Ceci n’est pas une micromachine

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Ceci n'est pas une pipe.
René François Ghislain Magritte (21 November 1898 – 15 August 1967) was a Belgian surrealist artist. He became well known for a number of witty and thought-provoking images. His intended goal for his work was to challenge observers' preconditioned perceptions of reality and force viewers to become hypersensitive to their surroundings.

Contents

1 Early life and career

Birth name René François Ghislain Magritte

Portrait of Magritte by Lothar Wolleh, 1967
Magritte: His intended goal for his work was to challenge observers' preconditioned perceptions of reality and force viewers to become hypersensitive to their surroundings.

C P Snow: The response was cold: it was also negative. Yet I was asking something which is about the scientific equivalent of: 'Have you read a work of Shakespeare's?'
Differential interference contrast

http://www.microscopyu.com/articles/dic/reflecteddic.html
Reflected Light DIC Microscope Optical Path

- Tube Lens
- Analyzer
- Vertical (Episcopic) Illuminator
- Microscope Frame
- Nomarski Prism Adjustment Knob
- Revolving Nosepiece
- Objective
- Opaque Specimen
- Polarizer
- Half-Mirror
- Nomarski Prism

Figure 1
the image created in reflected light DIC can often be interpreted as a true three-dimensional representation of the surface geometry, provided a clear distinction can be realized between raised and lowered regions in the specimen.

http://www.microscopyu.com/articles/dic/reflecteddic.html
Is DIC realism helping these humans understand why the microscopic gear train is stuck? (video or live demonstration)
It may be helpful if our definition of saliency embraces work on the human visual system (HVS) as well as the more abstract work on saliency, as it is certain that understanding by humans will always stand between recording of a useful signal from all manner of sensors and so-called actionable intelligence. A DARPA/DSO program lays down this requirement in a current program (Kruse 2010):

The vision for the Neurotechnology for Intelligence Analysts (NIA) Program is to revolutionize the way that analysts handle intelligence imagery, increasing both the throughput of imagery to the analyst and overall accuracy of the assessments. Current computer-based target detection capabilities cannot process vast volumes of imagery with the speed, flexibility, and precision of the human visual system.
Work could also contribute to NA-22 needs with methods that use imaging (from whatever spectral band) to communicate (to humans through their HVS) visual evidence for attribution (statistical as well as legal). Hoffman and others (Hoffman and Singh, Salience of visual parts 1997) (Hoffman, Visual Intelligence: How We Create What We See 1998) offer a wealth of examples together with computational-model-based theory to better understand how visual salience (and other mechanisms wired into HVS) stand between the reality in our physical world and our perception of this reality. The best engineering of imaging sensors may be ineffective in managing proliferation if the limitations of the humans that consume the imaging are ignored.