



The Search for Terrestrial Intelligence

S.T.I. turns the technologies that look to deep space for Alien Intelligence back onto Planet Earth in a quest for 'evidence' of Terrestrial Intelligence. Using satellite imaging and remote sensing techniques S.T.I. will scour the Planet Earth using similar processes employed by SETI (the Search for Extra Terrestrial Intelligence). Looking at Earth from space the project will develop processing techniques using autonomous computer software agents. In their search for evidence of intelligence the agents will generate new images, animations and audio (which may produce more questions than answers) which will be publicly accessible on the S.T.I. website.

The S.T.I. Project Consortium brings together artists, scientists and technologists from four research groups (STAR, CNAS, ATR, NRSC) based in three organisations, the University of Plymouth, ATR Media Integration & Communications (Japan), and the National Remote Sensing Centre (NRSC). The S.T.I. Project is constructed by a Development Committee, which consists of eight individuals, they are: Mike Phillips (Project Co-ordinator), Geoff Cox and Chris Speed from STAR @ University of Plymouth: Dr Guido Bugmann and Dr Angelo Cangelosi from the Centre for Neural and Adaptive Systems (CNAS), @ University of Plymouth: Christa Sommerer and Laurent Mignonneau from ATR Media Integration & Communications: Dr Nick Veck: Technical Director, National Remote Sensing Centre.

S.T.I. establishes a common ground for the consortium by sharing the collective knowledge of remote sensing, imaging technologies, autonomous agents (AI and Neural Networks), and On-Line interaction. The Project fuses this knowledge into a challenging exploration of planetary data analysis, through a process of experimental prototyping of a number of autonomous data analysis agents that reside on the S.T.I. website.

Vision dominates our culture and lies at the heart of scientific and artistic endeavour for truth and knowledge. Increasingly the dominance of the human eye is being challenged by a new generation of technologies that do our seeing for us. These technologies raise critical questions about the nature of the truth and knowledge they elicit, and the way in which we interpret them. The S.T.I. Project goes beyond the irony of the search for terrestrial intelligence on Earth by engaging with our understanding of the 'real world' through our senses, whether real or artificially enhanced. Will these autonomous systems 'know' the 'truth' when they 'see' it?

The S.T.I. Project engages in critical issues surrounding the shift from the hegemony of the eye to the reliance on autonomous systems to do our seeing for us. This shift has an equal impact on scientific processes and creative endeavour. By turning away from 'outer space' to an examination of 'our space' the project also engages public interest, as expressed in the popular imagination through science fiction (X files, etc), in the alien within our midst. Do we recognise ourselves when seen through our artificial eyes.

For example: 'Face on Mars'. The blurred and faded images sent back by the 1976 Viking Orbiter reveal little to the naked eye, until they are digitally processed. The processing slowly reveals a skull like face that stares blankly from the surface of mars. The technology strips away the grain and fuzz and re-visions. The 'face' becomes gradually un-obscured, progressively un-veiled, with features suggestive of eyes, a ridge-like nose, and a mouth, its 'truth' emerging through the technology. Maybe the processing techniques employed allow us to see more clearly the images we nurture inside our heads. Maybe they bring into sharp focus the things we want to see.

The output from the S.T.I. project will generally conform to the Open Source definition (Version 1.7), ie: free redistribution, distribution in source code as well as compiled form, allowing modifications and derived works, no discrimination against persons, groups or fields of endeavour, etc.

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