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#71
special issue

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Digital Africa

DIGITAL ART
AND INNOVATIVE TECHNOLOGY

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Map
DIGITAL AFRICA

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Digital Africa

In 1984, in a book titled *Un regard noir**, Makossa *alias* Blaise N'Djehoya humorously described *the French as seen by the Africans*. Today we invite you to explore digital art in Africa from a different point of view on new media: Africans as seen by Africans. What if innovation, so fawned over in the West, were to be (re)discovered on the African continent? Reappropriating, repurposing, inventions, new applications…

African contemporary art linked to new media remains little known and underrepresented on an international scale. This publication offers a basic topography, from Maghreb to South Africa, spotlighting the actors of African digital art. With its extraordinary but non-exhaustive panorama, this issue reflects the diversity and richness of artistic expression related to the specific cultural, economic and social contexts of the African continent.

All the trends are represented: multimedia installations, machine-artworks, digital photography, video art, *live* audiovisuals, Net art, sound art, poetry readings, typography projects, animated graphics, video games, participative processes, interactive installations, recycling art, coding art, design, geolocation art, "viral street culture", open experiments… The organizations that produce and/or distribute these works are also featured: festivals, resource platforms, websites, blogs, collectives invested in open software and *Open Source,* fablabs, innovation networks…

In 2009, Musiques & Cultures Digitales initiated the *Digital Africa* project with Karen Dermineur, guest editor for this issue, in order to offer a new perspective on new media by revealing African creators who use them and reappropriate them, who simply make art with contemporary tools.

We would like to thank the authors and artists who contributed to this issue: Tegan Bristow of South Africa for her precious help on English-speaking Africa; the International Organisation of La Francophonie, dedicated to promoting cultural and linguistic diversity (especially in Africa), whose support allows us to distribute this publication for free in French and English in digital formats (pdf and e-book); and Institut français, whose editorial insert reports on the Digital Africa series of discussions around digital industries and innovation in Africa, launched in 2012.

This Magazine des Cultures Digitales devoted to *Digital Africa* is a starting point, an invitation to continue this exploration of African digital art. Feel free to join these networks and especially to contact these artists, exhibition curators, festival directors and cultural institutions, laboratories… to produce and distribute them internationally.

Anne-Cécile Worms

* Blaise N'Djehoya and Massaër Diallo, *Un regard noir, Les Français vus par les Africains*, 1984, éditions Autrement.

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After 20 years of working in digital media, including 10 in Africa spent building my network out of Dakar with artists, project instigators and other players of the digital scene, I was already intimately linked to my topic: digital art in Africa, an overview of the various artistic and innovative practices, either existing or emerging, on the continent and within its diaspora.

Africans have a specific way of using digital technology, of appropriating it. This is the vision of the world that I seek to reconstitute through an instant topography, by giving them a voice here. I attempt to acknowledge and promote the qualities of Africa-specific art, giving artists, curators and innovators international visibility, and facilitating connections among them.

This overview requires a global perspective of today's Africa and the role of digital media in society, in order to offer to synthesis of this emerging scene, composed of a wide range of initiatives, which, in multiple ways and with great generosity, each lays a brick on the foundation. Let yourself be guided and amazed by this surprising diversity...

Africa has certain characteristics that have a profound impact on the nature of digital technologies and arts. In order to address and understand existing practices, we must first consider various contexts and diverse ways of thinking. Africa, which is the primary subject of this issue, is a vast continent, two-thirds the size of Asia and three times the size of Europe, with a population of more than one billion spread out over 54 countries. The diverse geography of these many Africas mirrors the profound diversity of African peoples and cultures.

Arduino introduction workshop. At Kër Thiossane, Dakar, March 2013.

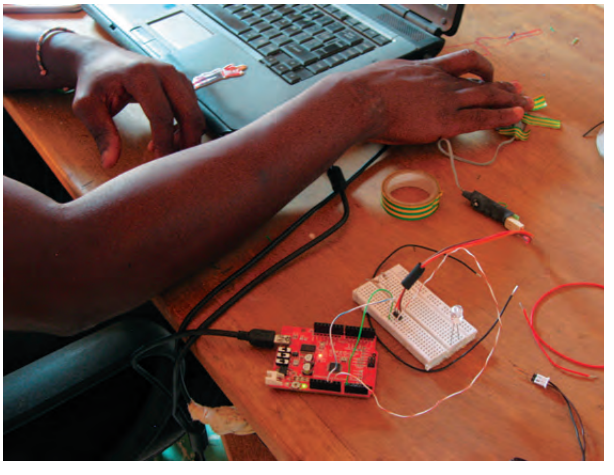


PHOTO © KRN

There is an extraordinary variety of traditions, art forms, ethnicities, languages, beliefs, and a very ancient history, alongside a recent past marked by successive foreign influences (conquests, slavery, migrations, colonization, neo-colonialism). West Africa, for example, represents many complex and very structured societies (clans, castes, customary hierarchies), based on traditional values and strongly anchored ancestral codes: predominance of the family based on a patriarchal system, but where women are the vectors of cultural codes and social traditions; cults, rites of initiation and ceremonials that punctuate life, from birth to death, and even beyond, via ancestors.

Societies are founded on oral tradition and oral transmission of knowledge, where traditional education is based on that which is functional, pragmatic, collective. The arts are dominated by a particular form of spontaneity and sensitivity, as well as the importance of collectivity. Contemporary reality disrupts these traditional values, without excluding them, and we can see the emancipation of young people who respond to outside influences, especially when it comes to information and communication technologies. Economically speaking, the situation remains particularly difficult, as the African continent is the poorest, with a very unequal level of development from one region, and even from one country, to another.

There are also many structural problems, which have grown worse due to the current global crisis: endemic poverty; high unemployment rate (less than one-third of the population has a stable paying job)[2]; 40% illiteracy rate for adults, of whom two-thirds are women[3], numerous and serious health problems; not to mention insufficient and decrepit infrastructures, or

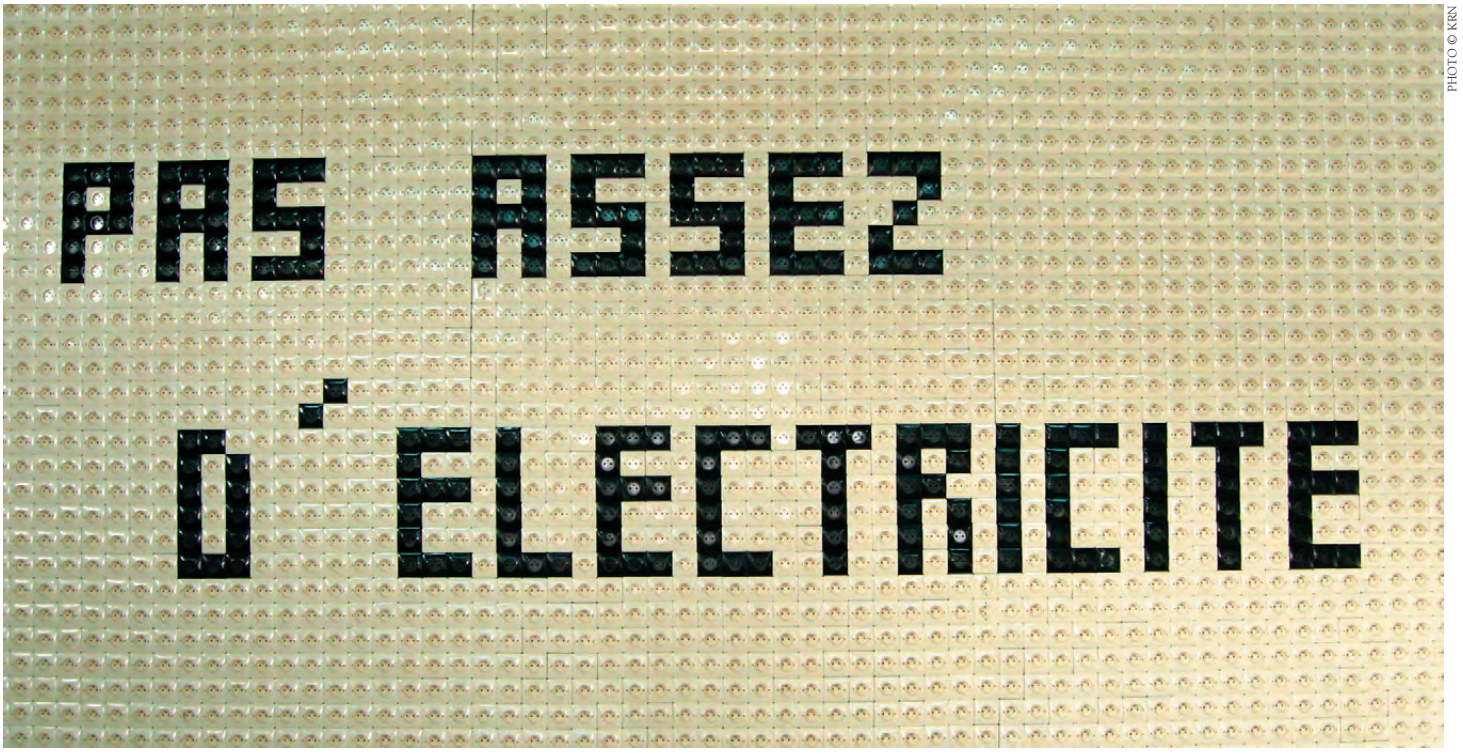


PHOTO © KRN

Pas assez. Cheikhou Bâ.
Biennale de Dak'Art 2012, Dakar, May 2012.

the political instability that affects many nations. Currently, one out of two Africans does not have access to electricity. In Sub-Saharan Africa (23% electrified, compared to 90% in Maghreb)[4], the energy supply is irregular, and people suffer from power failures and frequent disruptions. In some countries, the situation is critical, with large disparities between urban and rural areas. Yet there is "no development without electricity". In this context, Congolese artist Jean Katambayi Mukendi[5] has made impressive machines that regulate the distribution of electricity.

As a limited but non-negligible response to this widespread poverty, a vital informal economy, which remains a traditional subsistence economy, has developed from the foundations of traditional precolonial exchanges. However, it is worth noting that Africa has developed rapidly over the past decade, with an annual GDP growth of 5.1%[6]. With the second-fastest growth rate in the world, according to the experts, Africa is emerging. The significant progress of digital technology and practices is both a beneficiary and one of the motors of this growth, even if numerous problems persist, such as access to equipment, which is expensive and either dilapidated or obsolete.

> *"The same brush that painted Africa as the "dark continent" will repaint it one day in gold."*
>
> **Muchiri Njenga,** artist, Kenya[1].

Across the continent, the penetration rate of wired Internet access is the lowest in the world (15.6% in June 2012)[7] and very unequally distributed (from 48.4% in Nigeria to 1.1% in Ethiopia). The main cause is the high cost of communications: an Internet connection in Sub-Saharan Africa remains the most expensive in the world, on average 3.5 times higher than in North Africa, for low bandwidth. In Togo, the cost is equivalent to the monthly salary of an employee (70 euros for 128 kilobits/second)[8]. But Internet access develops as a result of international cooperation and the rise in power of Panafrican providers, as well as the progress of other related technologies.

Mobile technology is thriving, with an average penetration rate of more than 40%. In a population of 1 billion, there are currently 500 million mobile subscribers[9] and over 200 different providers spread out across some 50 countries. But more than a mere communication tool, mobile phones have become ubiquitous "everyday life tools", ›

PHOTO © MEL-ODILE

Frequent floods in West Africa. Dakar suburb, 2010.

seriously impacting economic and social development, especially through common services such as monetary transactions[10], access to health, administration, education or agricultural development, while playing an important role in technological innovation. One example is the mobile application developed by Babacar Ngom (Senegal) [11], which provides Peul (nomadic) shepherds with information about the current state of water points and paths.

Africa is the second-largest mobile phone market worldwide. A number of militant citizen initiatives use this technology[12], and the mobile phone has become the "African pocket computer". Furthermore, 3G technology[13] facilitates access to the mobile Internet. Social networks (Facebook, Twitter, Instagram, etc.) are also expanding and are now an essential part of young Africans' daily lives.[9]

> *Cultural freedom is a right, Open Culture is a choice.*
>
> **Salah Malouli[19]**,
> organizer of Rencontres Open Taqafa, Morocco.

In this context, art and innovation express both ancestral traditions and modern life. This study attempts to shed light on this particular challenge. Certain choices were made in order to convey and highlight the profiles and practices related to digital media that come together in Africa. After two years of research, and thanks to the help of N'Goné Fall[14] and Sylviane Diop[15], as well as crucial research in Anglophone Africa by Tegan Bristow[16], working on this issue has allowed me to discover many things and to define the objectives of this first overview, intended for all readers, African or Western, professional or just curious.

I encountered a very diverse emerging scene, a wide variety of profiles, practices, projects and artworks, often hard to classify. I wanted to explore this relatively unknown subject from a sensitive point of view, identify avenues of thought, and share the African vision of digital art, which is in many aspects very different from the Western one. The result is a descriptive, analytical and, above all, qualitative approach to a selection of favorites.

So in order to address and make sense of this great diversity, I made certain choices. First, I was guided by the quality of encounters and artworks, which in turn changed my initial point of view on the subject. Finally, I focused on determined people, interesting initiatives, sensitive, rich, poetic or even fragile artworks, and original ideas. I also wanted to associate individuals with very different approaches, whether they live on the continent or in the diaspora, established artists and renowned experts, but also young talents, less well known but dynamic and determined, giving priority to the artistic aspect, as technical innovation is already a hot topic elsewhere.

The doors were open, I was always warmly received by the people I contacted, and they were responsive, willing and indulgent in regards to the level of participation requested. But I also realized the degree of economic hardship that they endure, where every day is a question of survival. "Creativity is not a luxury, it's a means to an end." From a practical standpoint, it was sometimes difficult to get up-to-date information, to contact certain people or to establish a regular exchange. So, while many artists and innovators are included, others are missing.

Meanwhile, as political and economic circumstances were major obstacles, especially to the implementation of digital technology, East Africa is more or less absent from this issue. However, three predominant regions are well represented: Southern Africa, North Africa and West Africa. These regions correspond to busy economic hubs and previously established art centers, which host a noteworthy scene and big events.

This issue provides an open platform to all those who are building the digital Africa of today and tomorrow. In order to offer the most consistent and complete vision possible, we classified these initiatives into three distinct sections: theoretical and practical reflections by experts (artists, academics, art critics); portraits of artists, instigators of innovative projects, event organizers, creators of spaces; and essential online references (art sites, networks, platforms, institutions) that open even more doors. The portraits and online references are based on the information I gathered from my questionnaire. The texts in the insert at the end of the magazine are by Institut français, and therefore not part of our study.

This research shed a light on the specificities of all the various initiatives. Many artists share a common will to "affirm their African-specific identity" through their artwork[17], and to "rid themselves of the Western model". Deep connections with African cultures, traditions and ways of thinking also persist. Treated like any other tool, yet one whose specific attributes lead to sharing experiences and practices, digital technology is part of a historical continuity.

New practices are emerging, in the spirit of Open Source, which advocate the free sharing of tools, resources and knowledge, especially the communal use of open software. Reclaiming, recycling and hacking existing tools is becoming more and

more important to creative activity. The new buzzword is "re-creation".

African innovators are determined to offer their communities services that are practical, useful and accessible to all. Art practices also incorporate a large share of collaborative work, the African tradition of making something together, which translates into a multidisciplinary approach, bringing together multiple skills to better meet specific needs. New hybrid (physical, online) spaces, both local and open to the outside, offer holistic services of training, follow-up, communication and distribution. Digital media allows artists and innovators to find and offer other solutions, in terms of both function (self-organization, network, federation) and creative tools (alternative production, open licences).

Fundamentally and all profiles combined, "digital players are players in their society". Despite the lack of official aid and recognition, they take into account the everyday problems of their communities. Technological innovation serves local development in order to meet real needs and improve living (survival) conditions. Meanwhile, art invents new languages, portrays issues poetically or ironically. It strives to provoke interaction between the artworks and the public, who is invited to participate actively in the creative process, almost becoming actors of the artwork. Tegan Bristow[16] takes it further: *Interactive technology should be used for both critical and esthetic means, when exploring a sociocultural context.*

Another recurring theme in many artists' work is the city, its architecture and population, as well as public space: Johannesburg, for Marcus Neustetter and Stephen Hobbs[19]; Lagos, for Emeka Ogboh[20]; Cairo, for Kareem Osman[21]; and many others.

If the observations on the solid principles of self-organization already at work in places such as Dakar and Mali are accurate, then it is time for digital art at the global level to turn to Africa for sources of inspiration and new ways of thinking about the user and the uses of these technologies. Western and Asian markets are certainly the major players in terms of producing and consuming technology, but Africa can offer great insight in redefining the boundaries of innovation (Marcus Neustetter and Stephen Hobbs[19], artists, South Africa).

This issue introduces a good number of talented players and astonishing work. Now it's up to you, readers, to be surprised, to discover their work, here and in exhibitions, and to contribute to an expanding network. If the first bricks have been laid, as seen in these pages, we will need to continue studying this constantly evolving world well into the future. Bon voyage ! ■

Karen Dermineur

Mobile phone in Senegal. Thanks to Christelle Scharff, of *Mobile Sénégal*.

PHOTO © ABDOULAYE MBAYE

Karen Dermineur, project leader and multimedia author, independent curator and event organizer in the field of digital arts, operating for the past two decades in Paris and Dakar (Senegal).
Born in Paris in 1971. Lives and works in Paris. Guest editor for this special issue of MCD.
http://KRN.incident.net

(1) See page on Muchiri Njenga in this issue.
(2) www.indexmundi.com/map/?t=0&v=74&r=af&l=fr
(3) www.unesco.org/new/fr/dakar/education/literacy
(4) www.rfi.fr/afrique/20101020-afrique-sous-equipee-electricite
(5) See page on Jean Mukendi Katambayi in this issue.
(6) www.slateafrique.com/94095/10-choses-que-vous-ignoriez-sur-expansion-economie-africaine
(7) Source: www.internetworldstats.com/stats1.htm#africa
(8) blog.economie-numerique.net/2012/02/09/lafrique-a-lheure-dinternet-2
(9) www.slateafrique.com/88343/comment-le-continent-se-connecte-r%C3%A9seaux-sociaux-facebook-twitter-mxit
(10) To this day, the M-PESA service has allowed approximately 40% of the adult Kenyan population, without a bank account, to circulate one-third of the national GDP.
(11) See page on Babacar Ngom in this issue.
(12) Ushahidi is a system of electoral monitoring launched in Kenya in 2007. The concept has since been perpetuated and reused.
See page on Ushahidi in this issue.
(13) 3G: third-generation mobile-phone technology, with a UMTS standard that allows broadband access and multimedia applications.
(14) See N'Gone Fall's article in this issue.
(15) See page on Sylviane Diop alias Praline Barjowski, as well as her article, in this issue.
(16) See page on Tegan Bristow, as well as her article, in this issue.
(17) See also the African tablet made by Vérone Mankou (DRC). More at verone.me.
(18) See page on Salah Malouli in this issue.
(19) See pages on Marcus Neustter and Stephen Hobbs, as well as their article, in this issue.
(20) See page on Emeka Ogboh in this issue.
(21) See page on Kareem Osman in this issue.

BY-NC-ND

Reflection

Theory and practice

DIGITAL ART AND INNOVATIVE TECHNOLOGY IN AFRICA

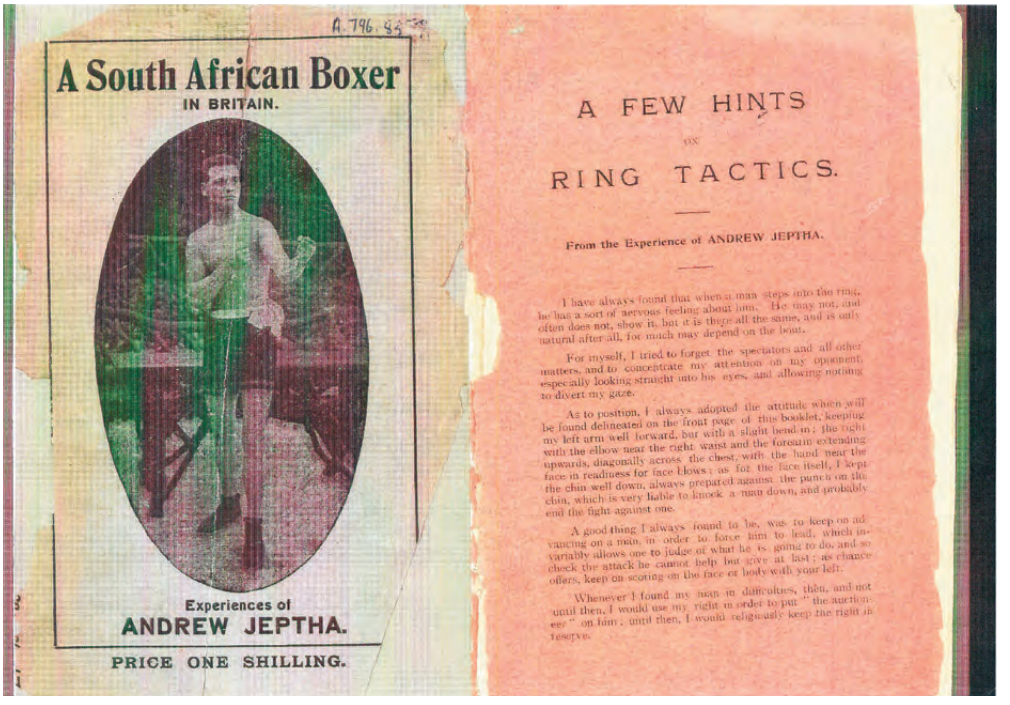
BY-NC-ND

TEXTUAL IDEATION AND THE DIGITAL IN SOUTH AFRICA

toward an activist practice of "folk-scripting"

This paper introduces the material archival traces of the champion boxer Andrew Jeptha. Despite his international achievement as the first black fighter to ever win a British title in 1907, he is only "visible" in the archive as a booklet detailing his life journey and a photograph bearing the trace of his handwriting in the form of an autograph. The handwritten script (and elements of text within the booklet) are currently being developed by the author into a digital typeface called *Champion Jeptha Script*.

This generative response to fragments within the archive challenge the conventional idea of historical research by inserting Jeptha into the present, functioning as a "return" of sorts for the boxer. This epistemic disobedience, in keeping with the radical approaches of subaltern studies, mounts a challenge to colonial archives that too readily embrace the regime of "authentic evidence only" and its corollary: silence. The emergent practice that this piece discusses is one the author terms *folk-scripting*, the emulation and dissemination of the handwriting of a distinguished "ordinary person" in a digital form for current and future communities.



[Image 1]
Initial pages of **Andrew Jeptha**'s publication. *National Library of South Africa*.

PHOTOS © KURT CAMPBELL

[Image 2]
Autograph, Andrew Jeptha.

The historical record of Andrew Jeptha is tellingly sparse in the sporting archives of Britain and South Africa. The only comprehensive archival trace exists as a singular, self-published booklet by Jeptha in the National Library in Cape Town titled *A South African Boxer in Britain*. This document is important as both a text and an object. The booklet itself, as a particularly visual, material object, provides us with a "face" for Jeptha. In approaching this specific piece of ephemera, the conceptual framework of Luciana Duranti[3] is of particular relevance. Duranti encourages archival practice that studies the genesis and transmissions of documents and their relationship with their creator. This manner of thinking about the tangible texts we encounter frames the "documents" as the "monuments", that is, *the document is not only the reservoir of data, it is in itself a source*[4]. An approach as specific as this receives all elements of the document not only as a means to the end of reading, but provides the framework for an ideation extending from, and beyond, the document.

The "first voice" of printed letters initially encountered in the publication is no less valuable in figuring Jeptha than the autograph encountered on the photograph of Jeptha [figure 2], which offers a direct and personal link to the subject. Valery's writings on the book ultimately foreground textual elements in books as a crucial point of departure in visual analysis: *I open it: it speaks. I close it and it becomes a thing to be looked at. Thus, more than anything else in the world, it resembles a man […] It has a physical aspect. Its visible and tangible exterior, which can be as ordinary or individual, as ugly or pleasing, as insignificant or remarkable as any member of our species. As for its voice, which is heard the moment it opens […] does it not reside in the typeface that is used…*[5]

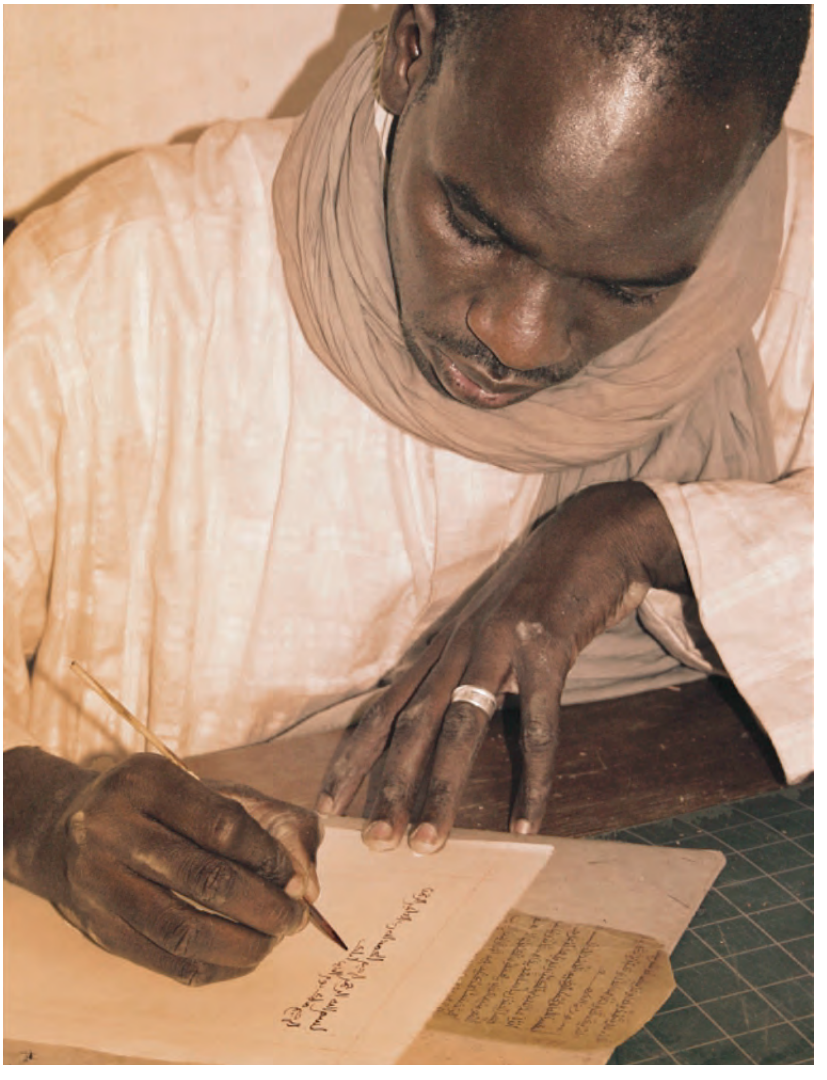
If we concede to the possibility of the book-form and the signed photograph constituting a particular "personage" of sorts, this thought introduces aspects of how scholarship related particularly and intentionally to the visual archival traces of Jeptha could proceed. A symbolic "return" of Andrew Jeptha as a radical form of bespoke typography can be achieved. Thus, the visual traces of Jeptha, in the form of the booklet and the signed photograph become both the site of analysis as well as the site of agency. The role of typography as both a historical key and creative medium is considered by Scholss: *Another way of talking about Typography, or the material conditions of the text, might be to identify it as a sign system or code […] Typefaces can provide visual analogues to the text…*[6]

Jeptha, completely blind at the age of 35 due to his fighting injuries, lamented that he regretted most the inability to read or write his own story. The creation of a typeface for use by others to write and read his story is at its innermost an "evocative" act. Jeptha describes, in the opening paragraph of his booklet, the modus operandi used to recount the events narrated in his publication: *A 'word as to the form this booklet assumes. I had been in the habit or jotting down memoranda from time to time, in a sort of abbreviated longhand, (intelligible enough to me, if I had my eyesight, but quite meaningless to anyone else). Cuttings from the journals of the day describing my numerous contests had also been gathered, and they filled two large scrap-books, besides a lot of loose newspaper excerpts I had not opportunity to paste in.*

> "To resurrect the folk [...] not only enlarges the ambit of the rational [...] it also acts as a responsible critique."[1]

A typographic challenge is mounted in the preceding paragraph: to devel-

PHOTO © R.R.



[Image 3] An **amanuensis** copying manuscripts in Timbuktu (Mali). Courtesy of the Tombouctou Manuscripts Project (12/2012). More at www.tombouctou-manuscripts.org/publications

› op a typeface that acknowledges the two systems of writing mentioned by Jeptha that capture his story. They are the mass printed letterforms in the newspapers with a high obduracy, and the personal, individual script (longhand) from the writer's entries. Embracing this method of working, so as to acknowledge the textual traces of Jeptha in the archive, positions the typeface *Champion Jeptha Script* as a visual production challenging the idea of what it means to memorialize an individual. The root word for *memorial* is related to the concept of a "memory mark". Typography as a discipline is capable of exploiting this idea of a memory mark in a unique way: letters speaking as both text and image, forms imbued with a radical (right to the stem) resonance of a person within a specific space and time.

> *The formal linking of history and fiction [...] produces an interactive use of texts and contexts, offering a richer perspective.*[2]

The portability of the Folk

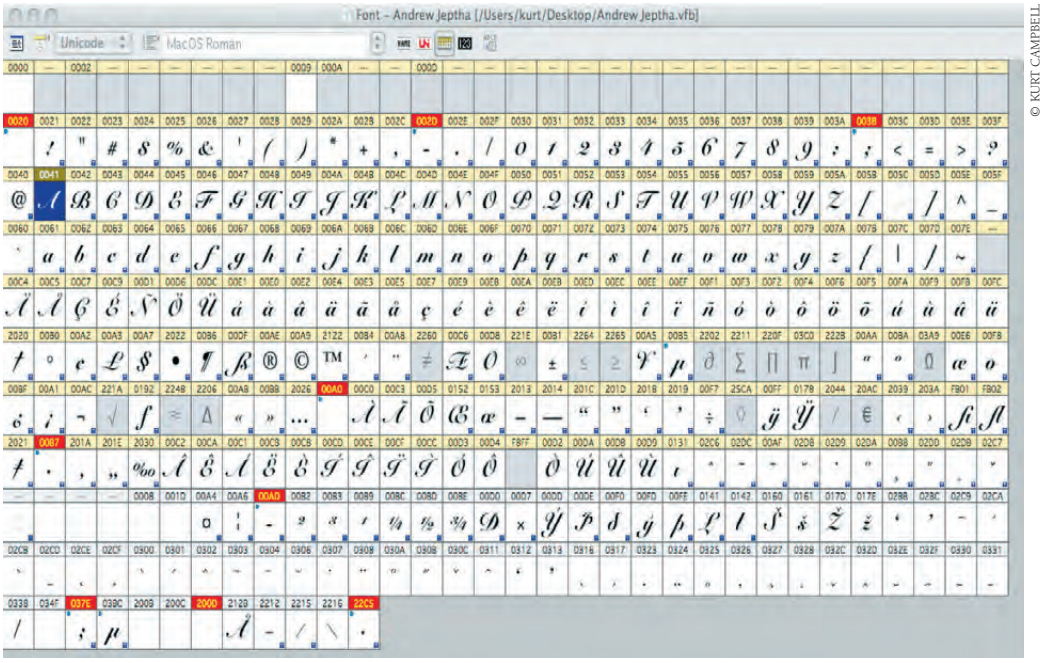
It is envisaged that the working digital text (*Champion Jeptha Script*) will be passed from one group/community of users to the next. This is not dissimilar to what Folk songs and Folk stories achieve or aim to achieve as productions designed for social deployment. Indeed, the tradition of Folk cultural history (spoken and material) concerns itself with the propagation of the achievements and lives of "ordinary" or "common" people worthy of remembrance by a future community. In the case of the digital medium of the font, the potential for transmission is as potent due to the utility, portability and collectability that typefaces can achieve.

The Textual Yoke: the epistemic challenge of Digital technology

The unintended yet central consequence of this project engaging in the reconstruction of the written script of a human figure has called into question the role of digital technological practice. To engage in this project was not simply to embrace the workings of a digital tool or the might of a machine that could automatically generate forms to be constituted as Andrew Jeptha's handwriting. On the contrary, this project demands an intimacy that is akin to that of the "copyist" tradition [figure 3], which has a long-standing history in manuscript dissemination in Africa[7]. Scholars in this tradition copied the "hand" of a master many times over until a "faithful" reproduction could be actualized. The copyist tradition involves understanding the complexities of the script that is copied and ensuring that there is no fundamental derangement in the process.

The history of technology presents us with an object that paradoxically removes all trace of human ideation in the process of a perfect replication of a human signature. This is manifest as the *Autopen* [figure 4], an automatic signature machine from the 1960s, used most notably and frequently during the office of American president John F. Kennedy[8]. This practice, of using a machine to physically sign documents of an official nature (which continues to this day in the office of Barack Obama), led to the production of a number of subsequent systems and commercial products including the *Ghostwriter* [figure 5]. These signature-machines use the visual code of the signature to produce an *authoritative materiality* in unlimited quantities.

The machine cannot, however, *extend* the language of the human hand beyond the limited number of letters comprising the signature, as the process of extending the signature into a full holograph is not only time-consuming, it requires an infinite number of word/letter combinations for the machine to ever succeed. In contrast, the copyist tradition is a practice that involves understanding the writing technique of the copied hand to such an extent that at times the scribe can predict what formal qualities the hand that he/she is engaged with would display when required to introduce a letter or numeral not



Screenshot of the ***Champion Jeptha Script*** font in the making.

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available to copy from. In this sense, a visual dialogue is created between the hand of a present man and the hand of a past man as a textual yoke is shared across time and space.

The author feels an affinity with Andrew Jeptha as he writes and re-writes the letters that Jeptha first wrote in the hope of rendering perfect glyphs, which can then be digitized. At times creating new letters is involved, "new" in the sense that no previous examples exist in the archive of Jeptha. In one manner of speaking, the process or act of developing the script typeface is the "holding of the hand" of a man who is long buried. The practice is also a form of activism and Folk-history-making, attempting to ensure that a forgotten national hero will be remembered beyond the political boundaries of his own life in a form that can be propagated within and beyond a community.

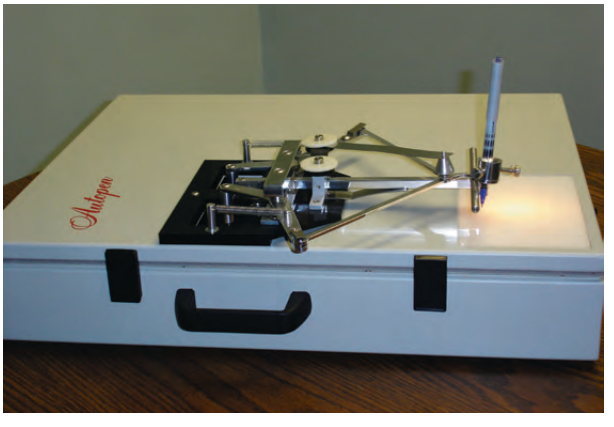
The practice of folk-scripting, manifest as *Champion Jeptha Script* typeface, points to a contemporary iteration of the ancient copyist tradition, profoundly at odds with what machines such as the *Autopen* superficially appear capable of doing. The ideological and epistemic tension that arises out of the role of the Autopen and that of the copyist tradition reveals the nature of the unnamed conflict currently playing out within the humanities in the context of industrial technology and artistic culture: *Technology is neither an ideology […] nor a neutral requirement […] but a scene of struggle […] a social battlefield*[9]. The question of the "Text", despite previously unimaginable trajectories that digital technology has enabled for it, is yet to be resolved[10]. ■

Kurt Campbell

Kurt Campbell lectures in New Media at the University of Cape Town, Michaelis School of Fine Art. He is the founder of an independent digital typeface foundry and has exhibited artwork in South Africa and internationally. His work is represented in the permanent collection of the National Gallery of South Africa and in a number of international collections.

(1) Vandana, Beniwal, Anup: *Aesthetics of Activism: A Study of Mahasweta Devi's Fiction*, p. 16.
(2) Opperman, Serpil: *The Interplay Between Historicism And Textuality: Postmodern Histories*, p. 102.
(3) Luciana Duranti's work highlights the efficiency of "diplomatics", an archival science founded by Jean Mabillon, a 17th century French Benedictine, in order to validate royal and monastic decrees, as well as to detect false documents. As a method for processing documents, diplomatics has undergone various progressive changes. "Special" diplomatics illustrates one of these evolutions.
(4) As explained by Olivier Guyotjeannin in *The Expansion of Diplomatics as a Discipline* (1996).
(5) Valéry, Paul: Le Physique du livre in *Paul Bonet*, by Paul Valéry and Paul Éluard (Blaizot, 1945).
(6) Shloss, Carol. *Journal of Modern Literature* (Indiana University Press, 1985), pp. 153-168.
(7) For more detailed information on tradition, see *Timbuktu Scripts and Scholarship*, edited by Meltzer, Lalou, Lindsay Hooper and Gerald Klinghardt (Le Cap: Hansa, 2008).
(8) See *The Robot that Helped the President* by Charles Hamilton.
(9) Feenberg, Andrew: *Critical Theory of Technology* (Oxford University Press, USA, 1991).
(10) See *The Genealogy of an Antidisciplinary Object* by John Mowitt (Duke University Press Books, 1992) for an in-depth study of the contemporary issue of "Text".

[Image 4]
The ***Autopen*** (Autostylo). Courtesy of the Autopen company, part of the Damilic Corporation.



[Image 5]
Ghostwriter. mechanical arm signing a document.
Courtesy of the Autopen company, part of the Damilic Corporation.

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Portraits of digital players

ARTISTS, INSTIGATORS OF INNOVATIVE PROJECTS, EVENTS, INSTITUTIONS…

Vessel and Bullet headrest. Kurt Campbell. *Fever Sleep: Colonial Pillow Series* exhibition. Michaelis School of Fine Art, University of Cape Town. 2007.
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KURT CAMPBELL (CAPE TOWN, SOUTH AFRICA)

www.michaelis.uct.ac.za/staff/campbell/

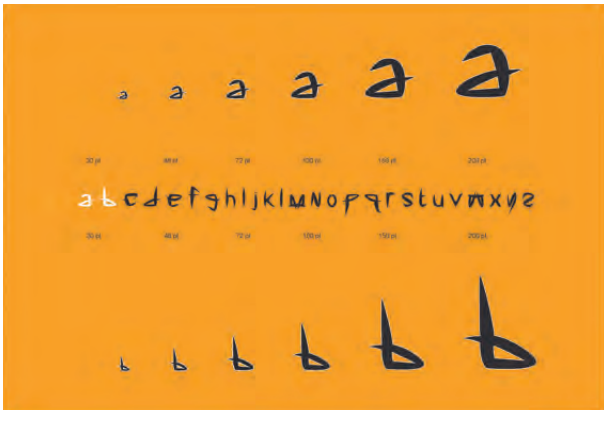
A digital artist and academic, Kurt Campbell makes typefaces. His interest in typography led him to found the Iron Age Font Foundry, through which he develops original typefaces based on African indigenous history.

PHOTO © KURT CAMPBELL

Kurt Campbell was born in 1978 in Cape Town, where he lives and works as a professor of art and design at the Michaelis School of Fine Art. He completed his undergraduate degree and postgraduate education studies at the University of Cape Town, before obtaining his Masters degree from Stellenbosch University, where he taught for four years. He is currently preparing a PhD in visual history at the Centre for Humanities Research. His academic interests include design history and theory, and postcolonial theory. He has participated in a number of national exhibitions and published articles on typeface design.

Cultural resonance and the heritage politics of South African museums, as well as the highlights of their collections, were the starting point in designing new forms of type. This *modus operandi* led to the selection of a Zulu headrest, antique furniture of Queen Anne, and the golden rhinoceros of Mapungubwe in the design process.

In terms of significations and associations, typefaces always play a larger signifier role than we might believe. In linguistic theory, even if the separation between "imago" and "logos" has been supported by Saussure and Derrida, among other structuralists, in practice this separation is an illusion. Johanna Drucker[1] succinctly puts this debate into perspective: *All the various activities that typography can lead to in producing values—pictorial analogy, emotional expression, formal iconic images of the liberation of linguistic elements resulting from traditional syntactical relationships—as the structures demonstrate, typography has the capacity to participate in the production of values.*



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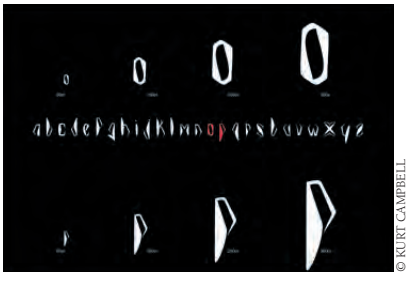
Mapungubwe typeface. Kurt Campbell. Screenshot.



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Kaggen typeface. Kurt Campbell. Screenshot.

The Iron Age Font Foundry uses artifacts and elements of indigenous cultural beliefs as a conceptual base for typography design with an interest in reconquering subjugated traditions, peoples and cultures. It attempts to express this by other means, directing attention away from the technical category of the appearance and toward the theoretical conditions of development. ■

(1) www.johannadrucker.com

MAPUNGUBWE TYPEFACE

The first typeface designed by the Iron Age Font Foundry was inspired by the ancient African city of Mapungubwe (South Africa), which was excavated in the 1930s. Of all the objects studied from the excavation site, the famous golden rhinoceros sculpture of Mapungubwe was the most influential in designing the typeface. Subsequent research regarding the discovery and excavation of the Mapungubwe site have revealed notorious omissions and silences in official and academic publications since its discovery. This suggests that the authors of Apartheid wished to retain their control of publications related to art objects of the Mapungubwe civilization, which perhaps witnessed all too clearly the rapid development of metalworking and agricultural industries before the arrival of the Europeans. The design processus required the designers to visit the museums that hosted the objects and study books and essays that illustrated the artifact with images and descriptions. In all the descriptions they read, traces recorded and comments received regarding the formal elements of the golden rhinoceros, it was the ears and the tail that most intrigued the observers. They are very delicate, well observed and refined. These dominant elements made up the main characteristic of the visual structure (ascenders and descenders) of the Mapungubwe typeface.

KAGGEN TYPEFACE

Kaggen is a major deity of the indigenous peoples of South Khoisan in Africa, often described as a big praying mantis. The Afrikaans name of the praying mantis bears witness to this heritage: Hottentotsgod, which roughly translates as "God of Khoisan". Each letter template was modeled after the pincher of a real praying mantis. Both the shape of the letters and the name of the typeface explicitly reference this history. Numerous stories related to Kaggen are included in the stylesheet that comes with the typeface to encourage research into the history and cultural beliefs of the San people. This project calls upon hidden cultures and works with histories and beliefs that were occulted by colonialism, which corresponds perfectly to the Foundry's design objectives.