## **Produsage: A Closer Look at Continuing Developments**

Axel Bruns and Jan-Hinrik Schmidt

ARC Centre of Excellence for Creative Industries and Innovation, Brisbane / Hans-Bredow-Institute for Media Research, Hamburg

a.bruns@qut.edu.au / j.schmidt@hans-bredow-institut.de

The concept of produsage developed from the realisation that new language was needed to describe the new phenomena emerging from the intersection of Web 2.0, user-generated content, and social media since the early years of the new millennium. When hundreds, thousands, maybe tens of thousands of participants utilise online platforms to collaborate in the development and continuous improvement of a wide variety of content - from software to informational resources to creative works -, and when this work takes place through a series of more or less unplanned, ad hoc, almost random cooperative encounters, then to describe these processes using terms which were developed during the industrial revolution no longer makes much sense. When – exactly because what takes place here is no longer a form of production in any conventional sense of the word - the outcomes of these massively distributed collaborations appear in the form of constantly changing, permanently mutable bodies of work which are owned at once by everyone and no-one, by the community of contributors as a whole but by none of them as individuals, then to conceptualise them as fixed and complete products in the industrial meaning of the term is missing the point. When what results from these efforts is of a quality (in both depth and breadth) that enables it to substitute for, replace, and even undermine the business model of long-established industrial products, even though precariously it relies on volunteer contributions, and when their volunteering efforts make it possible for some contributors to find semi- or fully professional employment in their field, then conventional industrial logic is put on its head.

What happens here – in the development spaces of open source software, in the sprawling knowledge bases of the *Wikipedia*, and in the many other environments examined in the articles collected in this special issue – can no longer be sensibly described as 'production', then, nor are its outcomes 'products'. Rather, the processes which we are observing here are what results if the barriers between the mere usage of existing content and the productive alteration and extension of such content are lowered to such a degree that it becomes possible for participants to switch easily and effortlessly between these two roles – allowing, ultimately, for the emergence of a hybrid role in between: that of the *produser*. And what these produsers engage in is no longer simply usage *or* production, but something else altogether: *produsage*, or "the collaborative and continuous building and extending of existing content in pursuit of further improvement" (Bruns, 2008).

New terms like produsage can act as a creative disruption to the scholarly process, enabling us to take a fresh look at emerging phenomena without carrying the burden of several centuries of definition and redefinition. They are also at risk of being misunderstood, misinterpreted, and misapplied themselves, however. Alvin Toffler's 'prosumers', for example, began their career as anything but the drivers of user-led content creation which some latter-day users of the term appear to think they are – rather, Toffler simply describes a more thoroughly integrated, on-demand industrial production process,

with the customer contributing not just the money but market and design information vital for the production process. Buyer and supplier share data, information, and knowledge. Someday, customers may also push buttons that activate remote production processes. Consumer and producer fuse into a "prosumer." (1990: 239)

Online, this rather lopsided cooperative setup may have its parallels in the most exploitative forms of crowdsourcing, where user labour and knowledge is similarly harnessed for the improvement of commercial products without acknowledgement or remuneration, but it has very little to do with the user-led collaborative

processes which our authors examine in this special issue of the *New Review of Hypermedia and Multimedia*. We still see some scholars using terms such as 'prosumer' and 'produser' interchangeably, however, or applying concepts like 'prosumption' to spaces like the *Wikipedia* – it's time, then, to define these terms more clearly, and to test these definitions in the field.

In that spirit, we define the key characteristics of produsage as follows (also see Bruns, 2008):

## • Open Participation, Communal Evaluation:

Produsage environments are open to participation by a wide and diverse community – indeed, in order to achieve their tasks they depend on both community size and diversity. Barriers to productive participation are kept low, to enable as many users as possible to make the step from user to produser; the evaluation of their contributions proceeds on a produsage basis, too – that is, the community decision-making processes which decide about what contributions are retained or dismissed are themselves also collaborative and open to almost all participants.

#### • Fluid Heterarchy, Ad Hoc Meritocracy:

The status of participants within the community of produsers derives from the quality of their contributions to the shared project. What emerges from this is neither a flat structure – despite their openness to contributors, produsage communities do have recognised leaders – nor a clear and permanent hierarchy: more junior participants do have the potential to gain status by participating in a consistently constructive fashion. The community is structured as a heterarchy, therefore: a multi-headed organisation with continuing leadership turnover.

## • Unfinished Artefacts, Continuing Process:

While the goals of a produsage project may be clearly articulated, due to the open participatory nature of the environment the process for achieving these goals is less directed. Development takes place on various fronts at once – many (often small) changes to aspects of the project are made in parallel by a diverse range of users, and gradually improve the quality. While at certain points the current collection of content may be declared to be a new and improved 'version', in reality the current state remains a temporary snapshot, and development continues indefinitely.

## • Common Property, Individual Rewards:

Effective participation by a diverse range of contributors depends on minimal hurdles to further contribution. This especially includes the maximal availability of existing content for further development – both technical barriers and legal restrictions must be minimised, therefore. The latter may involve an implicit or explicit declaration of existing content as common community property (for example through Creative Commons or similar licences). This also implies that it is difficult, if not impossible, for participants to directly extract royalties from the content they have contributed – therefore, the chief currency in produsage projects is personal status, not financial rewards.

Produsage processes which meet this definition are now evident across a wide range of activities (mainly online, but increasingly also extending to the offline world) – from citizen journalism and communal knowledge management through to collaborative artistic activities, from learner-led education models to citizen engagement in political processes. As such models establish themselves, what does an examination through the lens of the produsage framework reveal about their internal operations? How do they affect the existing institutional, industrial, social, and cultural environments within which they operate? How may they be guarded against cooptation and exploitation by corporate interests? What possible futures do they foreshadow?

The articles collected in this special issue describe a diverse range of such produsage activities, significantly advancing our understanding of the benefits and pitfalls of the produsage model as it is put into practice.

Taking a critical and programmatic perspective, *Proulx, Heaton, Choon, and Millette* situate the concept of produsage within the context of informational capitalism. Two case studies, on *Facebook* and on *TelaBotanica*, are used to develop and discuss the main argument: the produser is a "paradoxical figure", since their empowerment – e.g. to produce, remix and distribute content – is often based on infrastructure and organisational structures that are deeply centred in capitalist exploitation, e.g. by aggregating and mining personal data or by monetising user-generated content.

Described as 'open hardware', the Arduino circuit board is one fascinating example for how the principles of open source software and produsage are being translated from the online to the offline world. In their contribution to this issue, *De Paoli and Storni* approach this project using Actor-Network Theory – in particular to examine the distribution and circulation of software and hardware skills across and within the Arduino community – and highlight the importance of sociotechnical networks as enabling such circulation. By extending into the offline sphere, Arduino points us to the question of what happens when the collaborative ideals of produsage encounter physical challenges of skills with and access to tangible tools and materials.

Beyond the well-researched examples of the Wikipedia or the Free/Libre Open Source Software (FLOSS) there exist various other projects and communities where practices of produsage can be examined. *Lin* focusses on the *OpenStreetMap* project and employs a qualitative approach to identify the specific ways in which boundary objects (such as the Map itself) and actors with different social and cultural backgrounds collaborate to produse not only geographical data and knowledge, but also social meaning and community.

In addition to the study of existing produsage projects and communities, the question of how new produsage platforms can be established to attract participants to specific projects is also of significant interest, of course. In their article, *Geisler*, *Willard*, *and Ovalle* outline a framework which aims to utilise produsage-inspired crowdsourcing processes to coordinate the collaborative indexing of film and television content – a challenge which exists in similar form in many other contexts where the sheer volume of information to be processed is beyond the capacity of any one team of staff, however dedicated they may be; NASA's celebrated Clickworkers project for the crowdsourced pinpointing of as yet unnamed craters on Mars is just one example from recent years.

One area where produsage becomes especially disruptive is the field of journalism and news production; lowering the barriers for contributing to public debate has impacts on various levels of social and political action. In his paper, *Picone* is reporting findings from a semi-experimental digital ethnography conducted to understand practices of news use. By focussing on users and their skills, knowledge, attitudes and situational factors, our understanding of the individual produser is furthered.

In learning contexts, concepts and key characteristics of produsage can also be made fruitful. In her contribution, *Kazmer* argues that the shift from teacher-led learning to learner-led knowledge building opens up new possibilities for pedagogical approaches. It also requires us, however, to adapt and build course materials, assignments, supporting technology, instructions given and the broader learning culture accordingly. By analysing her own experiences in a combined synchronous and asynchronous e-learning course, the paper gives valuable insights into the challenges for learning in the 21<sup>st</sup> century.

While there is a strong body of research on the appropriation or domestication of technological artefacts into everyday routines, relatively little is known about users' expectations and scenarios for a technology before it is introduced to the market. In his contribution, *Skågeby* analyses the conversations that were held in online discussion for aabout the Apple iPad ahead of its actual launch. He is suggesting the term pre-produsage – conceived of as a form of predicted or expected use – to account for the process of engaging with a product yet virtual.

From the study of established produsage environments to the extension of produsage approaches into new fields, these papers indicate how pervasive the logic of produsage has become. Nonetheless, like the artefacts of collaborative produsage projects themselves, these papers necessarily remain momentary snapshots of an ongoing development: how much further this phenomenon may develop remains to be seen. We're looking forward to finding out.

# References

Bruns, Axel. (2008) *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang.

Toffler, Alvin. (1990) *Powershift: Knowledge, Wealth, and Violence at the Edge of the 21st Century*. New York: Bantam.