Live Blogging Science News: The Rosetta Mission

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When one of the world's most popular online news websites decides to cover a space science event live, you know that something big is brewing. Stuart Clark reports on how live blogging can be used for science reporting and how an idea that was triggered by his observations during the *Rosetta* flyby of the asteroid Lutetia and the landing of the *Curiosity* rover on Mars led to him live blogging two of *Rosetta*'s most memorable occasions for *The Guardian* newspaper.

Introduction

I knew the *Philae* landing would be popular but I had no idea it would be *that* popular. I was in Darmstadt, at the European Space Operations Centre (ESOC), working for *The Guardian*¹. I had expected a few hundred thousand online readers — a highly respectable number and the kind of figures that would class the story a success. Instead what I got was well over a million, and a one-day job that turned into a four-day mission to keep a fascinated public informed. The eyes of the world were on *Philae*.

I was there to live blog the event. *The Guardian's* website² was making increasing use of live blogs to provide instant, rolling coverage of fast-moving news events. Sports matches too had proved to be highly popular for the live-blog team and I had become convinced that live blogging could be made to work for a science mission.

An idea is born

My epiphany happened during the landing of NASA's *Curiosity* rover on Mars in 2012³. Like so many other people I had been glued to the NASA webstream, but the thing that opened my eyes was the social media chatter, specifically on Twitter. People from all walks of life and countries were talking about the landing and sharing their interest in space exploration. Few were experts, most were simply caught up in the moment and many had questions about what was going on. I saw immediately that a live blog that provided analysis as well as coverage could provide what these people wanted.

Rosetta was the obvious choice. I had been working as the ESA website's senior editor for space science when Rosetta had made its flyby of the asteroid, Lutetia, in 2010. I had witnessed the tension and excitement of waiting for the spacecraft to make contact with Earth and that gave me an idea.

Not that long after the flyby, *Rosetta* had been placed into hibernation for about three years. There was palpable anxiety surrounding the wake-up; not because anyone thought that corners had been cut, but simply because space is a hostile environment, which can trigger unpredictable events.

Deciding to embrace the risk of public failure — a strategy that paid off hugely for the agency — ESA organised a wake-up press event at ESOC, Darmstadt⁴; a kind of vigil to wait for the signal. This was a great way to test a science live-blog. *The Guardian* agreed to the experiment and that it could run as part of their science blog network, where I contribute the astronomy blog *Across the Universe*⁵.

Live blogging Rosetta's wake-up

I was allowed access to the ESA in-house briefings the day before the wake-up and, thanks to some very supportive staff, was made comfortable with a secure internet connection (and triple redundant options!) on the day itself.

With a live blog, the key is keeping it lively and varied. We can pull in tweets or other postings from social media; embed videos and webstreams; and also provide our own commentary. These include snatches of interviews and pictures taken on the day.

For this event, the tension of the day was a big draw. Viewers steadily ramped up during the day until there were around 50 000 readers watching and waiting for the wake-up itself. Not bad considering that *Rosetta* was a specialist mission in those days, and not the mainstream superstar it was soon to become.

From wake-up to landing

Following on from the success of live blogging the wake-up it was a no-brainer that I would live blog the landing⁶. This meant running articles, features and news in the months and weeks leading up to the event that would raise awareness. The steady stream of revelations that came out of the mission — such as the shape of the comet, the choice of landing site and the honest discussions about the difficulty of landing — all helped to engage the public, to make them root for the lander and to feel part of the mission.

On landing day itself, 12 November 2014, I was in the press centre when it opened at 6 am. There were a number of reasons for this early start. Firstly, the newspaper wanted the live blog to start as soon as possible. Secondly, there were only a limited number of tables in the press centre and I could not imagine trying to blog from a chair. Thirdly, I had arrived the day before to prepare and had watched the go/no-go decision overnight on the webstream from the hotel — being too excited to sleep — and it was obvious something was not quite right with *Philae*.

It was not long before the press were being told about the problems with the landing thruster. The beauty of the live blog was

that this could go out straight away, as a simple statement of fact, as could the news that the landing attempt was going ahead anyway⁷. I did not have to frame a full story around the news, which would have attracted an inevitable and undesirable "Philae in trouble" headline. Instead, I could just throw the news into the rolling coverage of all the other things that were taking place, as part of a positive story, rather than a negative blast of news.

Getting the news about the thruster at the stage we did was an early indicator of something that I think the agency should be extremely proud of, and which made my job, and that of the other journalists covering this event, so much easier. It was the level of contact that we had with the scientists and engineers, both during official briefings and informal ones that happened because an expert happened to be in the press room. There was a world-class level of professionalism on display in the way the experts would answer our questions honestly and openly — even when things started to move away from the plan — and in the willingness of the outreach professionals to seek out the people or information to get us the answers we needed. This kind of cooperation is essential to the success of live blogging a mission in this way.

Impact

As the day unfolded the unexpected bounce and eventual awkward landing all just added to the story. It is also true that anthropomorphising *Philae* and *Rosetta* through YouTube cartoons and their first-person Twitter feeds in the run-up to this day was masterful. It would not work for every mission, but here it was a charm (Mignone et al., 2016).

I realised the story was big when the live blog was given the most prominent spot on *The Guardian's* front page. It rapidly became the most read story on the website and stayed that way all day. Well over a million readers joined us to follow the drama — the kind of online readership usually reserved, in the UK at least, for general election coverage.

Perhaps predictably my mobile rang me to wakefulness the next morning. It was my editor wanting to do the whole thing again. In total, I ran the live blog for three days.



Figure 1. Press room on the Rosetta landing day. Credit: ESA/C. Carreau

Day two was just as busy and well-read as day one. On day three the dip started, but still it was in the top ten most-read stories on *The Guardian* that day. In all, around 3.4 million unique readers read some or all of the *Philae* coverage.

Conclusion

It was a week like no other I have experienced. I was working from 6 am until late into the evening, but I was in a very special place, somewhere that millions of readers were also wanting to be. I remember thinking at the time that I doubt that I will cover a story as big or as magical again.

Philae was an Apollo moment, and I feel privileged to have been able to share it with so many other people. It was also proof that the appetite for astronomy is out there and that live blogging can offer the public a fast-paced and responsive account for science with just as much success as for breaking news in any other field.

Acknowledgements

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Notes

- ¹ The Guardian is a British daily newspaper.
- ² The Guardian website (http://www.theguardian.com) is one of the world's most popular English-language news websites, ranking in

- the top three along with *The New York Times* and the *Daily Mail*.
- Relive the Curiosity landing: https://www. youtube.com/watch?v=LAL4F6IWC-Y
- The wake-up press event can be viewed online here: https://www.youtube.com/ watch?v=AmdZRw-0AZI and here: https:// www.youtube.com/watch?v=kxQbt7xTnE8
- 5 The Guardian's Across the Universe blog is online here: https://www.theguardian.com/ science/across-the-universe
- The first day's live blog can be found here: https://www.theguardian.com/science/ across-the-universe/live/2014/nov/12/ rosetta-comet-landing-live-blog
- The problems with the lander's thruster were posted here: https://www.theguardian.com/science/across-the-universe/live/2014/nov/12/rosetta-comet-landing-live-blog#block-54630104e4b0c6f7ffe34b4f

References

Mignone, C. et al. 2016, Communicating Astronomy with the Public, 19

Biography

Stuart Clark is a best-selling author, script-writer and widely read astronomy journalist. His working life is devoted to translating the complex world of astronomy, space research and physics into comprehensible language for the general public, whether it be via novels, radio documentaries, news reports, in-depth magazine articles or public talks. Stuart writes the Across the Universe blog in The Guardian, and is a consultant and regular contributor to New Scientist. His most recent book is The Unknown Universe: what we don't know about time and space.