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DEFINING THE UNKNOWN:THE ROLE OF PRACTICE AS RESEARCH IN ANIMATION

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Purpose: This paper seeks to establish clarity on the nature and structure of practice-based research (PbR) in animation studies. It is also an attempt to situate PbRdiscourse on research. The focus is on justifying PbR as a valid, rigorous methodology supported by clear pedagogy.

Methodology:Reflections from practice based research as well as desktop research was used to investigate methods of artistic and animation production as these demonstrate knowledge and the criteria/quality assurance measures to assess this knowledge in an academic setting.

Findings: Preliminary findings indicate that Practice based Research (PbR) is a relatively new approach for doctoral research within Kenyan Universities, where scientific modes of inquiry dominate. There is a lack of clarity around the use of PbR in animation studies at PhD level, and this affects the ways in which creative research outputs are understood. Further, it explains the dearth of policy papers on the evaluation of such creative outputs and innovations.
Practical Implication:The study contributes to our understanding of PbR as a valid research method in the arts and related creative fields in Kenya, how such research is carried out, evaluated and presented, as well as debunking the assumption that textual research as having more value than artistic research.

Originality: There is scant research by Kenyan scholars on PbR as employable to animation studies at PhD level. This paper contributes to discourse on artistic/animation.
Keywords: Practice based Research, material thinking, artistic research, Animation research

INTRODUCTION

While developing the PhD proposal, I arrived at a crossroad, attempting to establish an ideal methodology to undertake this study and realize the objectives. I was confronted with two primary choices. One, to use methods that are closely related to those used in the sciences. Two, to pursue a practice approach as a practitioner where visual materials formed a significant part of the thesis. The methods used in the sciences were somewhat foreign and presented challenges with regards to providing a methodology that reflects the practice of artists and designers. My impetus towards artistic inquiry, as echoed by Gray and Malins(Gray &Malins, 2004), was driven by a professional stimulus, to seek alternative ways of practice in animation for the purpose retelling of African orature in digital media. Such is the practitioners' desire to respond creatively to an identified research problem. Out of preference as a practitioner in animation, I settled for the latter to pursue a study that results in a practical output through practice, and where such practice informs the bulk of the research itself.

As an early-stage researcher, the decision to use my own animation work as the primary mode of inquiry prevailedas this would provide a more direct and firsthand approach as a practitioner than through solely relying on conventional sources of data. While the research

was largely experimental and empirical, this route is beset with challenges due to a dearth of guidelines on practice-based research and lack of policy documents on the evaluation of creative outputs. A stark contrast to not only the plethora of material in the sciences, but also to growing international discourse from as early as the works of Rudolf Arnheim(Arnheim, 1954)and Susanne Langer(Langer, 1951a) “who validated the cognitive aspects of the arts to large academic audiences and established the intellectual basis for approaching art making as serious inquiry”(McNiff, 2008). Cursorily, within the academic culture in Kenyan universities, this seems to imply a relegation on the value of practice-based research at doctoral level or simply, a lack of awareness on the potential of such an approach.

ANIMATION RESEARCH

Animation draws upon artistic practices such as illustration, painting, sculpture, choreography/performance, and photography(Callus, 2015)that are further extended by the affordances of emerging technologies that provide the potential to define new ways of working. This is facilitated by an ever-increasing range of areas that open up animation as a confluent medium of hybridization, where art, narrative, sound, photography, physical crafts, drawing and so many other processes can come together and stimulate cross disciplinary research in the arts and design, computer science and social science to advance animation research. Although there has been growing academic interest in African animation within the last decade (Azi, 2012; Callus, 2015; Ghazala, 2013), more studies are directed at the historical development of animation in Africa and few are directed at exploring through

practice, the creative opportunities of research though animation, that culminates in works of animation which allows for reflective practice.

My interest in animation is thus fueled by the wide-ranging methods of artistic practice and aesthetic devices used in animation, their employability in varied narrative contexts such personal narratives and a need to contribute to the scarce discourse of animation and expanded cinema from the African continent. At present, a lot of the research in animation is directed at computer graphics and computational technology to develop new narrative formats for animation and is largely carried out by technical teams from the field of computing using research methods that are well rooted in the sciences. Furthermore, a large amount of animation research is conducted by non-practitioners — scholars who contribute to discourse on animation as observers and are far removed from the actual production of animation work. In addition, quite rarely do we see animation being produced for research purposes and most texts on animation studies focus on animation production and animation theory, with little attention paid to connecting challenging theoretical ideas to practical work in a way that can result in new ways of working. Lastly, a common problem in animation research amongst practitioners seeking to engage in practice research is that practical approaches are limited to either recording animation techniques or studying their productions and seldom on the awareness of embodied knowledge and self-advancement in the process of making. This problem arises on the one hand from the wish of practitioners to use their creative practice in research, and on the other from uncertainty about the role of creative practice in

relation to the requirement for contributing to knowledge within research.

PRACTICE- LED- RESEARCH

In as much as individuals are driven to engage in research for various reasons, research in academia is sustained by a need to address a problem through an original systemic investigation to find things out, and/or to establish new insights (Nelson, 2013). While such a pursuit is not novel in the arts, it is only recently that labels such as practice-based research, practice-led research or practice as research have been ascribed to research in the arts. Nelson (2013) posits that these terms are likely to have come about as more artists started to pursue higher education at PhD level, and their practices began to be recognized as knowledge-producing. So one might be prompted to ask, how does an animation practitioner conduct animation (practice) research within an academic context?

To answer this question, it is thus useful to establish some understanding of the notion of research in the creative arts. Frayling (Frayling, 1993) in defining research in art and design points towards a stereotype among creative practitioners as to what research is. The R-word, as he labels it implies an activity that is a long departure from their practice. One that seems to be not only concerned with going over old territory (though creative pursuits are concerned with the new) but is also characterized with esoteric ideas and whose outputs are characterized by words and not by deeds. He further asserts that it is only recently, from the early 1990s, that government funding for higher education embraced the activities of artists, designers, and craftspeople as research.

Although describing the art and design research landscape in the UK, the international debate continues to revolve around what, where, when and why of the varied typologies of practice as research. For the practitioner as an animation researcher, these questions can be understood within the context of understanding the purpose of research. Frayling proposes three models in art and design, which have been contextualized in this study for animation research:

- Research into animation
- Research through animation
- Research for animation

Research into animation alludes to historical research, research on aesthetics, and research into the varied theoretical perspectives on animation such as economic, political, technical, and cultural. It is a straightforward inquiry with a considerable base of supporting models and procedures. A growing number of animation research on African animation, such as (Callus, 2015) revolves around this category.

Research through animation is a smaller category that entails a blend of studio work and a research report and entails either:

i. Materials research which refers to varied modes of making in either 2D or 3D animation;
ii. Development research where an animator can appropriate technology and use it for a different novel function such as digital photogrammetry to create hyper-realistic 3d models for animation;
iii. Action research which is characterized by reflective journaling detailing step-by-step experiments conducted in the studio with a final report (exegesis) serving to contextualize it.

The last category, research for animation, refers to research where the end product is the resulting artefact and the contribution to

knowledge is embodied in the artefact itself. The goal of research for animation is not immediately discernible through verbal/written means but rather visually, where the work ‘speaks for itself’. Because of this, its validity is often hampered by the lack of documentation of the research process that resulted in the artefacts in cases where the only evidence of the process is the ensuing artefact.

CHALLENGES AND METHODS OF REPORTING IN PbR

It is worth noting that Practice Based Research in academic work, is beset with challenges due to a dearth of guidelines on PbB and lack of policy documents on the evaluation of creative outputs. A stark contrast to not only the plethora of material in the sciences but also to growing international discourse from as early as the works of Rudolf Arnheim(Arnheim, 1954) and Susanne Langer (Langer, 1951b) whose work validated the cognitive aspects of the arts to large academic audiences and established the intellectual basis for approaching art-making as serious inquiry” (McNiff, 2008). Cursorily, within the academic culture in Kenyan universities, this seems to imply a relegation on the value of practice-based research at the doctoral level.

Studio-based or practice-based research can often be subjective, especially when the inquiry is of an artistic process in which knowledge is generated through action and reflection. This holds because what motivates the research process is personal interest and experience rather than objective ‘disinterestedness’ (Barrett & Bolt, 2010). This can also be attributed to the embodied knowledge

of the animator due to their being extremely close to the study itself while the sciences seem to favour a more distanced objectivity.
For animation research, another problem area pertains to methods of reporting and evaluating the work. This is not problematic in situations that use methods that are much closer aligned to well-established practice in Sciences and Humanities where traditional forms of writing pervade and are suitable and sufficient. For early-stage animation researchers, exploring appropriate forms of communication that are more accessible than conventional text formats are akin to making a massive leap into the unknown. This is driven by the absence of generally accepted approaches that take into cognizance what can be achieved.

One possible strategy for reporting is through a progressive experiential approach via a few achievable goals that eventually lead to something useful which provides ground for understanding the knowledge contribution of the artefact. While this is rooted in two educational philosophies, progressivism and constructivism, it is more apparent as a process in psychologist Graham Wallas' theory, The Art of Thought, where he outlines four stages of the creative process as follows:

1. Preparation: perceiving or identifying a problem.
2. Incubation: thinking divergently about the problem, making new links and associations.
3. Illumination: becoming aware of the novel possibility, a solution or interpretation.
4. Verification: checking and evaluating the novel outcome.

This progressive model typifies how animators work since they tend to focus on improving their craft or developing new techniques of working. It takes into cognizance the animators accumulated explicit

and tacit knowledge and encouragement of reflective practice. This is rooted in existing approaches to cognitive design theory, such as models for reflection for practitioners to examine their work. As stated below:

> “When a practitioner reflects in and on his practice, the possible objects of his reflection are as varied as the kinds of phenomena before him and the systems of knowing-in-practice that he brings to them. He may reflect on the tacit norms and appreciations that underlie a judgment, or on the strategies and theories implicit in a pattern of behaviour. He may reflect on the feeling for a situation that has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he has constructed for himself within a larger institutional context”.(Schön, 1983, p.21)

While few animators engage in such reflection for academic research purposes, a luminary example is the 1987 paper by then animator John Lasseter. The paper detailed the application of principles of traditional animation to 3D computer animation. This process resulted in the short, animatedfilmLuxo Jr which wasfirst presented at the 1986 SIGGRAPH. The film is regarded as a breakthrough in the animation medium, changing traditional interpretation of computer animation and exemplifies the animation practitioner working on academic output.

Regarding the evaluation of PbR in animation research, Elkins (cited in Nelson 2013) remarks that:

> “...the problem of evaluating creative-art PhD simply cannot be solved unless disciplines give up their shapes and readers step outside their normal interpretive habits: exactly what might make the new degree so interesting, and at the same time ensure it cannot be commensurate with other degrees.”

This implies that there is a mismatch in evaluating through the lens of traditional sciences and not evaluation from a practice-based standpoint in the arts and design. As observed by Schön(cited in (Nelson, 2013)) “we cannot readily treat (practice) as a form of descriptive knowledge of the world, nor can we reduce it to the analytic schemas of logic and mathematics”. As such, it is difficult to prescribe a process as constrained by a theoretical framework since theoretical frameworks are “based on a body of facts that have been repeatedly confirmed through observation and experiment”.

Lesage(Nelson, 2013) posits that evaluation of PbR study at PhD level “should focus on the capacity of the doctoral student to speak in the medium of his or her choice. If this medium is a film, or video, or painting, or sculpture, or sound, or fashion, or even if the graduate student wants to mix media, the assessment will require from a peer jury ways of reading, interpretation and discussion other than those required by a written academic text” (Lesage, 2009, p.145). This advocates for the presentation of works only, without a textual component as the requirement for a written supplement seems to infer a lack of confidence in the practitioner and in the capacity of the arts to speak meaningfully of its contribution to knowledge. In South Africa, for example, notable progress has been made since 2005 when the first forum was convened to propose

evaluation criteria for PbR. Some of the proposed procedure for evaluating submissions of PbR is as follows (Lesage, cited in Nelson 2013):

i. How does the product/process viewed relate to the framing (contextual framing document outlined by the researcher?
ii. Does it contribute to current practice and the advancement of knowledge in the discipline? How and to what extent?
iii. Does it reflect theatrical and/or dramatic accomplishment and a creative signature, relative to the specific nature of the project and its context?
iv. To what extent does the product and/or process impact upon the context, the discipline, or the viewer (scope/complexity/effect/affect).
v. Upon completion of the project, the researcher would then have to provide a self-reflection on the project as well as report on the reception of the work in the public domain.

Even though there seems to be no consensus on evaluation and quality assurance criteria for Practice-based research in countries such as South Africa, New Zealand, Australia and United Kingdom where PbR is generally accepted, existing quality assurance criteria typically range from exhibitions at national and international institutions, exhibitions at international festivals and biennales, publications in credible journals, patents and commercialization of design amongst others. Such criteria have drawn intense criticism because they tend to lean in favour of outputs that demonstrate commercial success, industry esteem and/or the perceived ‘quality’ of the performance orexhibition venue and exclude exhibitions of work at the researchersacademic institution.

PERSONAL REFLECTION

My practice as an animator began almost by serendipity. Although I had immense interest in the medium, my undergraduate specialization in Graphic Design did not provide training in working with time-based medium. Instead, my design training facilitated in gaining skills transferable to animation such as illustration and layout design, technical/instrumental drawing and colour theory. During my third year, I was fortunate to be in the employ of a local animation studio that partnered with a UK based animation studio to develop Kenya's first animated TV series, TingaTinga Tales. The series was based on traditional African folklore and visual style that borrowed heavily from the Tanzanian TingaTinga art style popularized by its founder Edward SaidiTingaTinga. TheTingaTinga art style is characterized by brightly coloured patterned landscapes that often include stylized animal and human figures. They are traditionally made using cheap art supplies including masonite and painted with bicycle paint which yields the bright hues. Elements including the patterned backgrounds and stylized animal forms inspired the design of the animal characters in TingaTinga Tales (figure 1, 2 and3). My training as a graphic designer lent itself well to my first role as a character designer and following in-house training at the studio; I quickly transitioned to Layout Design and Animation. During this time, the wide-ranging skills (from ideation to post-production) that feed into the practice of animation became apparent.

Figure 1: TingaTinga paintings (source: https://www.businessdailyafrica.com/lifestyle/art/A--Tinga-Tinga--Renaissance-at-Nairobi-Gallery/3815712-5068618-e6y6hu/index.html)

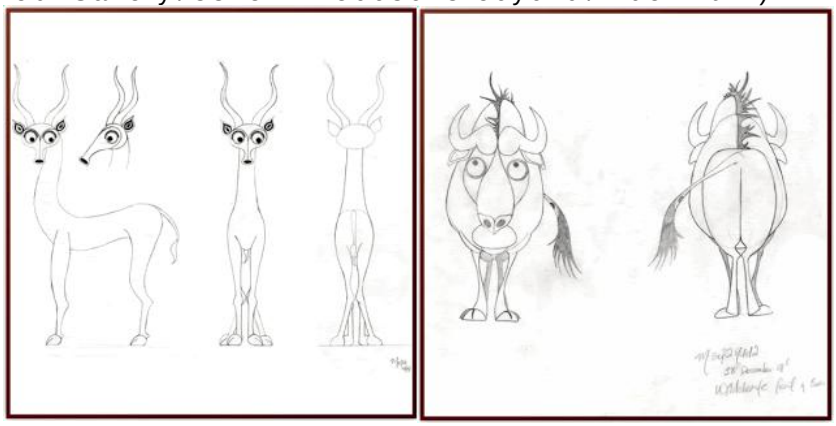

Figure 2: Examples of characters designed by the researcher for the TingaTinga Tales animated children's TV series.(source: author)

Figure 3: Characters from the animated children's TV series TingaTinga tales (source: https://iview.abc.net.au/show/tinga-tinga-tales)

Furthermore, I became aware of the different approaches by different artists and animators, which in retrospect, constituted artistic research. Artistic research can be understood as research in and through the arts to infer an investigation conducted by an artist, and where the artist's experiences and insight seek to improve the knowledge needed in the artistic process and production. The undertakings of animation encompassed a "systematic activity undertaken to increase the stock of knowledge", such as the tools, methods, work by predecessors and artistic approaches, and "the use of this knowledge to devise new applications" (OECD, 2003). As such, my practice and that of other animators, characterized by diverse forms constituted artistic research. Here was a process of deliberate inquiry including the methods, motivation, inspiration, reflection, discussion, formulation of research questions, conceptualization, implementation and evaluation, which provided ground with which to gain new knowledge and further engage with the medium.

Nevertheless, although my Masters' research work also yielded a practical animation output that formed the basis of the investigation on using animation to enhance learning amongst Primary school children in Kenya, it was my later collaborative projects using animation, creative programming, and interactive media that ingrained the idea of animation practice as a research process. This included the decisions made by animators, knowledge, experience and constraints that lead to novel ideas, influence and external inputs that affect the final production. Towards this end, I have engaged in the production of several experimental animation

projects that have been exhibited at local and international film/digital art festivals such as Space a Digital Art Festival(2016) and the NODE Forum for Digital Arts (2017). These projects form part of the reflection that build-up towards the final research example.

The main works that elicited the research questions in the PhD study that motivated this mode of inquiry, included a series of animated projects. The first is titled Zamani Yajayo,[1]which combined different animation techniques to give visual form to audio interviews. The second project was What the Fuss?,which is a 360° Video that draws its narrative content from Social Media posts. The third project was Mindscapes and Genesis,which incorporates traditional African dance. The fourth project wasAvenue of Baobabs (Anxiety!Anxiety!) which is a VR project presented as part of a larger performance piece. The fifth project was Nobody,which isa 2D animation based on a poem. These early projects culminated in the final project, a retelling of Song Lawino,which was implemented in VR using Virtual Humans.

Additionally, the research was situated within the milieu of digital art and film projects developed by creatives from or based in Kenya, that explored notions of nationhood and African futures. The works include: Who I Am, Who We Are — a process-based project that, as described by the project authors, “uses art and self-expression to create spaces and conversations for personal reflection on the themes of citizenry, civic responsibility, race, belonging, ethnicism and nationalism” with the resulting works including recorded

[1] Link to project website: www.zamaniyajayo.com

interviews and life-sized paintings called body-maps (Kuona Trust, 2016); the short film Yellow Fever, a mixed-media documentary animation by NgendoMukii that explores themes on the globalization of beauty, skin colour and race (Mukii, 2015). The other defining project that contextualized the study was the African Futures Festival held in which positioned several questions on what African futures will look like including how artists and academics imagine this future as well as the forms of narratives developed by African artists. In summary, my prior experience and knowledge in experimental animation are the basis of reflecting on the process of working with animation production techniques that cut across film and gaming technologies.

These animation projects served as a means to work within animation production techniques such as 2D rotoscoping, 2D hand-drawn animation, 2D digital cut-out animation, that the researcher was already skilled in. Further, the projectsprovided an opportunity to acquire new skills in the use of new technologies such as 360-degree video or Virtual Reality, and spatial audio in storytelling; and even borrow from other fields such as the use of photogrammetry and fractal geometry for 3D model creation. These production techniques/technical approaches are not exhaustive of all that is possible with the animation medium. Instead, they served as a representative sample of 2D animation, 3Danimation, and new and emerging technologies; to inform the discussions on the affordances of animation and new media technologies. Moreover, they enabled the researcher to make more informed decisions on the design and implementation of the digitization of the oral storytelling research example.

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