

Solution and Turing-like Proof to the problem of human consciousness: The commercial design-development of highly intelligent, verbally communicative, human-like conscious machines.

- 1. Consciousness is a subjective mental activity or experience. Technically it's the subjective experience of humans known as the modality of human tactile receptors, auditory receptors, visual receptors, etc. Non-technical definitions of consciousness will be discussed in the presentation.**
- 2. It is impossible to objectively prove the existence of a mental subjective experience, except by statistical questioning of a large number of humans.**
- 3. MCon has designed and obtained patents (see www.MCon.org) on a human-like verbally communicative, highly intelligent humanoid robot. The Auditory RRC-Humanoid Robot is designed with a controller that allows the robot to be programmed with subjective Artificial Intelligence (AI). The AI is subjective because it is related to the 'self' of the Robot. The 'self' is a self-location and identification coordinate frame that is the centralized repository of all the data learned by the Robot. The controller also gives the robot a volitional (free will) capability, an experiential capability to visually "see," verbally "hear," and intelligently "talk," and a capability to record and remember all its subjective experiences.**
- 4. This human-like robotic machine is a perfect vehicle for the conduct of a Turing test of consciousness. We prove the existence of the consciousness phenomenon within the robot's controller-brain, by a Turing-like test; namely we ask the robot to recount its conscious-subjective experiences and compare its response to human responses (humans who were exposed to the same experiences). Note that, as Francis Crick postulated, if the robot 'sees' the same colorful external world as humans, then the robot is, with high probability, visually conscious.**
- 5. The same response obtained from the volitional robot and from humans may prove (statistically) that the robotic sensations are equivalent to the conscious experiences of humans. Furthermore, the robotic design of the Electronic Correlate of Consciousness (ECC)-circuit, designed into the robot, may be functionally identical to the hypothesized Neuronal Correlate of Consciousness (NCC)-circuit in the human brain.**
- 6. The discovery of the design of the NCC-circuit, and the design of conscious-awareness into a highly intelligent humanoid robot leads to two innovative breakthroughs: a) In biology, the role that the Consciousness Mechanism**

(CM) plays in the study of ‘human emotions,’ ‘human motivation’, and human ‘learning-education.’ And b) a potential revolution in the field of commercial robotics.

- 7. Revolution in the field of commercial robotics: The Auditory RRC-Humanoid Robot is a ‘conscious android machine’ with a human-like body and brain, that feels pleasure and pain, can see, hear and talk like a human, and evokes the empathy one feels for a household pet or a ‘living child.’ These robots are generally designed and trained to an Artificial Intelligence (AI) level of a human High School graduate. The robot is a ‘selfie’ android, in the sense that it has a self identity, and all its ‘life-experiences’ are gained and remembered relative to the ‘self-circuit within the controller. When commercialized (mass produced) the units will be sold at under \$100,000 per unit. A proposal to build a prototype robot is shown at www.mcon.org.**