Bubble trouble

timeshighereducation.com (https://www.timeshighereducation.com/features/bubble-trouble/407277.article)

The cause of the meltdown in global financial markets is obvious: leveraged trading in financial instruments that bear no relationship to the things they are supposed to be secured against. When creditors finally ask how much bonds secured by collateralised debt obligations backed by billions of dollars of mortgages are actually worth, the answer is "what the buildings can be sold for". In some cases, nothing. In many cases, the buildings are no more than weed-covered lots or graphics in a developer's PowerPoint presentation.

The academy, too, is a market - a large one in which the value of any piece of research is ultimately secured against the world. If the world is not as described or predicted in the article or book, the research is worthless. A paper that claims that autism is caused by vaccination or terrorism by poverty is valuable only if it turns out to be a good explanation of autism or terrorism. That is why an original and true explanation is the gold standard of academic markets: the double helix, On the Origin of Species, Henri Pirenne's Mohammed and Charlemagne.

The academic market is also like the financial market in another way. Stocks trade above their value, which leads to bubbles and crashes. Brain-imaging studies, for example, are a current bubble, not because they don't tell us anything about the brain, but because the claims made for them so vastly exceed the information they actually provide. As with a leveraged investment in mortgage bonds hedged by a foreign-exchange credit swap, most customers have no idea how a brain-imaging result is produced and what it is really worth. Those who do - the ones in labs using complicated statistical algorithms to map impossibly messy signals to artificial 3D models of brains - are usually very circumspect about the results. But every week we read in the science pages that brain-imaging studies prove X, where X is what the readers or columnists

already believe. Women can't read maps! Men like sex! Childhood trauma affects brain development! There is an Angelina Jolie neuron! The bosses of big labs that employ hundreds of people use these studies, along with artfully placed articles about them, to get funding for future research. In a similar way, directors of mining companies raise funds on the basis of prospecting reports "leaked" to the financial press.

Consider, as an unrivalled piece of hyperbole, this statement from the website Edge.org, which aims "to arrive at the edge of the world's knowledge" by seeking out "the most complex and sophisticated minds". It is by Vilayanur S. Ramachandran, a brilliant experimental neuroscientist as well as a master publicist: "The discovery of mirror neurons in the frontal lobes of monkeys, and their potential relevance to human brain evolution ... is the single most important 'unreported' (or at least, unpublicised) story of the decade. I predict that mirror neurons will do for psychology what DNA did for biology: they will provide a unifying framework and help explain a host of mental abilities that have hitherto remained mysterious and inaccessible to experiments."

That's not very likely. Mirror neurons are neurons in the monkey premotor cortex that are active both when a monkey produces an action such as grasping, and when it observes the action. No one yet knows quite why there is an overlap in patterns of neural activity. Ramachandran would like to find out, so he has made his pitch to investors. They know he has done some beautiful experiments and he is a charismatic public performer and Edge.org regular, so we can expect the mirror neuron boom to continue for a while.

As with mining companies, there is nothing wrong with using a prospectus to raise capital for research. But (we hope) the share price of a mining company and any derivatives secured against those shares drops if no gold is found. Similarly, (we hope) the price of publications secured by brain-imaging studies and overinterpretations of mirror-neuron studies will undergo a correction as the studies are integrated with more fundamental neuroscience and the other sciences and humanities that shed light on how the brain enables cognitive functioning.

Bubbles in the cognitive neuroscience market are fairly benign. Trading patterns there resemble a bullish market more than a speculative bubble. This is because, in general, stocks in science (the papers, grant applications and CVs that secure appointments, salaries and grant funding) trade fairly close to their real value. It is hard to leverage them because there are a lot of investors who are trying to cash in their investments rather than passing them on to some other dupe and taking a fee. Other scientists want to see if the theorem is proved, the prediction verified, the world accurately described or the technology workable.

There are also short-sellers in the scientific market - that is, people who are prepared to bet against a shaky hypothesis by discounting its value. These are the people who research the counter-hypotheses. The Australian scientists who pursued the unorthodox idea that stomach ulcers were caused by bacteria were ultimately vindicated in the same way as those who sold Lehman Brothers short: by evidence. This is why smart directors of research institutes or government funding bodies hedge their bets by supporting plausible research that runs counter to current fashion.

I worry that there are no similar mechanisms for correction in the humanities - and not because stocks in the humanities are intrinsically worthless. Historians, anthropologists, linguists and even philosophers (on a good day) are able to discover or explain things. But a lot of the market is unsecured and highly leveraged. By this I mean that people in the humanities often do not write about the world or the people in it. Rather, they write about what somebody wrote about what somebody else wrote about what somebody else wrote. This is called erudition (not free association), and scholars sell it to their audience as a valuable insight about the nature of terrorism or globalisation or the influence of the internet (preferably all three). Almost every grant application in the humanities mentions these three topics, but the relationship between them and the names and concepts dropped en route are utterly obscure.

None of this would matter if the market were basically self-correcting like the science market, or erratic but brutally self-correcting like the financial markets. When people do not write directly about the world, it is hard to compare what

they say against the world. So the main corrective mechanism in the humanities is reputation built on publication and, since publication is often based on reputation, the danger of a bubble is extreme. Someone who takes a supervisor's advice to base a career on writing about Slavoj Zizek is in the position of an investor deciding to invest in Bear Stearns on the advice of Lehman Brothers. The price is high and predicted - by those who have a vested interest - to rise further.

But why is the price high? If the price of a theory is based on the explanatory insights it provides, all is well. But it is striking to see how rarely this index of value, the price-to-earnings ratio of research, figures in investment catalogues in the humanities.

Compare the citation for a Nobel prizewinner in chemistry or physics with the way humanities research is evaluated. The Nobel citations are accessible to any intelligent reader. A problem - typically an initially baffling one like the relationship between protein synthesis in the nerve cells of sea slugs and human memory - is explained and solved (see the beautiful description of Eric Kandel's research on the Nobel website). Things sometimes seem to go the other way with the big names in the humanities. A problem (eg, terrorism) is misdescribed (eg, as an expression of subaltern response to modernity) and a raft of pseudo-explanation is recruited to leave everyone baffled. People are too polite, too confused or too unscrupulous to care. The unscrupulous will have their chair before the tide of academic fashion recedes. One can tell the unscrupulous from the merely confused by the rapidity with which they jump from bandwagon to bandwagon. This is OK for those who profit in a bull market, but there are students who have shelled out good money to write a thesis on Deleuzian social work, feminist theology or (let's be even-handed here) brain-imaging studies of criminal intent.

This is not the familiar philistine bleating about the pointlessness of the humanities, or the inaccessibility of academic writing. Humanities have never been more to the point, and academics are entitled to use specialised technical language where necessary. It is a worry about the possibility not of a market

meltdown, but of a gradual dawning of comprehension on the part of governments and the public that their investment in the humanities is contaminated with toxic debt.

What will they do? They can't just fire all the bullshitters. For one thing, the bullshitters have tenure; like the senior managers who appointed them and directors of banks, they will be receiving (not earning) big salaries for a while yet. Second, it's hard to tell who they are. Investing in humanities departments is like buying a tranche of contaminated bonds. The bundle you buy contains some AAA, some AA and a lot of rubbish. As with the bonds, a big problem has been fraudulent rating and self-delusion when traders and regulators are either closely linked or even the same people.

Recent attempts in Australia to determine which journals are A+ is instructive. "The Australian Journal of X" is always rated by Australian academics as among the top 5 per cent in the world. This is predictable self-deception of course (90 per cent of academics surveyed think they are "above average" teachers and researchers). But why is the Government asking Australian academics to rate the journals they publish in? It's like appointing the directors of banks to monitor the banking industry. Come to think of it, that's what governments did - with the results we are all paying for.

The financial solution has been to place the worst of the bonds in a category of worthless investments to serve as a millstone around the neck of newly nationalised banks - the "special" bonds that no one wants. Of course governments will compel people to buy them with some incompetent combination of stick and carrot that ends up hurting the most vulnerable and rewarding those who created the disaster. It's easy to imagine, for example, future governments legislating that some proportion of poor people's superannuation funds must be in recycled toxic bonds now renamed "recovery bonds". In fact this has just commenced with the Royal Bank of Scotland. The debt has been nationalised, while the chief executives used the Government's rescue package to pay themselves gigantic bonuses and superannuation payouts.

In the case of the academy, the equivalent is separating the worthless research and quarantining it in departments of anti-knowledge staffed by former masters of the universe and their acolytes, endlessly giving seminars to each other until, mercifully, they retire. The most degrading element will be the bad faith of governments and universities trying to tell students that these departments are worth investing in - in effect compelling them to enrol by making higher education virtually compulsory while depriving high-school students (by starving state schools of resources) of the skills they need to do a genuine subject.

The unfortunate students who mortgage their future for these worthless qualifications will very likely be students drawn from lower socio-economic groups, not traditional investors in education, who don't have high enough marks, self-esteem or cultural savvy to get past the government and university spin. The ultimate stick is the humiliation of the dole. The carrot is the "prestige" of a university degree in anti-knowledge purchased at considerable cost. Meanwhile, departments of anti-knowledge and governments will justify offering handicap degrees to marginal students from poor backgrounds on the basis of "equity" and "social inclusion".

Who would want the job of setting up these departments? Imagine the rage of colleagues fingered as traders of toxic intellectual debt. No wonder vice-chancellors are so well paid. They are going to have to become intellectual bankruptcy administrators if they aren't already. If they follow market practices, they will hire consultants to select the wrong candidates - just as they do with senior management positions. But fortunately this may not be necessary. As with the banks, the academic market cannot hide its toxic debt for ever. Just as there is always one slave to market fashion that is always the first bank to crash in a bear market, so some departments and "theorists", despite (or perhaps because of) their current overpopularity, are bellwethers for intellectual disaster and self-determining candidates for quarantine.

There is an academic version of the "fool in the market" proverb that says every university has at least one department that is a national laughing stock, and if you don't know which one that is, you are probably in it. The same is true of humanities superstars and ideologies. Ten years ago, Gayatri Spivak was woman of the moment, but now she is a very hard sell. Everyone is wise after the event, but we need to know who is currently leading the charge into oblivion of the theory-lite brigade. The keywords are pretentious, bombastic, obscurantist, humourless, ideological. Add a complete inability to state or argue for a non-trivial factual thesis and booming popularity among those who created the last bubble, and you have the profile of a bubblemeister.

It's rude to point, but I'm very short on Giorgio Agamben: the man who tells us that life in the concentration camps was pretty "bare".

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