

Arts-based versus clinical research: two sides of the same coin?

Author: Artur Jaschke

Abstract

Research is crucial in order to move forward. Development as well as innovation, have for decades been products resulting from rigorous and focused research. However, while research comes with the glory of knowledge, it struggles to manifest itself in the wide field of the arts, calling for a re-definition and re-organisation of the term research, the methodologies used, methods and moreover the implications for culture, society, the arts and science. Exchanging methodologies and methods is the first step in creating a de-disciplined community, where art-based research and clinical research can co-exist and co-depend on each other. At the end of the day, research is the amalgamation of knowledge, innovation and development, induced back into the education of scientists, artists and practitioners to come.

Clinical research, the lab and arts informed applications

Research lies at the heart of knowledge. It feeds our natural curiosity to understand how things work and how to further develop them. Even though the word *research* is used interchangeably across several domains, it comes to a full stop when brought up in Dutch universities of applied sciences or universities of the arts.

Since the second half of the 1980's universities of applied sciences (including art schools) were given the task to conduct applied forms of research. Since 2001 these research responsibilities have been formalised in greater detail. This has led to the implementation of the so-called Lectoraat, which is a research organisation form that only exists in the Netherlands.¹ This however, has only taken shape in the past ten years, with more research questions originating from practise-based domains (De Graaf, 2016). Research conducted at universities of the arts or of applied sciences focus on problem solving which can be directly implemented, tested and evaluated in the 'field'. Critically speaking, however, the comparison between a university of the arts and the university of applied sciences cannot be made since the discourse, tradition and approaches seem fundamentally different (Sonderen, 2017). Formally speaking, however, both institutes do share the same research ethics, because they arise from the professional field and in turn, inform education and professionalization of future practitioners. Even though research projects as well as publications have increased in the past years, a huge gap remains between the research output of universities of applied sciences, of universities of the arts and of 'regular' universities of higher education. It is generally believed that conducting research lies in the hands of institutes of higher education (read: 'regular' universities) and requires besides practical facilities an "ivory tower to shout from." This attitude can not be further from the truth, however, even though we agree that the connotation surrounding universities remains one of an elite few, finding answers or solutions to the questions of the world. New generations of researchers, professors, and lecturers, seek alliances in institutes of practice-based research. While society has empowered universities to conduct research on their behalf, only little knowledge is being re-implemented back into society. This may be caused by the fact that results are too abstract, or not yet consolidated, or that questions were not clearly defined to be re-implemented. Universities of applied

¹ The international field of academia does not know the term lector as it is used in the Netherlands. Lector officially translates in English as professor, and not full professor. A full professor leads a research or theoretical chair of an accredited research institute or research university. In December 2017 the Dutch parliament decided, however, that Lectoren, when holding a position as associate professor at a research university, are given the *ius promovendi*, next to the full professors. This gives the lector the right to promote PhD research. The introduction of the lector took place because the Netherlands have stuck to the binary higher education system.

sciences were therefore more than welcome to come to the rescue. Questions answered here were required to have a close relation to societal needs and to be directly implementable in order to be tested, researched and analysed. Unfortunately, these institutions can only perform research on master level or through the “lectoraten” and therefore lack the power to promote higher order research on PhD level. The increasing amount of collaborations with universities make PhD research, however, possible from a practice-based perspective (Jaschke et al., in prep).

Research in the arts and beyond

Against this backdrop, art research, artistic research, design research or research through design, have bigger fish to fry. In arts-informed research, there is no clear definition of research as a domain specific and necessary entity to advance the field (cf. ArtEZ Ways of Research). Current research within ArtEZ seems to reflect more researching the researcher her/himself and how s/he - hopefully - critically reflects on society and his/her stand as an artist. This may sound harsh at first but is at the centre of arts education: the development of individually strong creatives, reflecting, though understanding societal needs and trends. Therefore, art-based research is reinventing itself, claiming a stand on the international stage, increasing the body of knowledge and re-define research within the arts (Bruggemans, Van den Eijnde, Lutters, & Sonderen, Manifesto of the Lectoraten at ArtEZ, in prep.).

To re-invent and re-define research within one domain, various domains have to be thrown into the mix in order to identify differences and to be able to address and – even more so -- embrace the differences. Sharing methods and methodologies approaches these variations, exchanging the blueprints of research, unique to each discipline. While research in the arts reflects on either the artist or a work of art within a societal context, research in a more lab-informed cluster calls for the creation of prototypes, interventions and/or applications which can be used, developed and changed for the need of somebody else directly benefitting from it other than the researcher or developer (Stuckey & Nobel, 2010). As the focus of the ArtEZ graduate school lies on three different ‘spaces’ where programs and research can take place, the lab-cluster (next to the hub and the studio cluster) is oriented towards this building of prototypes and experimental paradigms (Shah, 2017/18).

Against this backdrop, clinical research requires a fundamentally different set of variables to produce feasible results. Clinical research into the working of an intervention requires the interaction with (often vulnerable) humans, whereby we as researchers are consciously aware that we are administering an intervention to a person (like administering a pill). Therefore, we

have to understand and clearly define our aims and objectives as being able to comprehend different types of research or even epidemiological outcomes (Kao et al., 2008; Stuckey & Nobel, 2010). To do so, clinical research should be ethically approved beforehand by an external board, something which is uncommon in design informed or art-based research. Clinical research may thus share questions with art-based research, but they originate in a different professional context. Normality/abnormality, diagnosis, frequency, risk, prognosis and treatment receive a significantly different meaning when used within art research. Clinical or lab-based research investigates these problems, which are usually externalised to a client, and use interventions to analyse the cluster of psychological or physiological problems (Kao et al., 2008). Art-based research may view these in a more community-based context or fitting into the cultural or societal understanding, diagnosing or identifying of the *existential right* for art, its frequency to be effective, assessing risk for artists, observers and surrounding and maybe even make a prognosis of a possible impact or advocacy for change. In line of this argument, one may ask whether clinical research and the arts have to ask the same questions at all. But as will become clear, clinical research and art-based research do not only co-exist; they are co-dependent as well when taking music-based therapies and interventions into consideration (or any other art-based therapy). This co-dependence is rooted in the same initial steps of research: observation, association, causation, intervention (or artefact), and evaluation (Kao et al., 2008).

The Art of observation

Both as artists as well as clinicians we invest a lot of our professional time into the observation of either other art, our clients and patients or the trends and developments within our professional fields. Based on these observations we create certain associations and causations, which surely are not the same in a clinical setting. To exemplify this, let's take a step back in the history of neuroscience and neuropsychology. In 1796, Franz Josef Gall, coined the term and discipline of phrenology (Graham, 2001). "Although now regarded as an obsolete amalgamation of primitive neuroanatomy with moral philosophy..." (anonymous author, retrieved 12/01/2018) it was widely used among 19th century psychologists and psychiatrists and even far into the 20th century (Simpson, 2005). In short, phrenology focused on personality and character traits, by measuring the size, weight and shape of the human skull. Each dent in a skull or enlargement was associated with a specific personality type which, in turn, had caused these dents and/or enlargements. Even though fascinating to read,

with a smile here and there hard to suppress, phrenology is the most elegant example that association is not causation and vice versa: at least not clinically.

It goes without saying that any research or discipline shares both an intervention or a work of art as well as an evaluation. A clinical research will investigate an intervention, evaluate it and, accordingly, an artist creates an artefact, which will be evaluated by either the public, by the artist herself, or by a larger entity such as time. Additionally, the art researcher in the community or studio has the luxury to escape the careful selection of the audience, since the audience usually chooses the design or artwork itself. Clinical research needs whole selection procedures, bias eliminations, confounding factors, reverse causation, chances and hypotheses as well as thorough stratification, standardisation and statistical modelling to come to an answer about an intervention or product developed and tests on clients or research participants. This -- for some perhaps even inhumane -- approach to the clinical investigation of the arts is, however, necessary for the context that music-based therapies and interventions operate in: hospitals, care-homes, and community-centres for challenging youths; in short, a delicate and fragile population where ethical code is paramount in the administration of an intervention or therapy and in turn the investigation of the effect of such intervention or therapy.

However, looking at the arts from a different point of view and approaching it from the medical profession as a tool for training rather than for intervention, a beautiful symbiosis is born. Utilising the arts (in this case predominantly the visual arts) in medical education can significantly contribute to the training of medical professionals and their 'clinical eye'. How can medical education benefit? Shapiro, Rucker and Beck (2011) have investigated whether medical students develop better clinical observational abilities when receiving arts lessons evaluating and talking about works of art. 38 year-three students were divided in a medical group working with clinical photographs and paper cases, and a group working with paintings and dance. Whereas students in the clinical group could transfer their skills directly to the medical field (a phenomenon called near transfer²) students in the art-based condition developed observational skills *beyond* the required 'medical eye', such as emotion recognition, cultivation of empathy, identification of story and narrative, and awareness of multiple perspectives (Shapiro, Rucker & Beck, 2006). These skills may not be learned from medical education directly, however broaden the perspective of a health professional

² Near transfer relates to a domain specific cognitive ability, e.g. playing chess four times a week will improve chess skills of the player.

significantly, and therefore fall into the category of ‘far transfer’ learning; learning skills in one domain influences skills in an unrelated area. This process of unrelated skill learning shows that “...the interventions studied [both clinical as well as arts] were naturally complementary and, taken together, can bring greater texture to the process of teaching clinical medicine by helping us see a more complete ‘picture’ of the patient.” (Shapiro, Rucker & Beck, 2006, p. 263).

“A whole new world opened up for me: clinical research using the arts”

participant AIRs Lab cluster meeting, 2017

Approaching clinical research with an art-based twist therefore investigates a clinical problem or question from two different professional fields, co-depending on each other and thus amalgamating the expertise of two fields focusing on one object or client. Using the arts to train medical professionals in their observational skills is one example in how the arts can be used beyond intervention. However, this link is often not easily made.

The arts as well as the therapies associated with them are balancing on the edge between client well-being, policy making, effectivity, and insurance policies. Developing, testing and applying sound methods therefore is crucial to prove the importance of music in medical and care settings. It is the power of music-based therapies and interventions in the lab, in the clinic, in the community administered by trained professionals and researched by practice-based scientists, which more and more spring from the long heritage taught in the ArtEZ Music therapy, music and music educators community. For this purpose, hypotheses to analyse the exact problems and questions have to be on the one hand simple and concise and on the other testable and relevant. In line of this, sharing these hypotheses and applying them in practice, comes with the unwritten academic law of scientific publications (Tijdink, MacLaine Pont & de Jonge, 2015). As the pressure is rising and scientific publication becomes more important, although publishing itself becomes more difficult, there is the overall question whether clinical research has enough time to be implemented into the practical field at all. Since we continue to gather knowledge we have the urge to share it with the clinical field. Recent research by the Rathenau Institute (Tijdink, MacLaine Pont & de Jonge, 2015) concluded that in order to advance this field, research has to be implemented into everyday practice, something which is not done enough yet. This in turn holds the potential danger for stagnation of the field, which, however, is not limited to clinical research alone. It lurks around every corner of art-based research. A danger, which can be eliminated

through exchange, collaboration and care about the most precious singleton of humanity: knowledge in all its forms.

Using art-based research in combination with clinical research, respecting and understating possibilities and pitfalls in both of them will help us shift our understanding of what counts as evidence-based research and elevate the complexity and multimodality in creating new knowledge within the field of art-based therapies and intervention research.

To conclude, creating an artistic as well as a scientific output, where practitioners, artists, clinicians and researchers come together in a setting where potential and often unlikely allies exchange and share their knowledge, will not only excel research collaborations, but will above all, strengthen the pedagogic process for researchers to come.

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