



Proceedings of the
**Drawing Research
Network 2013
Conference /
Thinking Through
Drawing Seminar**

Teachers College - Columbia University + The
Metropolitan Museum of Art



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Simões | Research, through and from the drawing in learning context

Abstract

As the drawing can be an instrument of research and research?

We intend to bring to discussion some key points about pedagogy and research in drawing in the digital age.

Anticipating that digital paradigm has affected the teaching/learning relationships, as well as affected the access to information and communication. In the context of access to the communications network, we intend to identify possible changes that occur in teaching drawing when we introduce a pedagogical methodology also expanded it to the network.

Inserted in the context of technology and education, and taking as a basis for our study the discipline of drawing in your project function, that is while speculative language and illustrative of the idea, we present some examples of tools available to support b-learning, and how these can contribute to a more participatory and collaborative education even when it comes to teaching/learning which has a strong tradition in person such as the artistic education.

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Investigate vs draw

What do we mean by research?

How we to investigate?

How we show the research that is inherent in artistic perform?

These questions underline the importance of research as process into artistic field. In teaching/learning of drawing, that is the focus of our subject, understanding how our students are investigating and how they render knowledge sounds matter of great significance for our study that propose approach between net and drawing teaching.

Is not unanimous the use of the research word in the field of artistic knowledge. There are different positions. Research is usually associated at scientific issues and as such, seems not to be the term that best describes the process of learning and knowledge obtained through artistic practice. Could simply define the artistic research like the practice itself, however, we are not sure that is true in the context of teaching.

We began by clarifying the distinction we do between artistic research field, and who is investigating in arts. For us there are two different situations; research in artistic practice, and academic research. Have different objectives that result in different objects of knowledge. This approach based on Frayling proposal (1993) wants like the author's show the possibilities at art research. For Frayling¹ there are three possible kinds of research: research into art and design, through art and design and research for art and design. For this article we reflect through art and design research by intrinsic necessity that exists between researches, learn and teach in this particular case.

In this article want reflect about research through art and design by intrinsic necessity that exists between teach and learning drawing.

Frayling tells us that research for art, doesn't exist attempt communicate through verbal language, but rather, appeal the senses and the imagination to do the reading of this subject. Frayling refers to the object like outcome of the investigation.

In the context of teaching and learning, the contemplation moment that

¹ Division proposed by Christopher Frayling to define the possible investigations into art in *Research in Art and Design*. London: Royal College of Art, 1993. The author divides into three possible ways on how to investigate in art and design.

Research into art and design; where to fit the works of historical research, aesthetic, or other possible theoretical frameworks that if they wish to give to art and design.

Research through art and design; where fall most of the works that have as purpose to verify and understand the practice linked to the theory, not the external point of view the problem as in the case of research into art and design, but linking and contextualizing knowledge both with a single.

Research for art and design; research results on a subject. Where the main objective is not the communication through verbal language, but in the sense of call to cognition and imagination.

exist when we see and feel an object of art should not be the key point or important. More important than the result, is the set of procedures in the field of conceptualization and representation. From the point of view of teaching, research processes in the context of artistic learning are to be taken into account as part of the development of the student, their ability to absorb powers, in the multiplicity of ideas and ability to propose new approaches. It is precisely for this link between practice and result, which often becomes difficult to show the methodology used in the process of artistic production.

Taking as an example our experience as teachers, found that it is through practice, of doing, the accident, the errors, the criticism, the conversations with the teacher or classmates, the instruments used, among many other variables that students will outlining and giving substance to the project. Divergent thinking, as Robinson (2010) say on Conference "Changing Education Paradigms". Is the way of thinking with multiple answers rather than a single way, get different ways of interpreting the questions, think laterally instead convergent thinking are fundamental factors to creative thinking and usually present in thought of artistic process. Is non-linear organizational structure of the creative process.

As the example of how to think and work methods in the artistic field can be multiple and varied are the RSVP² Cycle (resource, valuation, performance, score) that Halprin drew in 60 years. A tool based on model that the process is directly involved with the artistic practice and in the creative resolution of problems. Is cyclic model, rather than hierarchical and linear, that emphasizes the persistence and the process, instead of the string and getting results. (Fig. 1 overleaf)

In the Halprin cycle the order is arbitrary. Don't exist one correct start point. We can enter through any point, and move us in any direction. The cycle can be repeated, overlapped or used partially. The sequence is quite variable, depending on the situation, artist and objective. As project methodology, the RSVP cycle does not intend to systematize and organize, but "liberate the creative process making the work visible process".

The closed cycle is an idealized situation. There are activities where the

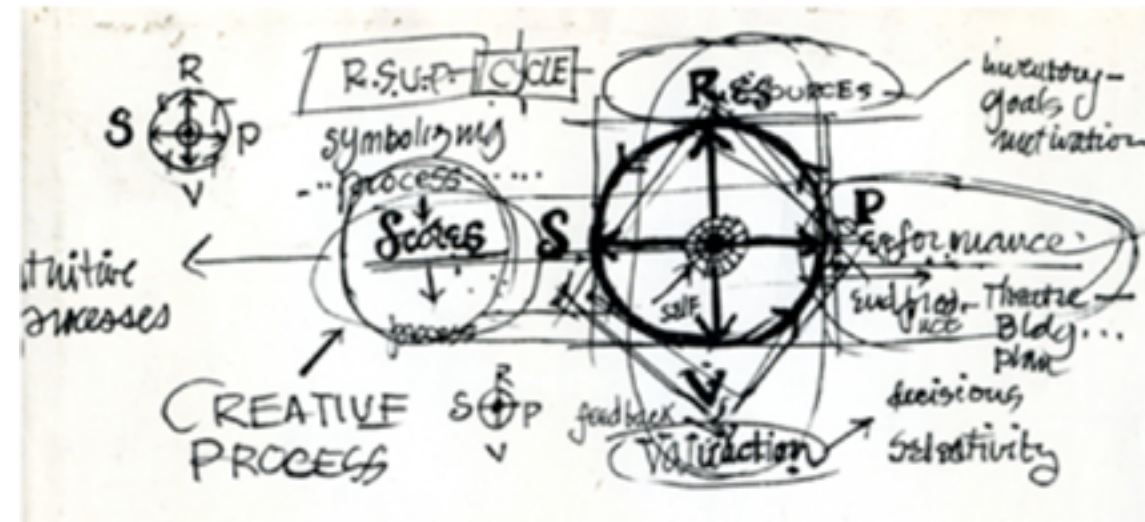
² [R] Is the initial to Resources (resources). That are kind of inventory that ranges from the human and physical resources, materials, space, the tools, the resources available, but also the objectives, motivations, needs, individual Poetics, etc, etc, etc.

[S] Refers to the field of Score (to count; pitch), which here is understood as representing an activity that will be develop for a certain period of time. That includes, scripts, sketches, notes, diagrams, notes, etc. These not only serve to describe or activate a process. It also serves to monitor and make visible the development of this.

[V] Designates the Valuation tools, emphasizing the sense of action (action value). Is the point of the cycle where the motivations and the initial resources intersect with the decisions. It is also at this stage to set out the possible alternatives to the process represented by the staff, and their validation.

[P] Is the initial Performance, or realization, and refers to the actual implementation of the project.

Fig. 1. – HALPPRIN, L. (1969). Front page of “The RSVP Cycles. Creative Processes in the Human Environment”



full cycle is not desirable. But this does not exclude the importance of knowing at what point we are in. As in any project, the key is to know where you go, not where it will arrive. If, for example, someone enters directly by Performance [P], is an improvisational situation, or the spontaneous response, is a vital strategy to channel creative impulses that might otherwise block (Halprin, 1969: 3).

The closed cycle is an idealized situation. There are activities where the full cycle is not desirable. But this does not exclude the importance of knowing at what point we are in. As in any project, the key is to know where you go, not where it will arrive. If, for example, someone enters directly by Performance [P], is an improvisational situation, or the spontaneous response, is a vital strategy to channel creative impulses that might otherwise block (Halprin, 1969: 3). The practice of drawing can be compromised with all points in the cycle, but it can also override the agenda (S) to (P); You can start with construction or performance, and from there to move towards task (S). This possibility of multiple starting points is strategy promoting the use of drawing on different fronts. Can be imaginary registers or representations through some starting place. The drawing can be present as a catalyst and language to think the project. That makes us think about what is really important in the context of learning if the result, or the process? How to build and develop creative skills our students? What are the mechanisms that we have to monitor and evaluate the research carried out by students?

How can we understand the mechanisms necessary for a more collaborative and participatory education, as we will find other mechanisms of feedback?

THE MEANING OF DRAWING IN THIS CONTEXT

Talk about drawing can be talking about an infinite number of possibilities involved with representation and realization, with the ability to project and materialization of reality constructed in the light of the context in which it operates. So in this item we dedicate particular attention to the meaning of “drawing” to stabilize concepts. A study of this nature requires particular attention to approaches that we want establish.

Before proceeding with the problems relating to the construction of drawing processes, we need to say a few lines, not on the definition of drawing, subject impossible parameterize, but on how the drawing can be thought on the context of this work. At the risk of limiting etymologically the meaning of drawing, leaving out other forms of definition, we find on Latin the origin of the word, that means produced on two-dimensional medium. This definition it is so short and synthetic that eliminates many of the important data to the understanding of the word design. The derivation and evolution of languages, contributes to different meanings of the word, as presents in his text Luís Martins on the etymology of the word drawing (2007).

There are several factors that contribute to the variety and ambiguity of the definition of drawing. The historical and temporal context, function, knowledge area in which it operates, the materials and the surfaces, are also conditions that affect the reading of which is drawing or not.

A closer approach of drawing meaning brings us to various fields of action, implying with concepts that are well beyond technical support issues. Considering the drawing as a framework and as a structure material, we can say that the drawing is the action of establishing knowledge, which has the obligation to give the body, form, show and make a public image. Drawing is in a broad sense, present, represent, make present, and make visible what speaks about drawing.

In fact the hybrid quality of drawing and his limits little defined, allows him the primacy for the visualization, driving and to opening the field to conflict between realization, knowledge and expertise. Nor all of the drawings have the same source, some arise from the need to demonstrating ideas, like notes; others have as purpose to solve the implementation

of an object, such as a sculpture or a House. The drawing in its procedural aspect has to accompany the thought, serving as an instrument of formation and verification of our records, as a means of identification and validation of the purposes. Another type of drawing appears as a necessity to produce new images in that registration and action of graphic production that are the result.

The drawing is not only the instrument through which we seek answers to the problems, the drawing is often thought visibility, origin of new issues, giving space to new knowledge, working as a “search engine”, which throws questions and tries to get answers.

Goes beyond the field of artistic knowledge the relevance of the image in relation to the thought and the imagination. Ferguson (2001) about the relationship between the thinking with images, “mind’s eye”, claims that most of the information that is thought is transmitted by drawings. Being that in engineering, as well as in architecture or design, areas in which the transmission of the message has to be made objectively, it is assumed also as a language able to translate and communicate the thought in image.

In initial form, drawing translates our imaginary into images without having to conform to a syntax or grammatical structure in which you can organize themselves as non-linear narrative, being however present a particular structure that may or may not be sequential and which may or may not be objective. Fundamental instrument to several areas of project, the quality that allows it to be the graphics environment and instrument with which form the world of ideas, to a world of presentation/representation, providing you with a performance over the centuries within the artistic, scientific and theoretical exploration that distinguishes it from other art forms.

Is one of the most crosscutting disciplines and through its flexibility, one of the most requested artistic practices by other areas. This is how art throughout history and continues to be a reality present today. This field of action, which operates with lines, stains, pictures, ideas; This possibility of doubt, the simplicity of means that need to take place, the effectiveness of graphic registration promotes the close relationship between thinking and doing. It is in this territory of confrontation, crisis, boiling, that through the design and develop ideas, we reject and approve other, that we have the drawing as the election. As Bismarck tells us (2001: 55):

‘ This space that lies between the idea and its image this space works the idea, that the rewrites, which puts in evidence the make, which calls and puts in the past and the future, the known and the unknown, the knowledge and recognition, tradition and new, graphic languages, its conventions and its limitations. This is the space where the drawing is done, this is the operating space of the drawing, the drawing if resolves.’ (free translation)

That is why we understand drawing as having a primary role as curriculum in teaching artistic discipline. As an instrument that mediates graphically and makes expand visual thinking. Has the availability of foster and develop critical reflections on the process itself and the educational role instrumental in developing critical and creative. Like Molina says, using Nauman words (Nauman .1991, apud. Molina, 2006: 44): “draw is equivalent to think”.

This statement that teach drawing is teach to researching, to doubting and asking, are not always clear. Referring to the problem that equates the relationship of language with the thought: is the language prior to thought? Is the language of thought? Coexist in the same plane? Is the language the domestication of thought? The drawing, risking his understanding as non-verbal language, understanding symbolically language as translation of an idea, which embodies in imaginary image through graphics, that is before any thought and other times it happens at the same time, and can explodes with stipulated standards and models.

In fact, the visual thinking begins not with the design on paper, but with the view. This first phase, which contrary to what we may think of does not depend on our ability to draw, but our ability to see though consciously or unconscious, see, is by itself an act to organize and establish relationships.

Also here in the territory of the communication in which the drawing is vehicle and language of visual communication, how greater is our proficiency greater will be our ability to communicate. To paraphrase Wittgenstein (2002) the limit of our world is the limit of our language. Visual thinking: see, to understand, to imagine and to present, in the process of drawing while non-verbal language, times when the realisation and the representation arise simultaneously and intuitively, where exist a close relationship between the thinking and represent is difficult follow the student projects in a collaborative context. Like Halprin proposed on RSVP Cycles.

Practice-based research

Research that develops along a process that involves practical skills finds

in this same practice its sustainability. Is commonly what we practice-based research, or reflective practice, action reflection or terms that we can find developed in Schön (1987).

In practice-based research, the relationship that is established between the do and reflection are inseparable. How can we think about a practice that does not exist, how can we opt for this or that way support our path is blank? How can we come in with our own ideas or even test our technical skills or abilities of representation if not executed? So, we are convinced that there is no other way to learn than by doing.

On the basis of procedural knowledge of Ryle (1949), in which the knowledge describes the operation, we would like to emphasise the importance of fundamental to the acquisition of knowledge in the area of artistic education. Where activities such as exercise, sense, test, cut, clean, etc., contact with the practice, leading to the acquisition of knowledge and skills that sedimentation over time are being automated so that the process becomes more fluent. However, the automation of the practice, that we understand how the domain of language may become counterproductive if not accompanied by a critical trial, we might be create a sustainable practice in the uncritical repetition of templates.

We found through our teaching experience that students who have greater proximity with practice, in this case the drawing practice, are more autonomous, they risk more in new compositions and new representations. If on the one hand, the repetition generated by the exercise and repetition of tasks can assimilate knowledge by another way can create the risk of a certain automatism at production if isn't being accompanied by a reflection and critical sense.

In the case study by Weisberg (2004) centered on the understanding that the practices and the exercises are directly connected to the ability in creative answers conclude that there is a clear relationship between the exercise and the expertise in the specific field of practice.

This survey that analyses the path of ten artists in the field of fine arts and music, over a period of ten years, shows also that ideas involved on resolution of some of problems are brought from previous reasoning processes and when incorporated in other contexts they are the solution.

Similarly, we can say that the practice promotes innovation and experience allowing the resolution and activation of new creative problems that are in the know, in the knowledge their own validation. Transposing the problematic for the individual ball, Weisberg (2004) concludes that an individual creative and other less creative use both your knowl-

edge to deal with the situations with which they are confronted. The big difference between the two lies in the level of knowledge they have and that is reflected in the way these give the answers.

An individual circumscribed to a kind of knowledge is limited to a small universe of possibilities, giving responses typically little varied and very similar when faced with different problems. While an individual with a wide and open knowledge, has more chance to have a set an answer differentiated and consequently more productive. How larger and varied is the knowledge, combined with the ability to relate and cross information, the greater the possibility to produce innovative and creative knowledge. This element is fundamental if we understand that the ability to understand and produce knowledge accompanies us during life, whether as professionals or just as people.

TEACHING OF DRAWING IN THE CONTEXT OF THE DIGITAL SOCIETY

Unlike the century in which he lived Ruskin,³ 21st century isn't the century of letters written on paper placed on the mailbox waiting to being taken to your recipient. Neither support and instruments are limited to direct means of expression such as paper and pencils.

We live at a society that evolves from text to Hypertext (Dias, 2000). Our time, the Hypertext, is the moment of the interconnectivity of devices, which enable digital communication from one to one million around the world and almost instantaneous. A world based on electronic communication, networking, where the elements re several: pictures, sounds, videos, all available at a distance of a click.

We note that the democratization and ease of creation of multimedia content are creating new elements of sharing that are expanding the networking of knowledge. They changed paradigms and behaviors of socialization. They are being promoters for other forms of search and share information. All this, because we found on networks a way to share and find the most varied types of information and ways of communicating.

It was in this environment of technological expertise that teaching found space to enjoy and take ownership of tools available on the Web 2.0 increasing and encouraging students in the exchange and sharing of knowledge, making the process of learning more dynamic and collaborative.

³ John Ruskin (8 February 1819 – 20 January 1900) was the leading English art critic of the [Victorian era](#), also an art patron, [draughtsman](#), watercolourist, a prominent social thinker and philanthropist. He wrote on subjects ranging from geology to architecture, myth to ornithology, literature to education, and botany to political economy. His writing styles and literary forms were equally varied. Ruskin penned essays and treatises, poetry and lectures, travel guides and manuals, letters and even a fairy tale.

These complex rhizome systems of links, very similar to the way of creative human thinking, as tell us Lévy (1990: 51), are particularly well suited to use in education. On the one hand, we have the possibility of individual participation and involvement in the acquisition of knowledge, on the other, the non-linear interactive features offered by interactive media encourage exploratory attitude amplifying critical and creative development of the student.

Most of our students were born after 90 years, decade in which digital devices and communication were being already implemented, for this generation that born with digital devices is normal being connected with world all the time.

The “digital natives” as the label and describe Palfrey and Gasser (2008) are young adults who developed and grew differently from ours, these were already connected on net. Are young people who communicate through mobile phone messages, that read and see the news on the computer and which more easily go to Google or wikipedia than go to the library.

It is important, us teachers to be aware of this reality. As Dias says (2008), the development of technologies, editing and sharing on the Web was the way for the construction of the change in design and organization of social networks, but not only, is also the way to organization from specialized knowledge networks where we can find room to discuss and develop knowledge.

Not only teaching and informal learning find here a place that focuses on discussion and sharing. The formal education also can to a certain extent find way to expand to the network.

Although we being promote the integration of information and communication technology, as of LMS (learning management system) on the models and practices in higher education, these practices are not yet vulgarized in the context of formal education. The “mismatch between formal education and the tools available on the web 2.0” (Eça, 2011) are a reality. The author, when referring to this mismatch, not says as according to an instrumental vision of the technology, but rather as an important means in education, pointing the Internet as person in charge of the new paradigms of teaching. Arguing that the digital is critical to student involvement in carrying out work in creating strategies that the approach of the willingness to learn, the expansion of autonomy, critical and creative direction.

According to the assumption that technology is a promoter of other teaching/learning paradigms, we propose as theoretical thought of

William (2005) who makes a reading of the importance of technology intrinsically linked to practice and the needs of the social subject, approaching from the perspective of social constructivism that we consider to be the epistemological model that best fits the approach of the problem.

For William, the technology is not being limited to artifact, to the instrument. If we search in the Greek origin of the word *techne*, means the craft, and *logos* meaning knowledge. It is understood that technology is a term that involves scientific and technical knowledge of tools, processes and materials created and/or used from such knowledge. The very meaning of the word implies a relationship between practice and knowledge. Assumes, therefore, the existence of a community active and constructor of their own interests.

Thinking about the issues of technology with a view to promoting other forms of participation and collaboration, these are only possible, if there is the need to use. We believe that only through their integration into pedagogical practices and propose other models and forms of communication, we will allow the educational system based its principles while respecting the individual’s growth as an organic process, promoting the conditions necessary for a critical mass capable of producing growth and creative.

As Robinson tells us (2010: edum) “we have to change metaphors. We can’t be more linked to an industrial model of education, based on a process of linearity, and normative.”

The experience has taught us that the artistic education is not at all a linear education. It has operational characteristics and dynamics learning that promote divergent and lateral thinking that makes expand the creativity of knowledge produced in practice/ reflection.

Because drawing learning have characteristics close from operative and experimental practices, exist a close relationship between students and teachers. On the one hand, we know that the arts education model is traditionally a face-to-face model, where the monitoring of work processes is based on a teacher/student relationship close and frequent.

However the transformations that happen in the world are not outside the reality of teaching of drawing. There is a social and economic context that points us in one direction, hence the relevance of ask what is happening inside of drawing with the new education curricula, with digital technology increasingly implemented, in which images, live and proliferate in a way never before possible, because they are no longer

tied to the physicality of the support, living in space, network access as both democratized in the disclosure.

The fact that the images pass to another dimension, virtual dimension, of the binary code, Immateriality, creates various possibilities that consciously or unconsciously certainly will have be effects on how we relate with them, changing not only the ways of doing, as well as to imagine, because our imagination is also influenced by imagery context where we operate.

Convinced that technology promotes distinct behaviors and attitudes of so-called traditional means, by the possibility of immateriality we propose a reading of this subject centered not on technical demonstration, but, in reading the technology as a means, an extension that allows us to reach other points, the other answers to other solutions and intervenes in the process and the results, because no means is free, invisible or inconsequential. We reiterate the subject centered on technology as a means, as a vehicle for the realization of an idea and a speech.

Technology as a tool although could be subject of study in this context only interests us in the sense that is responsible for the proliferation and production of other images. It is understood that there is no difference in the ways of doing and operate in what is the drawing itself. To understand what we mean, by way of example a sketch is always a regardless of whether drawn on the iPad or sheet of paper. What distinguishes the tracing of another way to draw, is its ability to register through a graphic image, man-made form and not the instrument or the support in which it is held.

The contextualization is intrinsic to research in own methodology, we do not understand the isolated phenomena, but being contextualized in time and space.

Following this line of thought, drawing as practice and instrument is also a result of a past and a present of a context where tools and holders can change and create other possibilities, new forms of transposition of reality where there could be new models, both to represent and teach.

A pedagogical methodology that can integrate practices in order to implement the knowledge through time and in time, in contemporary times, as tells us Agamben (2009: 18). To understanding the habits that are changing our perception and representation are affected and affect the practice (Riley, 2008: 157). This consciences is one of the main functions of the drawing as a discipline in the artistic education programs.

The issues of teaching and learning, according to the current westernized society of technological framework, that supports the need for methods and pedagogical practices related to the social and temporal context (Riley, 2008: 157) assumes that in order to understand the world it is necessary to interpret it in the light of contextual meanings in time, in space, in knowledge and in accordance with the territories.

Mentioned earlier that the drawing has certain qualities and characteristics depending on the historical context and temporal, like their function, how it operates, of the materials and media that uses. Drawing is one of the possibilities to understand the reality contextualized in time/space and consequently making the interpretations of a reality that if you want to submit and materialize today, in which the speed of technological change and its absorption by the society turn on the paradigms originating new ways of doing and thinking.

Against this background, the teaching of drawing, have to be open to this reality and questioning yourself about current models of representation and therefore, about current educational models. In fact, as in art history, demonstrates with testimonials about the responsibility of drawing into thinking and questioning the installed templates, causing with this way of thinking changes and represent the conceptualization of reality.

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