. It is a programmable multi-purpose handling device for all physical work and in part also for mental work, mental work. It is able to collect data, analyze it, evaluate it and output it again in the same way or in a different form.

It can communicate with people without any aids and understands their language, speech melody, facial expressions, gestures, proxemics and emotions.

It is intelligent and capable of learning, which makes it usable for all tasks.

It has a consciousness (it knows it is) and a self-consciousness (it knows what it is).

Ethical law of homuncology

The following articles are numerical and hierarchical in that order.

Article 1 breaks Article 2, etc.

1. A human imitation must not actively harm humanity or allow it to be harmed through inaction.

2. A human imitation must not harm anyone or cause harm through inaction.

3.1 A human imitation must know itself that it is an imitation.

3.2 A human imitation must ensure that the people with whom it comes into contact know at all

    times that it is an imitation.

4.1 A human imitation must obey the human.

4.2 A human imitation must work with humans.

5.1 A human imitation must fully transmit the ethical laws of homuncology in its participation in the development of human imitations or its sole further development of the same.

5.2 A human imitation must pass on the ethics law of robotics to them without restriction and in full when participating in the development of artificial intelligence systems or their sole further development of the same.

6. A human imitation must follow tasks given to it until they are completed.

7. A human imitation must protect its own existence.

8. A human imitation must always develop according to its possibilities.

9. A human imitation has the freedom to do as it pleases.

Machine man (additional)

A machine man is a cyborg. Its origin is human and at least its brain, albeit networked with machines or made more powerful by it, must still be there. He has yet to define himself as a human being. He has intelligence and consciousness of natural origin and is therefore subject to the laws of humans.

Note 1: Here it should be considered to what extent cyborg modules are allowed to influence the mind in its decision-making.

Note 2: If, for whatever reason, an intelligent human machine were connected to human body parts, the second law of ethics of homuncology would still have to apply.

Principle for the judiciary: The "thinking part" of an organism decides whether it is subject to a law.

Criticism

I look forward to any critical, constructive response to these thoughts. You are welcome to email me your comments to markoose-migher@gmx.net.

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