



Interfaces to Enhance Creativity

Prof Rae Earnshaw

Prof of Creative Industries, Glyndwr University
UK

Prof of Electronic Imaging
University of Bradford, UK

r.a.earnshaw@bradford.ac.uk

Overview



- Online collaboration
- Multiple person crowd acceleration
- Virtual environments and latency
- Interactive broadcasting and narrowcasting



Orange arrow = insular, dogmatic individual or small group

Mediocre Solution Mesa

Problem-Solving Success -->



Optimal Solution Piccacle

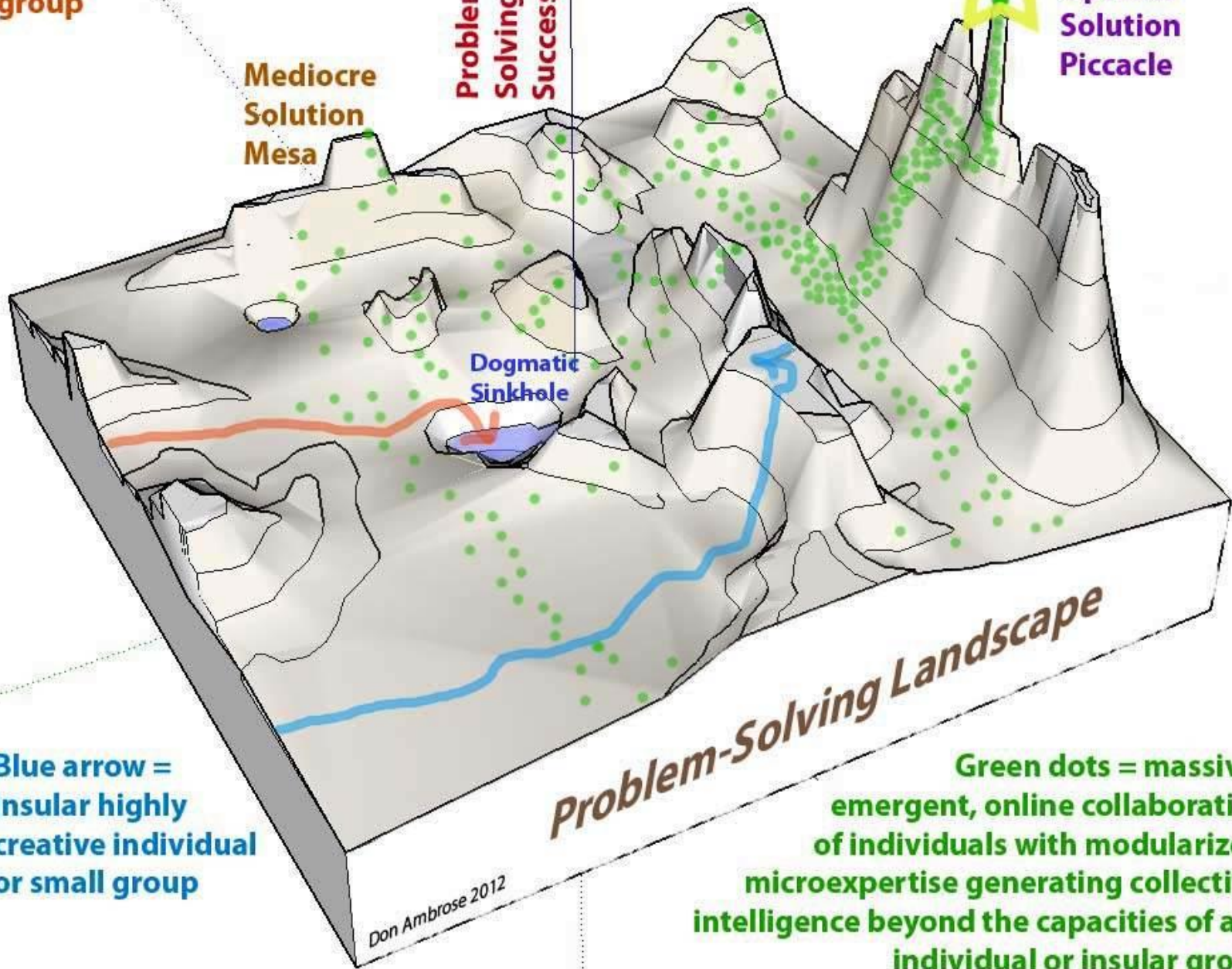
Dogmatic Sinkhole

Blue arrow = insular highly creative individual or small group

Problem-Solving Landscape

Green dots = massive, emergent, online collaboration of individuals with modularized microexpertise generating collective intelligence beyond the capacities of any individual or insular group

Don Ambrose 2012



Virtual Environments



- Integration, and enhancement of creative teams working together over large distances, often bringing together different cultures and social contexts – brings greater potential diversity and creativity
- But issues of latency for applications which are time-critical, e.g. virtual orchestra rehearsal
- <https://www.youtube.com/watch?v=OcLkVBZ4ULs>
- Virtual exhibitions, art galleries
- <https://sites.google.com/site/ita15artexpoandworkshop/gallery>
- Virtual art catalogue
- <http://glyndwrpix.co.uk/carbonaugust2/>



Interactive Broadcasting and Narrowcasting



- Increasing personalization of media
- Moving from many to one → one to one, and one to many
- Social media changes the environment
- <https://sites.google.com/site/raearnshaw/presentations>
- Social media generates large volumes of information in a short time.
- Elucidating the key meaning is a major challenge
- “Second screen” is increasingly used in association with viewing broadcast content

Interesting Questions - 1

Q: Isn't creativity intrinsic to each person? So how can technology increase it?

A: Technology can provide an environment where creativity can be stimulated, e.g. by connecting people who otherwise would not be.

A: It can also design technology that can inspire people

Interesting Questions - 2

Q: What can art contribute to science?

A: Aesthetic form is often the most technologically efficient, e.g. as in nature

A: Can help with communication and education

http://www.researchgate.net/post/To_what_extent_do_people_believe_that_art_can_contribute_to_positive_change

<http://blogs.scientificamerican.com/guest-blog/from-stem-to-steam-science-and-the-arts-go-hand-in-hand/>

Q: Will the virtual art gallery replace the physical art gallery in the future?

A: Will get to larger audiences

A: Reduction in funding for physical galleries may be an opportunity not a limitation

<http://beta.interestedwomen.com/editions/visiting-a-virtual-art-gallery/>

<http://www.artdiversions.com/virtual-reality-and-art/>