My article builds on more than 25 years of research and engagement with indigenous media makers, encompassed in a book in progress entitled *Mediating culture: indigenous media in a digital age*. In this work, I cover a wide range of projects from the earliest epistemological challenges posed by video experiments in remote Central Australia in the 1980s (Ginsburg, 1991) (Michaels, 1986) to the emergence of indigenous filmmaking as an intervention into both the Australian national imaginary and the idea of world cinema (Ginsburg, 2010) (Collins & Davis, 2005). I also address the political activism that led to the creation of four national indigenous television stations in the early 21st century: Aboriginal People’s Television Network in Canada; National Indigenous Television in Australia; Maori TV in New Zealand; and Taiwan Indigenous Television in Taiwan) (Ginsburg, 2011); and consider the questions of what the digital age might mean for indigenous people worldwide employing great technological as well as political creativity (Ginsburg, 2008).

I draw on this knowledge to provide a broad context for discussing contemporary indigenous media in multiple locations, and to consider what connects and distinguishes these projects both concretely and theoretically. What kinds of opportunities and obstacles emerge from the shift to the digital for indigenous media makers in many different locations and across generations? The uptake of media technologies by indigenous producers – from the old analog format of U-Matic widely used in the 1980s,² to contemporary digital
social media platforms such as YouTube and mobile phones – has often been motivated, at least initially, by a desire to “talk back” to structures of power that have erased or distorted indigenous interests and realities, and denied them access to dominant media outlets. Many of the works and projects that have been produced might best be understood as forms of “cultural activism,” a term that underscores the intertwined sense of both political agency and cultural intervention that people bring to these efforts to sustain and transform cultural practices in aboriginal communities. These are activities linked to indigenous efforts to assert their rights to self-representation, governance, and cultural autonomy after centuries of assimilationist policies by surrounding states, part of a spectrum of practices of self-conscious mediation and cultural mobilization more generally that began to take on particular shape and velocity in the late 20th century. Even as indigenous media have evolved in sophistication and reach in many parts of the world, these central motivations continue to drive much of the work, whether created by people living in remote communities or those in urban centers. While cultural, linguistic and historical circumstances certainly differ, similar circumstances wrought by colonial histories are faced by indigenous communities everywhere and these frequently motivate their uptake of media. Additionally, it is important to keep in mind the possibilities and constraints of the political economy and material conditions that shape contemporary digital media, especially given the lack of digital infrastructure in many remote areas.

In this article, I want to focus on some of the key issues facing indigenous media makers, including the expense and sustainability of media and the constant search for funding; the lack of digital infrastructure and its constant obsolescence; and issues of archiving and access according to the demands of both preservation and cultural protocols.

From the vantage point of the second decade of the 21st century, it is hard to imagine that, just a little over two decades ago, some scholars were assuming that the uptake of media in indigenous communities would be the death knell for “authentic cultural practices,” despite considerable evidence to the contrary (Weiner, 1997). The broader question this raised – what in 1991 I called the Faustian contract – as to whether indigenous peoples (or indeed, minority or dominated subjects anywhere) can assimilate dominant media into their own cultural and political concerns or are inevitably compromised by their presence, haunted much of the research and debate on indigenous media at that time (Ginsburg, 1991). Happily, the uptake of media in indigenous communities has gone well.

Before exploring particular cases, I would like to provide a brief overview of the current state of things and introduce some key concepts. Indigenous media work has become a particularly robust form of contemporary cultural production, expressive of longstanding concerns shared by indigenous
people across the planet to gain control over their representations. I think of this as media sovereignty, a term I introduce to describe practices through which people exercise the right and develop the capacity to control their own images and words, including how these circulate. Here, I draw on a classic legal definition of sovereignty as the possession of authority over an area, extending this more typical idea of political authority over a land and populace to the possession of technical, cultural, political and creative control over media produced by indigenous peoples and about their lives. This approach dialogues with the discourses of native North American intellectuals emergent since the mid-20th century. I build on the idea of ‘visual sovereignty,’ initially deployed in 1995 by Tuscarora scholar, artist and curator Jolene Rickard (Rickard, 2011), to characterize the interventions of indigenous artists in the North American context that amplify in another register the legal-political assertion of sovereignty as a complex, expressive indigenous visual imaginary. More recently, Seneca scholar Michelle Raheja expanded on the term and its genealogy, elaborating on its connotations and furthering its recognition in her important 2011 book, Reservation realism: redfacing, visual sovereignty, and representations of native Americans in film (Raheja, 2013). In this work she shows how “video-makers and cultural artists are [...] interrogating the powers of the state, providing nuanced and complex forms of self-representation, imagining a futurity that militates against the figure of the vanishing Indian, and engaging in visual sovereignty on virtual reservations of their own creation” (2013: 240). Raheja acknowledges a genealogy that includes the influence of Tewa/Dine (Santa Clara Pueblo) writer and filmmaker Beverly Singer’s notion of ‘cultural sovereignty,’ which she uses to describe Native American filmmakers’ strategies that rely on trust “in the older ways and adapting them to our lives in the present,” an idea developed in her 2001 book, Wiping the warpaint off the lens (Singer, 2001: 5).

From small-scale video and local radio to digital projects, archival websites, and mobile phone films, to national indigenous television stations and feature films, indigenous media makers have found opportunities for all kinds of cultural creativity, increasingly on their own terms. Some are directly engaged with political actions; more frequently, the projects are forms of cultural activism. They often support the maintenance or even revival of ritual practices and local languages, as well as historical knowledge, while building forms of cultural expression that frequently serve to repair fraying inter-generational relationships, bringing much needed sources of productive activity and at times income into communities that habitually suffer from poverty, anomie and political disenfranchisement. I wish to give you a sense of the remarkable range of work, using a wide variety of technologies and involving many different community or institutional bases, that is encompassed by the term ‘indigenous media.’
— small-format local productions, originally produced in analog video, beginning in the 1980s, and now on digital formats;
— the creation of local and regional television over the last two decades, facilitated initially by the launch of communication satellites over remote areas, as with CAAMA radio and video in Central Australia and Inuit Broadcasting in Canada; and now by digital possibilities, as inaugurated in 2009 with Isuma TV in Nunavut, Canada, by Igloolik Isuma.
— the emergence of the aforementioned indigenously-run national television stations since 1999 with the debut of the:
  – Aboriginal People’s Television Network in Canada (1999)
  – Maori TV in New Zealand/Aoteoroa (2003) (and a second channel for Maori speakers in 2007)
  – Taiwan Indigenous Television (2005)
  – National Indigenous Television (NITV) in Australia (2007). Together these stations have formed the World Indigenous Broadcasting Network. 3
— the production of – by now – over 100 indigenously directed feature films worldwide has contributed to indigenous film taking its place as a form of world cinema on the global stage, including circulation through prestigious mainstream venues, such as Cannes, the Toronto International Film Festival and the Sundance Film Festival, which showcase films and in some cases support their development. A number of works have picked up major prizes, which function as important forms of cultural capital that can be turned into resources supporting the continuation of their work. Feature films are also part of a lively circuit of indigenous film festivals worldwide. Two key organizations that serve as showcases and important transnational meeting grounds for indigenous peoples are imagineNative in Canada, and the Latin American CLACPI: Coordinadora Latinoamericano de Cine y Comunicación de los Pueblos Indígenas.

These and other projects raise important questions, bringing us back to some of the basic issues about representation and the materiality of different platforms, including concerns about the increasing stratification of broadband access, as well as media practices that are dependent on literacy-based corporately-designed computer interfaces. As an example of a creative workaround, Isuma TV and its latest retooling, the Nunavut Independent TV Network (NITV), exploits the possibilities of the digital for providing alternative ways of circulating indigenous media around the world among communities whose very remoteness has made such access difficult via conventional means of distribution – a project they call Digital Indigenous Democracy. 4

Finally, indigenous archives based on decades of community work, as well as the return and repatriation of ethnographic and other kinds of films
and photographs made in earlier, often colonial/settler eras, have become an increasingly important and exciting social practice enhanced by mindful use of digital technologies. These are often created through deeply collaborative creative partnerships with technically skilled non-indigenous fellow travelers, as they together imagine and invent new ways to build in cultural protocols, such as restrictions on viewing images of people who have died. Non-alphabetic language uses are also being imagined, as in the groundbreaking work of the Ara Irititja project in Australia. In the next section, I focus on the question of archives, and the sense of crisis and creativity shaping some contemporary projects that have been addressing the need to sustain and preserve this work for the communities that made them, a crucial aspect of media sovereignty that, in my view, has been insufficiently addressed.

ARCHIVAL EXPOSURE

For many ‘legacy’ indigenous media organizations, such as the Kayapo Video Project catalyzed by Terry Turner (2006), questions of sustainability loom large, given the difficulties posed by scarce labor and resources, along with the ravages of tropical, desert or Arctic environments. This situation is made even more complex by the shift to digital platforms as the hyper-capitalist imperatives of planned obsolescence that shape contemporary computer technologies render certain kinds of formats and software outdated over shorter and shorter periods of time, meaning that the costs of purchasing newer versions are constantly looming. This is something we have all experienced when attempting (or being required to install) so-called upgrades to operating systems, only to discover, to our frustration, that the programs we have been using for years can no longer function, an experience that the industry calls “lack of backward compatibility.” While this poses some awkward problems for those of us in first-world academic settings with ready access to technological support and funding, the consequences of the shift to digital infrastructures in remote areas of the indigenous world can be far more troubling, although such challenges are often met with considerable creativity.

Consider the consequences of the constant change in digital platforms for the sustainability of valuable indigenous media collections from Latin America and elsewhere, some of which now extend back over more than two decades. The question of archiving a rich array of cherished material looms large everywhere. Projects such as the Indigenous Latin American Digital Media Archive, proposed by Erica Wortham (2013), comprise important efforts to respond to this crisis. Such work calls attention to the need to look after this material, and shows the connective circuits that have been built up over two decades, as supportive partnerships are created with groups across the globe, from Isuma TV in the Arctic, to the indigenous Australian platform Mukurtu, a free, mobile and open source project originally developed with indigenous
communities in central Australia to manage and share digital cultural heritage in culturally and ethically relevant ways, fostering relationships of respect and trust.\(^7\)

Even the National Museum of the American Indian’s Film and Video Center, one of the most visible and robust institutions supporting and showcasing indigenous media from across the Americas for over 30 years, has not been immune to budget cuts, threatening the preservation of the valuable indigenous media gathered from across the Americas. Their extraordinary collection reflects 30 years of works shown at programs, showcases, conferences and festivals held at the NMAI. This work is now in considerable jeopardy due to cuts in federal funding for all national cultural institutions, forcing the museum to make Solomonic choices between the preservation of traditional objects and the legacy of indigenous film and video holdings. Fortunately, NYU’s longstanding alliance with the museum’s film and video center provided a potential solution. When NMAI Film and Video Center Director Elizabeth Weatherford called me, despondent over the pending fate of their media collection, we held an emergency meeting with a range of expert allies to alert them to the gravity of the problem. This group included our library’s Collection Development staff, people dedicated to the expansive growth of licensed electronic resources and the rescue of valuable collections at risk. We are moving forward with them on a plan to care for this collection through the support of a Mellon Foundation grant, and are currently writing to acquire this material in trust with the museum. While this circumstance arose from a crisis precipitated by national austerity measures, it also offers us the opportunity, in the age of YouTube, to upgrade materials to contemporary formats that were first recorded on older ones such as 16mm, VHS or the even older U-Matic, once the state of the art analog electronic format until the 1990s.

Such a relocation of materials to a new site necessitates more than technological transfers. If we are to respect the framework of media sovereignty, we will need to rekindle social relations with the many media makers and their communities represented in the NMAI collection, from Igloolik Isuma in the Arctic to the work of Mapuche filmmakers such as Jeanette Paillan from southern Chile, in order to renew and extend permissions to hold their work in a new location and, if appropriate, make it available as a study collection. We also are working with faculty to develop creative solutions to the dilemmas faced by digital archives, including possibilities for traditional knowledge licenses and labels as alternatives to copyright controls developed for corporate purposes, in particular the Local Contexts project.\(^8\) These kinds of projects offer opportunities that need to be kept in mind – especially by those of us able to act as allies in mobilizing the resources available in our institutions when our indigenous colleagues outside the academy face challenges. Renewing permissions and relationships, and making a wide range of indigenous
media work available for source communities, teaching and research are important outcomes, and also demonstrate how those of us working in universities can use the resources we have available to support indigenous media makers in the digital age, not only by showcasing work but also by providing the financial and infrastructural support that can help preserve indigenous media archives for future generations.

Let me offer another example of creative solutions to indigenous media archiving. Ara Irititja – which translates from the Pitjantjatjara language as “stories from long ago” – was created by indigenous producers from the Ngaanyatjarra, Pitjantjara and Yankunytjatjara peoples of central Australia, known collectively as Anangu, along with their non-indigenous supporters (Srinivasan et al., 2010). Inaugurated in 1994, the project has been dedicated to repatriating ‘lost’ material – artifacts, photographs, film footage and sound records – shot and recorded by visitors to these lands, including missionaries, school teachers, anthropologists and government workers, and then taken away. Despite being potentially of huge value to Anangu, most of these items had been removed and placed in the archives of public institutions, in family photo albums or old suitcases and boxes, stored in closets and under beds. Now, more than two decades after its founding, Ara Irititja staff members have tracked down hundreds of thousands of films and photos. Due to the harsh environmental conditions of desert life, fragile materials cannot be physically held in remote settlements but are carefully maintained by supporters in the South Australia Museum. However, they are all digitally returned using a purpose-built knowledge management system. As their website explains:

Anangu are passionate about protecting their [recently discovered] archival past, accessing it today and securing it for tomorrow. Anangu have managed complex cultural information systems for thousands of years, restricting access to some knowledge on the basis of seniority and gender, priorities that have been built into their cultural lives for millennia, and that now shape the design of their digital archive. In the past, Anangu were photographed and their knowledge recorded and published without any negotiation. Today, Anangu are careful to determine how their history and culture are presented to the world-wide audience.

The interface was designed to be easy to use by people who might not be literate in English as a first language, using large icons familiar to communities, minimizing difficulties for populations with high rates of eye problems and little familiarity with computer tools. The software was adapted to restrict access to sensitive materials, such as images of recently deceased people (since these tend to cause distress to Anangu). Additionally, separate databases were created to protect the privacy concerns surrounding both men’s and women’s materials. These functions facilitated the development of multivocal, Anangu-centered histories and resulted in a software program with a unique set of attributes from the outset. Since 2012, a convergence of cir-
cumstances has revolutionized the project’s potential: adequate infrastructure for high-speed connections has reached many communities on their lands; young people have grown up using the internet as a communications tool; and the Ara Irititja team received funding to develop new software to be shared on a network. The new, browser-based, cross-platform, multimedia knowledge management system was launched in 2010, incorporating all of the functions of the old software and adding many new features. These include individual profiles for every person, plant, animal, thing, place and collection in the archive, expanding the original Ara Irititja software into a comprehensive tool for preserving and reproducing traditional cultural knowledge. The program is now accessible only to people who can login with individual passwords, which makes information input and editing much more accountable and archivally rigorous. Finally, the new system is delivered using the web but via a private intranet adhering to strict Anangu privacy imperatives. In response to the fundamental question ‘How long will Ara Irititja last?’ the website has a compelling statement that, I suspect, applies to many indigenous communities, although the optimism about the promise of technologies for preservation must be taken with a grain of salt.

From the late 20th century, Anangu have become overwhelmed by cultural globalization through national and international media. This has caused widespread concern among the elders about the transmission of culture and language under contemporary conditions. In 2014, this issue is critical. Elders who carry the culture are ageing and many are in failing health. When they are gone, the knowledge dies with them. Ara Irititja’s management system provides a means for this knowledge to be passed on through the use of contemporary technology and can provide this forever.

Let me turn to a third case in which early analog indigenous media projects made for the first experiments in producing Australian Aboriginal television are now being repurposed and made newly accessible on the digital platform of the Australian National Indigenous Television (NITV) network, the fourth such station in the world to be created as a national indigenous broadcaster. NITV began in 2007 in the town of Alice Springs in Central Australia. At that time, there was barely two hours a week of dedicated Aboriginal programming being broadcast across the nation when it began “beaming across the bush” as a channel made by, for and about Aboriginal people, with a staff of 25. It was the culmination of a quarter century of campaigning on the part of indigenous Australians for the right to have their languages, cultures and concerns reflected within the nation’s mediascape, building on the work that began in the late 1980s with groups that I initially studied in Central Australia such as Warlpiri Media, Ernabella Video and Television, and Central Australian Aboriginal Media Association (CAAMA). In 2012, NITV moved from Central Australia to Sydney, and was incorporated into SBS, the second of Australia’s public service broadcasters, making it a free-to-air channel.
Two years ago, to supplement their popular indigenous sports and news programming, and the broadcasting of indigenous films, NITV acquired over 180 episodes of a series called Nganampa Anwernekenhe (or ‘ours’ in the Pitjantjatjara and Arrernte languages) that began over 20 years ago as half-hour video oral histories with mostly older, traditional indigenous Australians living in remote areas of Central Australia. These short films were a staple of Alice Springs-based CAAMA’s broadcasting in the 1990s, made by younger Aboriginal Australians from the region, often relatives of the elders they filmed, many of whom have gone on to become some of Australia’s most prominent indigenous filmmakers, including Rachel Perkins, Warwick Thornton, Beck Cole, and others. The original series was, for many years, the only Aboriginal program produced by and broadcast primarily to Aboriginal people in their own languages (with English subtitles for those who don’t know their languages). CAAMA taught a particular style of documentary production, what they call “respectful listening,” which allows the subject’s voice to shape the narrative by providing the time needed during production for this process to occur (Ginsburg, 1991).

The result is an invaluable video archive about indigenous lives lived over the last century in remote Central Australia, strong cultural leaders who often had no contact with ‘whitefellas’ until they were young adults. NITV’s efforts to digitize this early analog work, originally shot in U-Matic, and make it available on new platforms to a national audience gives these remarkable if under-valued works new significance, amplifying the work of CAAMA and its important early enactment of media sovereignty in the late 20th century. On NITV, the works are further enhanced by the introduction provided by Warwick Thornton, now one of Australia’s most recognized filmmakers and artists, whose own work began on the Nganampa series in Alice Springs 20 years ago.

It is worth observing that in two of the key locales where indigenous media initially developed – Canada and Australia – it did so in response to the entry of mass media into the lives of First Nation peoples through the state’s imposition of satellite-based commercial television over the remote regions where more traditional populations lived, beginning in Canada in the late 1970s and then Australia in the 1980s. Remote indigenous communities vigorously opposed the ‘dumping’ of mainstream media into their lives, insisting on the opportunity to shape their own media to meet local concerns. At the same time, the increasing availability of inexpensive user-friendly small-format analog video systems and small satellite dishes presented an opportunity for these groups to produce their own work. Some indigenous activists imagined their productions, metaphorically, as a shield of local manufacture capable of fending off the invasion of these other signals from the dominant culture (Ginsburg, 1991). This was the case made famous in a pioneering initiative by activist researcher Eric Michaels, initially hired to study the impact of media on indigenous people living in the Central Desert of Australia. In the 1980s, he
worked with Warlpiri people to help them develop their own analog video practices and low-power television – what he called The Aboriginal Invention of Television in Central Australia (1986) – created as an alternative to the onslaught of commercial television via satellite (Michaels, 1986). Thus these projects provided a kind of natural laboratory for understanding the possibilities of radically different media practices that remain ‘off the grid’ of most media scholarship or research addressing indigenous lives (contexts in which media practices are still too easily regarded as either epiphenomenal or insufficiently traditional).

The significance of ‘embedded aesthetics’ in the indigenous media being produced in traditional Aboriginal communities is still insufficiently appreciated. I created this term in 1994 to call attention to a system of evaluation that refuses any separation of textual production and circulation from broader arenas of social relations (Ginsburg, 1994). This is evident, for example, in Kayapo video productions and their valorization of the temporal dimensions of ritual, and qualities enhanced by repetition, amplified from embodied performance to its doubled presence on video. With embedded aesthetics, the quality of a work is assessed according to its capacity to represent, embody, sustain and even revive or create certain social relations both on and off screen, respecting longstanding protocols appropriate to the group making the work. Indigenous media can be seen as a new kind of object, therefore, operating in a number of domains as an extension of collective self-production in ways that enhance indigenous regimes of value. As another instance of this complex sense of embedded aesthetics, anthropologist/artist Jennifer Deger’s work with Yolngu media makers from the Gapuwiyak community in Arnhemland, northern Australia, focuses on what we could call an indigenous (Yolngu) theory of ‘media effects.’ As she explains in her book Shimmering Screens, traditional concepts of the impact of revelation, witnessing and showing are constitutive of identity, a kind of active viewing that empowers and catalyzes ancestral power, rendered evident to knowledgeable viewers, even if it remains invisible to non-Yolngu audiences (Deger, 2006).

Most recently, the Yolngu Miyaarka Media Collective, a group based in Gapuwiyak to which Deger belongs, has created a traveling media exhibition called Gapuwiyak Calling. The exhibit features a number of distinct genres of Yolngu phone-media. These include phone-art collages featuring giant green frogs and dreadlocked babies; cut and pasted family photographs uniting the living and the dead in flashing gif files; funny videos featuring fragments of mainstream television and movies re-voiced with Yolngu jokes in Yolngu languages; young men dancing in blue grass skirts ordered from the internet to a remix of the 1980s Eurhythmics hit “Sweet Dreams”; and a charming 30 minute film, Ringtones (2014), about the variety of ringtones in use in Gapuwiyak, ranging from ceremonial songs, to gospel and hip-hop. Although much of the
content is deliberately playful, incorporating ostensibly ‘foreign’ acoustic and visual elements accessed via the internet connections on their phones, the Yolngu media makers nonetheless see the exhibition as an opportunity to assert enduring and meaningful connections between generations of Yolngu kin living through times of enormous social stress and change. Structured according to a Yolngu poetics, the exhibition takes its motif and meaning from the actions of Mokuy, an ancestral trickster spirit who lives in the forests of Arnhem Land.  

For my final case, I would like to consider a recent experiment in indigenous media from the Arctic, the latest venture in the longstanding and always groundbreaking work of the remote Nunavut-based Inuit media collective, Igloolik Isuma. This group is perhaps the most well-known indigenous media organization in the world due to the global success of their prize-winning film Atanarjuat: the fast runner, made in 2001, the first of three extraordinary Inuit feature films created using the collective’s distinctive community-based production process.  

The group formed in 1990, turning video technologies into vehicles for the cultural expression of Inuit lives and histories, another initiative formed as a counterpoint to the introduction of mainstream satellite-based television, this time in the Canadian Arctic. Headed by Inuit director Zacharias Kunuk, Isuma engaged Igloolik community members, while Brooklyn-born filmmaker and Isuma partner Norm Cohn, when not in residence up north, led a tech support team in Montreal. Frustrated by the difficulties involved in showing their work to other Inuit communities, in 2008 they launched an innovative alternative for indigenous distribution, Isuma TV, a free internet video portal for global indigenous media, available to local audiences and worldwide viewers. In 2009, Isuma launched the Nunavut Independent Television Network on Isuma TV, a digital distribution project, bringing a low-speed version of Isuma TV into remote Nunavut communities where the bandwidth is too low to watch even a single YouTube video. This workaround allows films to be uploaded from anywhere, re-broadcast through local cable or low-power channels, or downloaded to digital projectors. The platform currently carries over 5,000 films and videos in more than 70 languages across more than 800 user-generated channels, including many works by indigenous producers in Latin America such as the Brazilian indigenous media group Vídeo nas Aldeias. This important intervention demonstrates the unanticipated possibilities presented to indigenous cultural activists during moments of media innovation, and the enormously creative use made of these transforming technologies. As Norm Cohn explained to me:

We saw the historical technological ‘moment of opportunity’ for the internet, the way we saw the analog video moment in 1980, and the Atanarjuat digital/film moment in 1998: the brief window in the technology of communication where margina-
lized users with a serious political and cultural objective, could bypass centuries of entrenched powerlessness with a serious new idea at a much higher level of visibility than usual in our top-down power-driven global politics. In 2007, internet capacity allowed us to end-run the film industry entirely and launch a video website that could take aspects of YouTube to a much higher level of thematic seriousness, and see what happens.

In spring of 2015, Isuma launched a new project – an online film festival – showcasing Inuit and other Aboriginal-produced works. The festival ran from March 2 to April 1, and included the world premieres of director Zacharias Kunuk’s documentaries *My father’s land* and *Coming home*. This is envisioned as a regular (if not annual) event to showcase indigenous media.

**RETHINKING THE DIGITAL AGE**

In conclusion, how might we understand the circumstances faced by indigenous communities in remote regions of the world where access to broadband and mobile networks is difficult or nonexistent? As one scholar queried in 2006: “Can the info-superhighway be a fast track to greater empowerment for the historically disenfranchised? Or do they risk becoming ‘roadkill’: casualties of hyper-media and the drive to electronically map everything?” (Landzelius, 2007). The recent developments discussed in this article offer some insight into what the digital age actually means for indigenous media makers in a variety of locations, and how new technologies are being both decolonized and indigenized, from the design of archives, hardware and software, to the questions raised about protocols of viewing, as in the Ara Irititja case. While indigenous access to digital platforms is certainly uneven, we have ample evidence for the creative uptake of new technologies in indigenous communities on their own terms, furthering the development of political networks and the capacity to extend their traditional cultural worlds into new domains. This, I suggest, is the basis for media sovereignty in the digital age.

Indigenous digital media raise important questions about the politics and circulation of knowledge at a number of levels. Within communities these may involve who has access to and an understanding of media technologies, and who has the rights to know, tell and circulate certain stories and images. Within nation-states, these media are linked to larger battles over cultural citizenship, racism, sovereignty and land rights, as well as struggles over funding, airspace and satellites, broadcasting and distribution networks, access to archives, and digital broadband services that may or may not be available to indigenous communities. Norm Cohn, speaking from his experiences with Igloolik Isuma for over three decades, articulates the dilemmas posed by this infrastructural stratification, while embracing the opportunities to indigenize new digital technologies under circumstances of radical difference.
At present, Inuit and other Indigenous people are on the brink of being left out of the most important new communication technology since the printing press. Almost everything in the 21st century will be conducted at least partly by internet. Being left off, even for another decade or two, is like a linguistic, cultural and economic death sentence. Isuma’s commitment to create IsumaTV even in the face of these disadvantages is our recognition of how access to the internet cannot be ‘negotiable’ for Indigenous communities struggling to survive. This is particularly the case since the new 2.0 multimedia internet actually offers a practical tool especially suitable for oral cultures in remote regions. Unlike the literary medium of print, or the 1.0 print-based internet which is all about reading, in which oral cultures traditionally have been disadvantaged by participating in their second languages, the 2.0 audiovisual internet advantages people using sophisticated aural and visual skill-sets in their own first languages. So our work has been a serious experiment in the history of alternate media experiments since the early-80’s, as Isuma has been from the start, helping viewers see indigenous reality from its own point of view.15

Cohn’s words underscore how indigenous media projects formed over the last decades are now positioned at the conjuncture of a number of crucial historical developments: these include the circuits opened by new media technologies, including digital circuits, satellites, compressed video, cyberspace, and mobile phones, as well as their links to ongoing legacies of indigenous cultural activism worldwide. Now, this work is increasingly being produced by a generation comfortable with media and concerned with making their own distinctive representations as a mode of everyday cultural creativity and social action.

I conclude on a note of cautious optimism. The evidence of the growth and creativity of indigenous media over the last two decades, whatever problems may have accompanied these developments, is nothing short of remarkable, whether working out of grounded remote communities, urban indigenous enclaves or broader regional, national or transnational bases. Indigenous media activism alone certainly cannot unseat the power asymmetries which underwrite the profound inequalities that continue to shape the world, or resolve the issues and images that their media interventions raise about their past legacies, present lives and cultural futures. These are on a continuum with broader issues of self-determination, cultural rights, political sovereignty and environmental degradation, and may help bring some attention to these profoundly troubling and interconnected concerns.

As indigenous media has grown more robust over the last two decades – in part because of the increasing convergence of media forms that blur the boundaries delineating television from film, web-based work or phone made media. The remarkably diverse array of works suggest that this emergence of media sovereignty – the synthesis of command over media technology with new and ongoing forms of collective self-production and the control over circulation – has much to offer indigenous communities as they redefine their lives to themselves, the world and future generations.
Faye Ginsburg is an American anthropologist, and the David Kriser Professor of Anthropology at New York University where she founded and directs The Center for Media, Culture and History. She graduated in 1976 from the Department of Archaeology and Art History at Barnard College. Her doctoral research was conducted at the Department of Anthropology of the City University of New York in 1986, and her revised thesis was published in 1989 as the award winning book *Contested lives: the abortion debate in an American community*. She has continued to work with cultural activists, in her 25 years of collaboration with Indigenous media makers, and most recently in her work on disability worlds.
NOTES

1 An earlier draft of this piece was written for a keynote I delivered at the conference Indigital: Indigenous Engagement with Digital & Electronic Media at Vanderbilt University, Nashville, Tennessee, Spring 2015. I am deeply appreciative by the invitation from Marco Antonio Gonçalves and André Brasil to offer a revised version of this article to the Brazilian journal, Sociologia & Antropologia. Many thanks to them and to Editor-in-Chief Maria Laura Cavalcanti for her excellent editing. Of course, I am profoundly grateful to all the cultural activists with whom I have worked over the last 25 years for sharing their knowledge, talent and insights with me.

2 For information on the history of U-Matic video, once the industry standard until the 1990s, please see <https://en.wikipedia.org/wiki/U-matic>. Accessed July 8, 2016.

3 For more information on this organization, see <http://www.witbn.org/>. Accessed July 8, 2016.

4 For a discussion of this project, see my May 4, 2009 piece and commentary on it as part of a media commons discussion on Indigenous media for the web-based In Media Res. Beyond Broadcast: Launching NITV on Isuma TV: <http://mediacommons.futureofthebook.org/imr/2009/05/01/beyond-broadcast-launching-NITV-and-isuma-tv>. Accessed May 29, 2009.

5 As their website explains, Ara Irititja means ‘stories from a long time ago’ in the language of Anangu (Pitjantjatjara and Yankunytjatjara people) of Central Australia. The aim of Ara Irititja is to bring back home materials of cultural and historical significance to Anangu. These include photographs, films, sound recordings and documents. Ara Irititja has designed a purpose-built computer archive that digitally stores repatriated materials and other contemporary items. Anangu are passionate about protecting their archival past, accessing it today and securing its legacy. See <http://www.irititja.com/>. Accessed May 29, 2009.

6 <https://www.w3.org/People/Bos/DesignGuide/compatibility.html>. Accessed July 8, 2016.

7 Please see <http://mukurtu.org/about/>. Accessed July 8, 2016.
8 Please see <http://www.localcontexts.org/>. Accessed July 8, 2016.

9 See <http://www.irrititja.com/>. Accessed July 8, 2016.

10 <http://www.irrititja.com/>. Accessed July 8, 2016.

11 <https://www.facebook.com/NITVAustralia/posts/10152647447707005>. Accessed July 8, 2016.

12 <http://miyarrkamedia.com/projects/gapuwiya-k-calling/>. Accessed July 8, 2016.

13 <http://miyarrkamedia.com/projects/ringtone/>. Accessed July 8, 2016.

14 The NITV news team did a story on the Gapuwiya-k Calling exhibition’s debut at the University of Queensland in Australia, showing how mainstream television news routines have been incorporated into indigenous television, while delivering a story about indigenous media from remote communities with a far more distinctive aesthetic. I invited the show to be installed for the Margaret Mead Film Festival in October 2014, held at the American Museum of Natural History in New York City. Miyaarka Media brought over their media made using mobile phones, as well as some of the key members of the collective to install the show and present their work.

15 <http://mediacommons.futureofthebook.org/imr/2009/05/01/bebyond-broadcast-launching-NITV-and-isuma-tv>. Accessed May 23, 2009.
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CINEMA INDÍGENA DO U-MATIC AO YOUTUBE: SOBERANIA MIDIÁTICA NA ERA DIGITAL

Resumo
Esse artigo aborda uma ampla gama de projetos, desde os primeiros desafios epistemológicos das experiências de video na remota Austrália Central na década de 1980 quando surgiu um cinema indígena que interveio tanto no imaginário nacional australiano quanto na ideia de cinema mundial. Aborda, também, o ativismo político que levou à criação de quatro estações nacionais de televisão indígenas no início do século XXI: Rede de Televisão de aborígenes no Canadá; Televisão Nacional Indígena da Austrália; Maori TV na Nova Zelândia; e Taiwan Television indígena de Taiwan. Questiona ainda o significado da era digital para os povos indígenas em todo o mundo, que demonstram grande criatividade tecnológica e política.

Palavras-chave
Cinema indígena; Direitos culturais; Soberania política; Era digital; Propriedade intelectual.

INDIGENOUS MEDIA FROM U-MATIC TO YOUTUBE: MEDIA SOVEREIGNTY IN THE DIGITAL AGE

Abstract
This article covers a wide range of projects from the earliest epistemological challenges posed by video experiments in remote Central Australia in the 1980s to the emergence of indigenous filmmaking as an intervention into both the Australian national imaginary and the idea of world cinema. It also addresses the political activism that led to the creation of four national indigenous television stations in the early 21st century: Aboriginal People’s Television Network in Canada; National Indigenous Television in Australia; Maori TV in New Zealand; and Taiwan Indigenous Television in Taiwan); and considers what the digital age might mean for indigenous people worldwide employing great technological as well as political creativity.

Keywords
Indigenous media; Cultural rights; Political sovereignty; Digital era; Intellectual property.