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When cultural content and information technology converge (1)

Guy Berger, Professor and Head of Department of Journalism and Media Studies, Rhodes University

Introduction

Does information technology drive content creation, or vice versa? Can we expect more cultural content to be developed because of new technologies, or will more technologies be developed and adopted because of new content? Which is the engine for growth of the other?

And what exactly do we mean by "content"? Thanks to technology, is all cultural production nowadays to be homogenised under this bland term – a term that conceals more than it reveals? Are museum display producers, radio dramatists, newspaper journalists and website designers all to become "content-producers" in an over-commercialised "culture industry" who function to turn our souls into sales? How about our country's writers, poets and painters? A church choir, an *imbongi*, a troupe of gumboot dancers, 'n boereorkes?

Where do we South Africans – in the age of Information and the projected African Renaissance – fit into global culture? What's the role of regulation and of social values? How does cultural production relate to democracy and development? Who gets access to creating and consuming our culture both at home and abroad? Where does South Africa's complex and changing culture end … and Americanised culture begin? Is Americanisation, in fact, such a bad thing? And last, but not least: who pays, who takes the profits and how is production organised?

These underlying questions inform the remarks by the panelists deliberating about Content and Culture at the Link Centre's ICT 2000 conference in Johannesburg, August 2000. The insights analysed below are from panellists Mandla Langa, Nicola Galombik, Stephen Sack, Nkopane Maphiri and Seipati Hopa.

As with most questions, the ones raised above are not either/or matters. The participants at the ICT 2000 panel introduced a range of angles, thereby demonstrating the value of diverse voices in probing the breadth and complexity of the interface of cultural content and information technology.

LINK Centre's ITC 2000 conference: panelists' views

For Mandla Langa, chairperson of the Independent Communications Authority of South Africa (Icasa), the new technologies greatly expand the possibilities for South African cultural production. The licensing body over which he presides has seen this vividly demonstrated in broadcasting: here, cheaper digital technology has significantly lowered the threshold for entry into the radio business. The result has been almost 100 new stations that have been able to take advantage of the opening up of the airwaves, in the five years since the first licences were issued in 1995. Not surprisingly, therefore, Langa sees the digital age as an opportunity to fulfil cultural roles even more than previously.

There is no doubt that new technology can and does stimulate cultural production. In the 1980s, South Africa's vibrant alternative press was able to launch and survive on the basis of desktop publishing technology, which – unlike the behemoth-style typesetting systems and large staffing requirements of

established newspapers – was within their financial reach. Today, the WWW publishing possibilities have enabled countless South African cultural workers to get their content online as part of one site or another.

Content as technology driver

But content also drives technology. This emphasis is stressed by educational broadcaster Nicola Galombik for whom "content is and always will be king." Concentrating on distribution technologies, she highlights that growth is powered by the successful application of content. It is a question of survival in an increasingly competitive context: cultural producers nowadays can – and must – push content out to new devices that are accessed in contexts that are different to old media such as print and broadcast.

Deeply involved in the educational broadcasts of the public broadcaster, Galombik explains how the SABC has used multiple publishing platforms for its programme "Take 5". In particular, the core television programme has an Internet component with interactive services via e-mail, thereby using new media to lever the impact on audiences. Through multi-platform output, the SABC aims to attract more people to spend more time with its messages, because these are now available via a range of complementary distribution channels. Galombik believes that South African cultural workers at large need new thinking about how to plan their content to be multi-purposed across a range of additional platforms.

These remarks throw up a challenge, however. This is whether content can be – in the jargon – "platform-agnostic". To date, most cultural output has tended to be made for one primary or core medium – like a magazine, a live performance, or a television broadcast. It is sometimes then re-purposed for secondary outlets like a website or a DVD. New technologies like extensible mark-up language (XML), however, make possible a level of "meta"-platform content creation. Databased content can be tagged and coded to be automatically spewed out for multiple platforms. No single platform is privileged – instead the format can be dynamically shaped along template-lines that provide suitable shape whether for publishing material on print, the web, cellphones, pagers or pdas, etc.

The debate here is whether quality can be sustained when – thanks to automation – there is no need for human customisation of content to take into account the unique character of each specific medium. It can be argued that it is precisely the *pre*-purposing for a particular platform that creates content that truly plays to the strengths of that medium. For example, footage shot for television does not translate well when automated to go on a website. This is because the latter's smaller picture and technical need for a minimum number of differing pixels to be compressed in the interests of fast download. Likewise, a clever headline that works well for a full text story can be weak, or even meaningless, when sent alone by a computer direct to a cellphone. The question, therefore, is how to use technology to maximise the distribution of cultural content at minimum cost, without compromising the quality of the communication.

Such conundrums aside, it is clear that both Langa and Galombik are correct: the relationship between cultural development and technology development is a dialectical one. If content is indeed "king", then technology is surely "queen". Technology makes possible an increase in cultural output, and in turn cultural workers drive technology to get their output circulated through as many means as possible. This interactive combo in the current period of South African history draws unique benefit from its occurrence at a time when the escalation of technological development coincides with massive and creative change and experimentation in shaping post-apartheid culture.

One cameo of this is the flourishing in South Africa of cellular telephony uses.

Such mobile interactive communication serves as a platform that promises to further supercharge the culture-technology relationship in this country. The more that cultural functionality is offered through this communication device, the more the technology will be adopted and used, and in turn the greater the opportunities will emerge for cultural producers to utilise the platform. SMS messaging already enables news to be sent cheaply to cellular phones. In years to come, there will be a proliferation of musical output and even audio novellas being shared via cellphones. These will also serve as Sony Walkman-style gadgets drawing down Internet-delivered content rather than spinning cassette tapes. In turn, it is likely that these devices, through the use of either cellphone, Bluetooth or microwave frequencies, will even be able to play out their content through other devices – like home or shop stereo sets.

Conversion of new media to old

If Galombik's approach is to stress the huge potential in using new technology to re-purpose content from old media to new, a hint of the potential of converting *new media* to *old media* is given by Nkopane Maphiri of the National Community Radio Forum. He speaks of using new communications technologies to share programmes, and of linking community radio stations to the World Wide Web and e-mail. Adjacent to Nkopane's community radio sector, this is already happening.

The SABC, for example, takes a purely web-based audio programme off the website of the US-based Freedom Forum, and re-broadcasts this every Sunday morning on its Media@SAFM programme. The technology format MP3 is usually associated with peer-to-peer music exchange by individuals, as with the US-based Napster service. But in the SABC-Freedom Forum case, it is this same technology, which makes possible new media being re-purposed for old media. New media, of course, does not render old media redundant. As in this instance, the new technologies can vastly enrich the old. In a country like South Africa in fact, old media like radio is very well-positioned to be at the interface across the digital divide –assembling content that can be re-purposed for new media platforms like the WWW on the one hand; and taking from the extensive text, audio and video resources available on the new media to add to and enhance content output in conventional radio broadcast transmission.

Unique communication: integration of old and new technologies

A different angle on the culture-technology interface comes from Stephen Sack of the Department of Arts, Culture, Science and Technology. Seeking to directly integrate old and new technologies into a wholly new kind of communication experience is the strategy adopted by the Department in 2000, to develop a monument to commemorate the women who marched against the Pass Laws on August 9, 1956. The monument uses technologies to present not multiple media, but rather *integrated multimedia*. Here the sum of the different elements is greater than the parts: video, audio, graphic, text, artifact and context are devised to work together to produce an impactful, meaningful whole. Multi-media is relevant not just in the publishing or distribution moment, but also in production. According to Sack, the artists involved in the monument's production were able to use computers to prepare the multi-media design, including rendering 3D perspectives. The installation itself included not just hi-tech representation, but also artifacts of traditional technology with high symbolic value – in particular African technologies for grinding maize. His Department, says Sack, aims to reflect South Africa as a hi-tech country that cares about its culture, traditions, indigenous heritage, and the challenge is therefore to engage new technologies while resuscitating old technologies.

What Sacks's remarks demonstrate are the potential gains from fusing technologies with culture. In this, the exciting area of interactivity remains to be fully explored. Whether it is interactivity by the audience with the content, with each other via the content, or with the producers and publishers through the content, the limit is only our creativity. From a development communication point of view, the potential of new media – especially multi-media – to provide a supremely rich communication experience should

not be underestimated. It is through such communicative interaction, which activates audiences (as opposed to one-way messaging that inevitably turns people into passive consumers of information), that development information can become truly dialogic and powerful. Ultimately, it is a combination of vertical, horizontal and interactive communications that makes information relevant, converts it into useful knowledge and creates a bank of cultural wisdom.

Exploring quality within cultural diversity

If the exploitation of information and communications technology means that content is careering ahead, it is relevant to ask questions about its cultural character. For Mandla Langa, the challenges of diversity must be addressed if South Africa as a whole is to strengthen its cultural creativity. Within this, he adds, the quality question must be explored. As a prominent author and playwright, Langa is all too aware of these issues. The important issues here are quality for whom, and thence what standards are used. In turn, this begs the question of what resources are available for the training and the time for cultural producers to achieve excellence.

For Langa's fellow panelist, film maker Seipati Hopa, the issues include quality but also – and critically – what values are being presented. She urges cultural workers to seek a national consensus on the values they subscribe to. This impacts, she believes, on the issue of their identity and language use. Her concerns are echoed by Nkopane Maphiri who highlights how much Internet content is largely in English. This is a factor that can alienate rather than attract new audiences.

All these comments are made against a backdrop of South Africa's racial and cultural divisions and their contrast to an evolving situation that celebrates diversity and hybrid practices that are not tied to race. It is a context that comes from our history of cultural marginalisation, exploitation and Eurocentrism, now in transition to a more equal exchange, interchange and African-centric practice. Fascinating questions lie ahead here. Just as South African history shows that rugby shifted from an English sport to support from Afrikaners and eastern Cape Africans, so we may yet see Kwaito moving from the townships to the tastes of White youth in general. In these kind of changes, technologies of production, distribution and play are critical.

The concerns of Langa, Hopa and Maphiri are also underlined by the huge cultural challenges of addressing AIDS, and the related matter of women's oppression. By implication, even if South Africa's cultural workers become "content producers", this process should not swamp cultural diversity under a swathe of English-language content. Nor should it ignore the need to include some common standards of quality and values of social commitment. All this is not even to touch on the overall role of culture in combating intolerance, crime and corruption, and in building a culture of education, job creation, democracy and development in South Africa and the continent more broadly. Bedazzling technological innovation should not blind us to these critical considerations. In a sense, what Langa, Hopa and Maphiri raise, is the matter of culture's role in the creation of community. The question posed is what kinds of progeny are produced by the increasing numbers of marriages between content and new technology.

Role of culture in creation of community

Worldwide, information technologies globalise localities as never before, usually rendering them as net importers rather than exporters of culture. As representative of the South African public interest in licensing broadcasters, Mandla Langa notes the local content quotas required of radio and television stations, adding that this system is to be reviewed. Seipati Hopa, as representative of the Independent Producers' Organisation, is especially keen that regulation should work to create an enabling environment for local content to succeed. Their positions reflect the challenges posed to local content

with the rise of satellite broadcasting, and increasing cross-national productions (such as foreign films being made in Cape Town). There are also increasing local imitations of US culture (like versions or Kwaito or soapies like Generations), and there are problems with the quality and expense of local content production. The complex question that needs to be addressed in all this is the character of this content – whether it is mainly White or elite content, whether it is distinctly South African, the extent to which it is more broadly African, where it syncretises with American forms, etc. And, as Hopa raises, what values it embodies and espouses.

South Africa is already infamous for racist xenophobia towards other African countries, at the same time as the country continues to embrace American mass culture. The USA's White-centric and consumerist cultural models do not do much to help combat this particular problem – nor many of the other challenges facing our country. Yet, in some areas, it is arguable that the American projection of individualism, and especially of women in assertive roles, is not entirely a bad thing. Certainly these representations could help explain why this culture strikes a chord with South African audiences. With more and more US culture available, there is increased relevance in the sentiments of Mahatma Ghandi who once explained that he wanted to live in a house that was neither shuttered against all fresh breezes nor lacking some protection against mighty gales that could rip right through it. South African cultural workers have a major stake in the kind of house we construct in this country and in how we use the technologies available to do so.

Globalisation and cultural content

The lack of local access to technology, however, is the Achilles heel of the potential of new technology, in the outlook of Nkopane Maphiri. Worldwide, new information technology is exacerbating social, educational and income gaps, and South Africa is no exception to this. For Maphiri, culture is the foundation of a knowledge-based society, and without mass access, South African content will be dominated by foreign content, and our knowledge base will be proportionately impoverished. The global village, too, will not then include an African village. Accordingly, Maphiri's call is to promote the participation of historically disadvantaged communities in all media, building alphabetic and technological literacy, and assisting ordinary people to develop South African content.

How the local plays in the global is a key issue in the twenty-first century. Stephen Sack takes note that South African Government strategy is export-driven, the logic being that the country needs to find markets bigger than its own. The solution, he argues, is that cultural workers need to think both globally and locally. He stresses what South Africa's cultural richness has to offer the world. Sack's remarks reinforce the view that critically questions the conventional mantra of "Information Rich countries vs Information Poor countries". While the international digital divide is certainly a huge and growing reality, the "Information Rich" countries are actually quite "information poor" when it comes to knowing about everyone else. Likewise, the so-called "Information Poor" have a huge wealth of riches: the challenge is to develop and realise these.

It is relevant to this perspective that Sack correctly calls for new technologies to be brought to South Africans who do not currently have access to them. The outcome would be more content being created and distributed for potential audiences outside our borders. From Galombik comes the reminder that cultural content, typically, only succeeds internationally after it has met with acclaim at home. Widening South Africa's domestic market of cultural consumers and producers then, is an essential part of the process of playing in the international arena.

This is not to suggest that the issue of access has no relevance in its own right. As Mandla Langa remarks in regard to broadcasting, it is because this medium uses scarce public resources (i.e. the airwaves), that it should benefit all. One can go even further, and argue that particularly because of

South Africa's iniquitous past, the deployment of information technology in general should be of benefit to the broader society wherever possible. There are lots of possibilities here regarding the sharing of technology between institutions, or between institutions and communities such as during university or technikon holidays, or in businesses at night, etc. There is also great potential for support for small and micro-businesses using new information and communication technologies as their core operation, or in support of their major activities.

Financial considerations of fusion

Who pays for cultural production and for access to technology is a critical theme lurking beneath all the issues discussed above. Not every marriage entails *lobola*, but either way, every wedding still costs something. Certainly, cash is needed for every union of content and technology. Maphiri urges partnerships between government, the private sector and communities to ensure that information technologies do not remain an elite service. Mandla Langa suggests a closer look at "pay-to-play" principles, to see how these impact on the public interest, and how they relate to issues like community access. With technological developments, systems of pay-per-byte and pay-per-minute, will also need to be looked at. Could the "pay-as-you-go" model for cellular telephony be extended into other areas of cultural technology?

Nicola Galombik warns that the rise of new media means the growth of an environment that entails fragmenting "the audience". This makes it difficult to reach massive audiences, and raises difficulties in deriving the revenue required to produce content. She stresses that it is becoming important to develop brands for cultural products, and to market these to audiences. At the same time, she notes, the new technology does mean that cultural workers can utilise new cost-effective production techniques. Balancing all these are critical matters for the growth of a viable "culture industry".

The search for a workable "revenue model" to go with the new technologies is not something unique to South Africa. In the heart of information technology, the US, the public is loathe to pay for online cultural content. In fact, the same public would probably also be reluctant to pay – if they were required to – the full costs of cultural content in other platforms like print and broadcast. Their consumption is made possible because the consumer price for these products is heavily subsidised by adverts. The question is whether advertising will spread to include the online world, but many analysts believe – that despite market gloom – this will happen as more and more people make use of this platform. But the US has a huge market – is there enough advertising in poorer countries?

Conclusion

Who then will subsidise content in South Africa? What cultural production can be viable in the (global) marketplace, what needs to be nurtured (and by whom?) to reach that point, and what merits continuous support? How much can new technology cut costs and increase access for cultural producers, and how much can it open new markets for their work? Another consideration here is the extent to which cash and commerce can "corrupt" cultural production. This danger is where content becomes a parody – a commodity that leaves its context behind and is put up for global sale, or where it is contrived and convoluted especially to sell other commodities. The content-tech marriage can easily sour into a situation where integrity has a price, and where ethics are no longer in evidence.

Finally, to the extent that technology helps put culture onto an industrial footing, the question arises as to who owns this industry. This affects not just the important matter of the spread of rewards. It also poses the issue of skill sets – where we get the production and managerial skills to exploit new technologies for cultural development. Related to this is another item on the agenda: defining the most appropriate structure for the industry. Do we need mega-corporations (like the Hollywood Studios of

old) to stand up to international competition, or should there rather be networks of independent producers and small, flexible and specialist companies? These matters have important policy implications for actors like the Government, especially in relation to its programmes for tourism and small business development. Our cultural-technological development, both at the start and the end of the day, occurs within a wider political economy.

These are all matters that are not easily answered. But the ICT 2000 panel showed that some of the leading exponents among South Africa's cultural workers are very much aware of the challenges. Complementing their insights are also their actions. And no doubt each of them uses culture and technology precisely to meet the tough – but exciting – challenges about culture and technology.

Endnotes:

1. This briefing paper reviews the Content and Culture session at the ICT 2000 Conference held at the LINK Centre in Johannesburg.
