

# Investment and Interpretation: Nanotechnology, Financial Journalism and Practical Epistemology

Geoff Cooper & Mary Ebeling



# Outline

- Financial journalism and the commercialisation of nanotechnology
- Method
- Journalists as analysts: epistemological strategies for interpreting nanotechnology
- Conclusions: the financial understanding of science

# Financial journalism and nanotechnology

- Project: 'Spinning science: the nanotech industry and financial news' project
  - decisions to invest in nanotechnology
- Financial understanding of science
  - including the role of mediators
- Today: how financial (scientific) journalists analyse and make sense of claims for nanotechnology

# Notes on method, data

- Open interviews with different categories of actor
- Eight print (including web based) journalists
  - six cover S&T for financial publications
  - one covers S&T for a news wire service
  - one covers finance and business for a science publication
- Three have science degrees, three have a journalism background, two from business

# Evaluating claims

- Some particular difficulties (for investors and journalists)
  - the complexity of the field (technical sophistication, heterogeneous technologies)
  - the degree of rhetorical inflation
- A range of strategies used ...

# Evaluating claims (cont.)

- Problems locating accredited scientific sources, and the use of attribution

*I don't think as a journalists you can really check out what is true, what you have to do is attribute it. [...] And there's no point in journalists ringing up some nanotech expert in a university and say 'I've been told this by a company' because the expert will say well how can I check any more than you? So I think checking is almost impossible, but attributing is what you do.*

*DD 20/1/06*

# Evaluating claims (cont.)

- Use of multiple sources (triangulation)
- Rely on status of journal

*But then what we're doing is we're relying on the journal themselves to have circulated this to the relevant people [the science has been peer-reviewed] and now obviously with Nature or Science you can rely on them to have done that, if it's the Journal of I've Never Heard of It Before then you have to be a bit more careful. OM, 30/6/06*

# Evaluating claims (cont.)

- PR and cycles of credit (using the newspaper's cultural capital)

*... if you publish something questionable in a paper of record like the [newspaper] and it turns out not to be the truth then your reputation and our reputation suffers as well but their reputation will suffer a lot more.*

*RE, 17/2/06*



# Evaluating claims (cont.)

- 'Social interests' explanations

*I don't have any journalistic training, official training, but this is the sort of theory that I've adapted to myself is to essentially not to trust anyone and to assume that everyone has an agenda.*

*KH, 20/1/06*

- Trusting PR (with its transparent agenda)?

# Analytical scepticism (nanotechnology as a construct)

- Degrees of anti-essentialism ...
- Different actors, different definitions
- The term and its lack of precision ..
  - ... the entire semiconductor industry is now submicron. So it's all nanotechnology. So we never use it MH, 23/6/06*
- Misleading financial indexes

# Analytical scepticism (cont.)

- Category mistakes

*The only unifying thing about nanotechnology is it's stuff that's small. The definition is whatever it is less than 100 nanometers or whatever but if I were to say to you what are your impressions of a technology between the sizes of 1 metre and half a metre, do you see what I mean?*

*OM, 30/6/06*

# Achieved reality of object

- A performed category; eg indexes

*But if pure play nanotech companies, because hey everybody's investing in the stuff, it's a research and development expense but they're all getting roped into it, if they go off and get hot you will see all kinds of investment flow that way [...] So if you create enough buzz, institutions [ie institutional investors] will come. DK, 19/1/06*

- Some effects of hyperbole

*Without it [hype] I don't think the U.S. government and other governments around the world would have decided to invest the billions that they're now investing into a basis in the field. KT, 8/2/06*

# Claims and stories

- Narrative dilemma: reconciling cultural imaginaries and high expectations with mundane realities

*I think it's a tough job to communicate what's going on in nanotech now because you had a whole load of hype about the field which had now died down and actually a lot of nanotech is really, really boring, and it will remain really boring for years. KH, 20/1/06*

# Claims and stories (cont.)

- The good story (and how not to miss it)

*... there is a whole other aspect to this is that if you have so many PR guns working for you, there is a lot, there's so much coming to you, and it could be a big story among, so you have to answer all those calls, you have to listen to them.*

*MH, 23/6/06*

- Spin within the newspaper

*They just see their job as selling the story to me but they don't realize that ...they have to give me enough of interest to get it through the next stage. DD 20/1/06*

# Conclusions

- Considering both senses of the 'sociology of journalists'
- Covering commercial dimensions of nanotech - some specificities (eg in use of PR)
- Financial and public understandings of science
  - finance: the value of looking 'where the action is'
  - linking financial to other concerns