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Ways of talking about drawing practices

Sociocultural views: Gombrich and visually controlled drawing

Abstract

In this article, I explore how part of the culture historian professor Ernst Gombrich's vocabulary can be used in two examples of today's drawing processes among children (age 9–12). His terms are related to their possible theoretical origin and placed in sociocultural understandings of human activity—and contrasted with other possible useful terms in a drawing-teaching context. How terms can encourage various teaching practices is then discussed.

Keywords: sociocultural theory, drawing teaching, concepts, Gombrich, visual controlled drawing

Introduction

The words we use are very often part of concepts, or ways of thinking, that lead to various practices. In the field of drawing teaching, this is also the case, so in this article I will shed light on the need for us as educators in the school-subject art and crafts to sharpen our curiosity about and awareness of the various theoretical origins vocabularies in drawing teaching might have. First, I must acknowledge the vast contribution to the debate on the philosophical and theoretical mysteries of visual expression made by such giants in the field as Rudolf Arnheim (1954/1974/1984, 1962), Brent and Marjorie Wilson (1977; Wilson, 2004), Victor Lowenfeld (1947/1957/1979), Kindler and Darras (1997), Willats (2005) and not least Ernst Gombrich (1960/1992), to whom I will refer throughout this article. These theorists propose possible answers to significant and eternal questions, such as, is the making and understanding of human visual expression individual-centered or culture-centered? They developed such terms as configurational signs, programs (Wilson & Wilson, 1977), initial imagery, iconicity level, hyper-generic tendency (Kindler & Darras, 1997), and drawing systems (Willats, 2005). These terms belong to larger paradigms of thinking and represent major contributions to the understanding of drawing development, and thus, the terms deserve to be presented and discussed in separate articles.

During the research process leading up to my doctoral thesis, I delved into the field of drawing, looking closely at seeing-drawing processes among children between 9 and 12 years of age. One of my aims was to see if I could contribute to the development of terms for characteristic processes among the 9- to 12-year-olds while they were drawing, based on a Vygotskyian theoretical platform of reference. The underpinning of this exploration was an informal hypothesis; Victor Lowenfeld (1947/1957/1979) established concepts such as preschematic stage, dawning realism—closely associated with Piaget's preoperational and concrete operational stages and his use of the concept of scheme (1936/1963, 1962, 1973), which was, in my opinion a reason his terms were understood and caught on. The terms were part of the concepts he communicated, and led to a change of practice in art education. My perhaps premature assumption is that if we want to continue to develop art education, and specifically the field of drawing education, we need to find terms reflecting concepts (here understood as larger understandings leading to practice) closely linked to theoretical models (Gudmundsdottir, 1991) already established in pedagogy, the science of education. In this article, I focus on a sociocultural theoretical model.

One of the earliest contributors who can be interpreted as having a sociocultural understanding of picture making is Professor of Art History Ernst Gombrich. In this article, I focus on part of his input and compare this with my own terms or “tryouts” in an analysis, specifically looking at his use of the terms *formula*, *scheme/schema/schemata*, *correction* and *visual control*, and the categories *medieval* and *post-medieval art* found in his major work *Art and Illusion* (Gombrich, 1960/1992).

This paper presents a new perspective on Gombrich’s ideas (see also Cunliffe, 1998; Michl, 2009) seen from a postmodern sociocultural point of view with Vygotsky as the main theoretical reference (Vygotsky, 1978, 1995, 1997). Vygotsky’s theoretical ideas were not as well established and acknowledged during the 1960s, when Gombrich (1960/1992a) wrote on this topic, as they are today. Therefore, I present a postmodern constructivist theoretical framework and part of Gombrich’s theoretical legacy in light of sociocultural theory as part of this theoretical framework.

This article advocates an understanding of the history of picture-making and how and why pictures were made and are made today as mediated activity in context. My use of the terms *the visually controlled drawing process*, *drawing genres*, and *internalized observation* (Frisch, 2010) are selected and presented as nuances of Gombrich’s above-mentioned terms (*formula*, *scheme/schema/schemata*, *correction*, *visual control*, *medieval*, *post-medieval art*). I do not see my terms as better, but as perhaps more closely linked to the vocabulary of a sociocultural understanding in education. I will then use these terms to outline an understanding of what is transpiring in two analyzed examples of seeing-drawing as teaching and learning in today’s drawing practices. The discussion will then elaborate on what the use of these terms as part of concepts might make us see, understand, and perhaps even do (Engeström, 2000).

Below I will begin by presenting the broad theoretical picture, where sociocultural theory can be seen as part of a wider theoretical chart. The wider theoretical picture is also presented as a reference for the terms to be presented. I have then chosen to provide an introduction to Gombrich and his interpretation of art making (including drawing) and, more specifically, his use of the terms mentioned above.

Theory

Post-modern constructivist sociocultural theory

According to Postholm (2005, pp. 20–21), we find three major paradigms for understanding the world, the ontology, that are relevant to education research. Placed on a scale, cognitivism is at one end and positivism at the other, with different “shades” of constructivism as a third paradigm in between these opposites. Sociocultural theory can be placed in the paradigm of constructivism, but is closer to what Packer and Goicoechea (2000) define as nondualistic theories, seeing the “mind” as part of the “world” as opposed to the dualistic theories that see the mind and the world as separate (Packer & Goicoechea, 2000). Piaget’s (1936/1963, 1973) schemata theory, closely followed by Lowenfeld’s developmental schemes (1947/1957) in the field of art education theory, are examples of theoretical glasses with a weaker emphasis on the unity between the “mind” and the “world” within the constructivist paradigm. When we examine the teaching/learning of drawing, the main assumptions in these theories within what Prawat (1996) labels modern constructivism are based on the biological development of brain functions, although today’s modern constructivists give culture the role of creating variations in expressions within the main defined frames provided by biology (Golomb, 1992). This path within the paradigm of constructivism, labeled modern constructivism, differs from postmodern constructivism, where we find sociocultural theory (Prawat, 1996).

Sociocultural theory’s core contribution, in my opinion, is the understanding of the mediating aspects of picture-making and drawing processes. One of the most important

contributors to what we today call postmodern constructivism as part of the constructivist paradigm in pedagogy, or the “third way,” was Lev Vygotsky (1896–1934). This third way is the explanatory space for human development referred to by Kozulin (Kozulin in Vygotsky, 1997, pp. xi–lvi) in Vygotsky’s work *Thought and Language* as “constructive principles of higher functions,” and explained as developing and taking into use signs and tools, the core understanding of “higher functions.” These higher psychological functions are seen by Vygotsky (1978) as mediated activity.

These Vygotskian concepts, as presented by Cole (1996), explain the term culture as the synthesis of all tools and signs labeled as artifacts (Cole, 1996) that are available to a group of people. The term “signs” includes verbal language and pictorial language. The term “artifact” then is explained as the aspect of human existence activated when man interacts with his physical and social environment. All human activities involving artifacts are mediated or indirect (Vygotsky, 1978, p. 54). If we examine drawing from this perspective, the pencil and paper are historically and culturally developed tools or artifacts used by humans in the mediated action of drawing, which means interacting with the social and physical world.

According to Vygotsky (1978), learning takes place in a social context where language and dialogue play an important role in the learning process. *First*, we have experiences in an external social setting, in cooperation with other people on the inter-mental plane, or situated in a social context (Cole, 1996; Lave & Wenger, 1991; Rogoff, 1984). Through various processes and reconstructions, we then individually *internalize* these experiences on the intra-mental plane. The social aspect, that is, context, comes first, and then learning can take place within these contextual boundaries.

Internalized observation and drawing genres

When describing visually controlled drawing processes (for a thorough definition, see below) where the presence of a model has been an essential part of the process and the making of the drawing is then internalized as a process (Vygotsky, 1978), I have used the term *internalized observation*. The drawing has then been internalized and can be drawn accurately “by heart” without a model being present, but still is a product of visually controlled drawing.

Genre is understood as the characterizing of different types of accepted and common styles of communication within a community or a context with a specific structure to suit a specific purpose, such as an academic speech genre (Bakhtin, 1986). Bakhtin is a theorist often referred to as part of the Russian third renaissance, where we find other sociocultural theorists, such as Vygotsky, Luria, and Leontiev. *Drawing genres* are understood as types of drawing developed in different historical and contemporary contexts, such as the still-life genre(s) in formal contexts (in school), and the line model drawing of icons, such as cartoon figures, found in the genre(s) of visual popular culture.

Visual control and visually controlled drawing processes

The visually controlled drawing processes are understood in my research (Frisch, 2010) as the drawing acts directly controlled or guided by having a model that can be looked at. The drawing is made by visually controlling or visually checking the drawing compared to the model in a direct ongoing seeing-drawing process to master the visually perceived model as a drawing. This includes looking at someone drawing and using other drawings and drawing structures or strategies as models. Gombrich also used this term (presented later in the article). This is our cue to look deeper into Gombrich’s theory and his use of the term *visual control* in connection with the formula “scheme and correction.”

Gombrich and theory

Gombrich's trademark when investigating picture-making was using relevant alternative sources, such as letters and books on didactics in drawing, in addition to using his immense knowledge of history and specifically art history (Gombrich, 1960/1992a). He also *trespasses* (the term he uses himself) into other fields of knowledge to understand pictorial representation as a human activity. He is especially interested in the science of understanding how humans use language in general. He also uses sociology and science theory, and is interested in psychology, especially focused on perception, that is, how we filter the world as humans, visually, auditively, and psychologically (emotionally and cognitively) (Cunliffe, 1998). He mentions the Swiss pedagogue Jean Piaget (1936/1963, 1973) and early Jerome Bruner, Goodnow and Austin (1956/2003) as theoretical sources (Gombrich, 1991/1992b), but insists on not being an "ism," here referred to by Lepsky: "There is no "ism" connected to my name. I have never pledged myself to one theory . . . My ambitions were limited to not write any nonsense" (Gombrich as quoted by Lepsky, 1991, p. 9 in Cunliffe, 2010, p. 5).

Even though Gombrich most likely would not have approved of the exercise used here, as a theorist, he also communicated a point of view. The above encourages us to look into Gombrich from a theoretical perspective, in other words, placing him on the scale of paradigms of understanding the world. Gombrich's project, according to L. Cunliffe (2010), associate professor in art and design at Exeter University, was to look for new ways of thinking to create a more satisfactory understanding of the *mind* in the history of image-making. He then does this within the paradigm of socioconstructivism. Socioconstructivism is then defined as an ontology focusing on the social, cultural, and historical settings humans live within. These aspects, crucial to our understanding of ourselves and the world, are close to the previously presented postmodern constructivism (Cunliffe, 2010; Postholm, 2005). Socioconstructivism as an understanding of the world will then emphasize the collectiveness of people living in the same context; they will have more or less a common understanding of the world or a common mind and a common language, for example, common ways of depicting the seen.

To support Cunliffe's point, I refer to Gombrich's presentation of the paintings of Lake Derwentwater in England by the Chinese tourist Chiang Yee in 1936 and an anonymous, most likely English painter from the 16th century (Gombrich, 1960/1992a, p. 74). The Chinese scheme of landscape drawing is clearly shown as a contrast to and different from the more Western-oriented landscape scheme, giving two distinguished cultural traces (in time and place) of the same landscape.

Gombrich did not agree with the understanding of art history as evolving from the primitive to the complex. He rather advocated that the function of art should be understood—again understanding art in context—historically, socially, and personally. This is also why social-constructivists (see for example Cunliffe, 1998) have understood and found an echo of this paradigm in Gombrich's way of seeing art as mediated artifacts developed by and available to a group of people, as a collective, social enterprise. This brings us to a brief overview of Gombrich's theory and his understanding of the terms formula, scheme/schema/schemata, correction, visual control, medieval art, and post-medieval art.

Gombrich's theoretical toolkit

Gombrich explains his drive and motivation for studying art history and the teaching and learning of drawing as guided by his research question: "Why is it that different ages and different nations have represented the visible world in different ways?" (Gombrich, 1960/1992a, p. 3).

An important finding from Gombrich's search for an answer to his research question, thoroughly discussed by Jan Michl, the Norwegian design historian at the Oslo School of

Architecture and Design, lies in the quote “living people (as) responding to certain expectations and demands” (Gombrich, 1999, p. 48 as quoted by Michl, 2009, p. 275), where I interpret the essence of this quote to be that *context* is the key to understanding the making of artifacts, such as drawings.

If the context is unknown or not understood, the visually expressed form cannot be understood. Function is a concept embodying cultural, social, and personal aspects of the making process, according to Gombrich, and the closer you get the more you know. He is the first to admit in a humble way that inquiring into art history as cultural history gives him methodological problems, as he states in his essay “Watching Artists at Work: Commitment and Improvisation in the History of Drawing”:

The first thing a historian learns is to resign himself. There is so very much that we would like to know and will never know. But even without having been present, we are sometimes able to infer from the evidence of sketches how the images we know emerged from the artist’s hands. (Gombrich, 1991/1992b, p. 92)

Gombrich is humble here because he acknowledges *presence* as the most likely way of understanding a situation or a process. Again, I interpret this as an emphasis on context. But as he is not able to travel in time, to experience the context, he has to settle for a method based on reconstruction of the context, using multiple sources to grasp as much of the situation as possible. In retrospect, he tries to find possible markers in the context that will explain the forms of the artifacts.

Formula, scheme/schema/schemata, correction, and visual control

Let us continue to follow the line of thought of the context-minded culture historian Ernst Gombrich. He claims that the common denominator between the symbol and the object being symbolized is not mainly the external form but the function. As in Vygotsky’s play theory (Vygotsky, 1978), the symbol or the painting/drawing can give us the same experience as when looking at the “the real thing.” The artist is working on making a plausible match just as we as an audience are working on making a match (Gombrich, 1972/1979), and in this process, a culturally developed and learned formula is used. This brings us to Gombrich’s use of the term *formula* (*formel* or *mønster* in Norwegian).

The term formula is used in different ways and is found in Gombrich’s chapter on the topic in *Art and Illusion*, and is mentioned in his *The Story of Art* (1972/1979, p. 23) and other works. Gombrich uses the word formula in two ways, as he writes about “the dry psychological formula of scheme and correction” (Gombrich, 1960/1992a, p. 148). Thus the term “scheme and correction” is a formula.

However, the scheme/schema/schemata can also be a formula, for example, when he refers to the formulas for a child’s head, a tree, and so on (Gombrich, 1960/1992a, pp. 142–143). These formulas are visual models, scaffolds, or patterns on how to make a drawing of a child’s face. They are general models to be interchanged and corrected according to the particular visual experience. It seems that Gombrich’s mind and eye are looking for the formulas or the schemata. As he says, “It matters little what filing system we adopt. But without some standards of comparison we cannot grasp reality” (Gombrich, 1960/1992a, p. 151). The scheme or formula comes first, that is, the standard for reality. Then we compare these standard forms with the seen or remembered by using a visual experience based on memory or direct visual experience, what Gombrich refers to as correction. I have chosen to use Gombrich’s term scheme/schemata for the standards or patterns used when drawing, and the term formula as the “scheme and correction” process.

Our picture-traditions or common schemata from the past are embedded in our cultural world of the present as part of the formula for making a drawing, for example, drawing a face (beginning, perhaps, with the scheme “oval egg with a cross in the middle”). The scheme is learned or internalized by the drawer, and then corrected in seeing-drawing processes to make a good match of a possible model through personal visual experience. This is the formula, as I interpret it.

Cunliffe (2010) expresses his understanding of Gombrich’s use of *formula* and *experience* in this way:

The way art is produced from a spectrum with formulae at one end and the individual experience at the other highlights the key role that schemata play in articulating expression and meaning, one that is analogous to the intermediate function of language to structure verbal thought. (p. 12)

Cunliffe, as I read him, sees the formula(e) here as a scheme or schemata and sees similarities between the way we use schemata in pictorial expression and in words and sentences in language to structure verbal thought. These visual and verbal structures belong to a common world of communication in specific cultures as language; otherwise, they have no meaning. The individual experience, on the other end, can then also include the direct seeing-drawing process.

The term *visual control* is used by Gombrich in the essay “Watching Artists at Work” in his work (1991/1992b, pp. 92–130) *Topics of Our Time - Twentieth-century Issues in Learning and in Art*. The artist’s task is, according to Gombrich (1972/1979, p. 24), “to make a match” of the drawing compared to the seen through a culturally acquired and accepted scheme—and regulating these according to the seen—the visual experience. Thus, the term visual experience encompasses the term visual control. Gombrich uses the term *visual control* in two ways. The first is to look at the drawing process itself—while drawing—which means that you can draw from memory and adjust your drawing from memory. The second is the way I use the term (Frisch, 2010), that is to look at the model and draw—controlling the drawing by comparing it to the model. However, he does not use this term as a theoretical concept. In the index of *Art and Illusion*, the term *visual control* is not found, whereas the terms *formula* and *schema* are (Gombrich, 1960/1992a, pp. 374, 383).

Medieval and post-medieval art

The last two terms used by Gombrich (1960/1992a, p. 148) relevant to this interpretation of seeing-drawing processes are the categories *medieval* and *post-medieval art*. Gombrich explains these categories as follows:

To the Middle Ages the schema is the image; to the post-medieval artist it is the starting point for corrections, adjustments, adaptations, the means to probe reality and to wrestle with the particular. The hallmark of the medieval artist is the firm line that testifies to the mastery of his craft. (Then explaining the post-medieval artist, my comment): . . . for all the skill of hand and eye that marks the master, a constant readiness to learn, to make and match and remake till the portrayal ceases to be a second-hand formula and reflects the unique and unrepeatable experience the artist wishes to seize and hold. (Gombrich, 1960/1992a, p. 148)

The medieval category of drawing-making covers drawings of drawings, as images or signs, where the contour or the outer form of the sign is marked, as icons. The post-medieval artist uses the formula “scheme and correction” to construct in a seeing-drawing process what he or she sees and/or experiences.

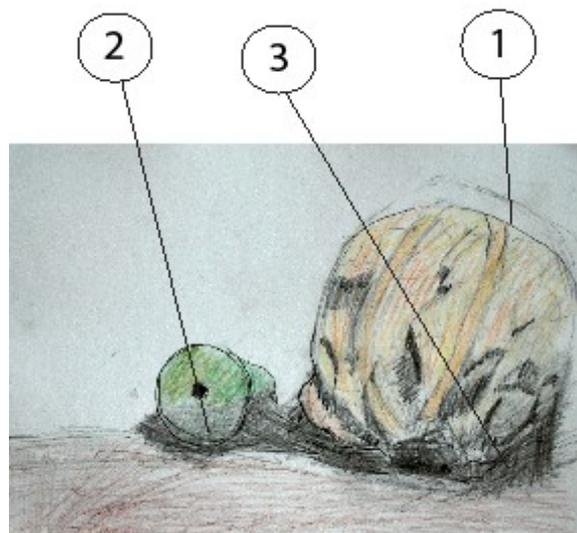
I have presented the definitions and my understandings of the concepts of visual controlled drawing processes, drawing genres, and internalized observation (Frisch, 2010), and of formula, scheme/schema/schemata, correction, visual experience, and medieval and post-medieval art (Gombrich, 1960/1992a). I will now investigate how these terms can be used as analytical tools in formal and informal drawings made by children in seeing-drawing processes.

The drawing processes

Method

The two examples presented below are thin slices of a larger inquiry in which observations (Adler & Adler, 1994; Erickson, 1986; Postholm, 2005) of one teacher's formal drawing lessons during one academic year in one school in groups of 8 to 12 students, aged 9 to 12 (all together 61 students) were conducted. The drawings (about 300) were collected from the 61 students in his drawing classes. Informal drawings (about 200) made by the same children in their spare time were also collected (the Vega files, 2010), and these were the topic of discussion in group interviews (Fontana & Frey, 1998; Stake, 1995). Video-recordings were also made of the children while they redrew and recovered the context around the making of their informal visually controlled drawings. Questionnaires (Halvorsen, 2007) were given to the students in which the focus was on why they drew visually controlled drawings and what models the students used. Finally, drawing processes from the two arenas were compared. Hence, the drawing processes presented below were observed either in class, in real life, or observed as redrawing processes after the drawings were collected, in interview situations.

A formally made still-life: example 1

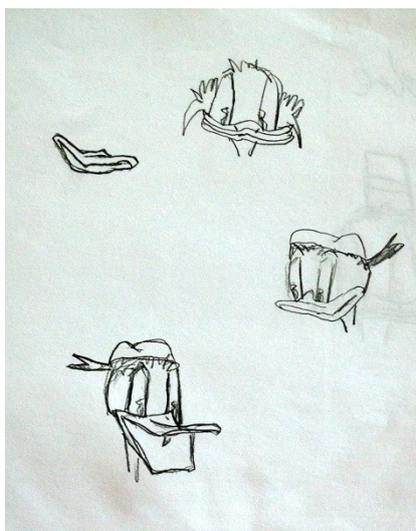


"Still-life of cabbage and pear" made by Andrea, 5th grade (The Vega files)

The drawing made by Andrea (above) in class shows that the scheme here is the main contours rendered as geometrical forms—the circles drawn with a light hand (1)—and then the use of visual experience or visual control combined with the knowledge of physics as a scheme to make shades in gradations of grays on the object according to the laws of light and shadow (2). The drawer then places the cabbage and the pear on the table by using a gradation of grays, again using the laws of physics as a scheme, combining the cast shadows in a seeing-drawing process (3), using visual control. The drawing process can be seen as belonging in Gombrich's (1960/1992a) post-medieval art category, using the formula "scheme and correction."

This can also be seen as a drawing belonging in the still-life genre, or a drawing genre used for training seeing-drawing skills, including a drawing strategy. First the contours (the circles) are drawn. Second, the shades and forms of the cabbage leaves on the cabbage are hatched. Then, third, the objects are placed in space by using the laws of physics and seeing-drawing to mark the shadows. Andrea has used a learned drawing strategy and then used visual control to match the drawing with the seen by looking at a still-life model and drawing. By repeating this drawing process, she can internalize the notion of how to draw a cabbage and a pear from this angle; the observation will become internalized (Frisch, 2010).

An informal drawing of a cartoon figure: example 2



A demonstration of how Donald Duck figures are made, by Erwin, 5th grade (The Vega files)

Here, Erwin demonstrates the Donald Duck scheme according to Gombrich; Erwin has learned it by heart and can draw these figures at any time. Erwin uses the image, a drawing of Donald Duck, as a model and copies the model as accurately as possible. His craftsmanship as a drawer lies in the line and the mastering of the defined forms of the icon Donald Duck. According to Gombrich (1960/1992a), we can place this drawing process in a category close to the definition of the medieval art category.

According to the interview (see Method), Erwin has also seen how this is done on TV. The construction of this figure is line-based with specific forms to make it a drawing strategy based on addition, always adding or constructing a new form to the previously drawn, often from the top to the bottom. The scheme is defined in the image, copied and learned, and when being repeated, can become an internalized observation. The drawing genre here is popular culture, the drawing strategy used is found in animation and cartoon making to create commercial drawn narratives for children. Visual control is used to look at the image model or the demonstration on TV (Frisch, 2010).

Discussion

As a starting point for the discussion, one could ask what the gains and losses are—or even, are there any gains and losses at all when looking for ways of “rooting” and talking about drawing practices as has been done in the two brief analyses presented above? Is it interesting at all? In my view, references, or the “rooting” of the terms that are used, have significance. Piaget’s theory on children’s developmental stages was popular in the 1950s and 1960s, and this verbal style can be discerned as a possible source of inspiration when *Art and Illusion*

was first written and published in the 1960s (Gombrich, 1960). Piaget (1936/1952, 1973) sees the development of schemata as a result of the biologically driven growth of the brain interacting with culture, whereas Gombrich (Gombrich, 1992b, pp. 94–95) writes about learned *cultural* schemata being used as scaffolds to make a drawing, and is very emphatic on this point (Gombrich, 1991/1992b). While in his time revealing schemata was an achievement, today we need to look with fresh eyes on the visually controlled, as the schemata are no longer hidden and are very much present in our art-teacher vocabulary as concepts referring to either biological or cultural phenomena. My impression is that the first understanding, the biologically oriented schemata, is the most prevailing concept in the art education community, most likely because it is rooted in Piaget's stage theory.

The vocabulary of art history is obviously also Gombrich's reference when he uses the categories "medieval" and "post-medieval art" in his approach to the scholars of the art history community. Gombrich's term "formula" possibly refers to mathematics and the world of symbols, what Vygotsky (1978, 1997) labels second-order systems, and which would include the structures and symbols of picture making, languages, and, for example, music notation.

Visual control is a term that both Gombrich (1960) and I (Frisch, 2010) use. Gombrich uses it as part of an explanation for the term correction, the second part of his formula—"scheme and correction." I have used the term to explain this seeing-drawing process or visual correction, as understood by Gombrich, but also to explain the learning-by-looking (Scribner & Cole, 1972) or learning-by-watching process (Reitan, 2007). My reference for this term grows out of the discussions about the development of the present national curriculum (LK06) for compulsory schooling in Norway, where there is an emphasis on visual competence as a basic skill in art education, as well as in all fields of teaching and learning. The curriculum accentuates the importance of having basic competences in communication through "visuals" "out there" in society, from the sketching of ideas when planning to build a house to understanding artistic expressions of our time. Being able to control a basic visual repertoire through drawing is the same as being able to express ideas visually to others in contexts where this skill is of use to us as lay-people (Nielsen, 2000, 2009). Thus, the term belongs within an understanding of visual communication as language, what Vygotsky (1978, 1997) would label second-order systems, here visual tools and signs as mediated human activity, where communication and action are used to reach the others within our communities.

The use of the term internalized observation obviously leans on the internalization process as defined by Vygotsky (1978). The term implies that the visual, observed world is external, but when we see, experience, and understand it, we can internalize or learn it by drawing, for example. Whether the term should be internalized visuals is open to discussion. For scholars, the "rooting" of the term observation is mainly related to a scientific method where listening is often far more important than seeing. However, in art education, and perhaps even more in the school subject of science, observational drawing is a well-established term, reflecting the accurate visual study and drawing process of trees, flowers, birds, and human organs such as the ear or the eye.

Drawing genres, as I have used the term, are culturally acquired; they are ways of drawing learned in social space for specific purposes, and are used in specific contexts. I root this term in the sociocultural linguist Bakhtin's texts on speech genres (1986). Picture making will then be understood as historically and collectively developed ways of making visuals and understanding visuals as we understand other genres, such as speech genres, film genres, and music genres. According to Bakhtin (1986), a genre has a specific structure, content, and purpose. A drawing genre can then be taught and learned by working with these specific structures, contents, and purposes. The popular cartoon genre as presented in the analysis

above as one drawing genre is a good example of drawing practices with specific structures, contents, and purposes.

Conclusion

So what is gained by reflecting on various ways of talking about drawing practices? Gombrich's terms can be interpreted as echoing his time (the 1960s) with an influence from Piaget (at least verbally), and as part of understandings found in art history and the field of linguistics. If we go back to the similarities between Lowenfeld's and Piaget's stages of development as outlined in the introduction, the answer can be that good terms will make us see, but perhaps more importantly, they will make us understand drawing processes related to the arena of teaching and learning drawing in new or different ways because they are placed in explanatory theoretical models of education. In education, we need more awareness of how explanatory models can refer to larger understanding of the human mind. I have presented drawing practices seen from a possible plausible interpretation of what the eyes and mind of the art historian Ernst Gombrich might have seen, with his vocabulary formed by sociocultural thinking and the times in which these texts were written. As variations, I have also presented terms I developed during my research that perhaps are more contemporary in their reference to today's acknowledged pedagogical theory-palette.

In another article, I would like to continue to explore (leaning on Vygotsky, 1978) similar issues: for example, can we talk about the proximal drawing zone? What would such a choice of words do to our drawing teaching practices? There is no one way of talking about drawing practices; indeed, quite the opposite is true. This means that reflections on the terms we use as part of a larger understanding of human existence, or paradigms, can encourage various teaching practices, and these reflections are part of being an open-minded, but cognizant, teacher in art education.

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References

- Adler, P. A., & Adler, P. (1994). Observational techniques. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 377–392). Thousand Oaks, CA: Sage.
- Arnheim, R. (1984). *Art and visual perception: A psychology of the creative eye*. Berkeley and Los Angeles: University of California Press. (Original work published in 1954)
- Arnheim, R. (1962). Art history and the partial god. *The Art Bulletin*, XLIV(1), 75–79.
- Bakhtin, M. M. (1986). *Speech genres and other late essays*. Austin: University of Texas Press.
- Bruner, J., Goodnow, J. J., & Austin, G. A. (2003). *A study of thinking*. New Brunswick, NJ: Transaction. (Original work published in 1956)
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Belknap Press.
- Cunliffe, L. (1998). Gombrich on art: A socio-constructivist interpretation of his work and its relevance to education. *Journal of Aesthetic Education*, 32(4), 61–72.

- Cunliffe, L. (2010). Wittgenstein's and Gombrich's therapeutic projects and art education. Submitted to *British Journal of Philosophy of Education*. Retrieved April, 10th, 2010 from <http://education.exeter.ac.uk/download.php?id=11864>
- Engeström, Y. (2000). Activity theory as a framework for analyzing and redesigning work. *Ergonomics*, 43(7), 960–974.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 119–161). New York: Macmillan.
- Frisch, N. S. (2010). *To see the visually controlled* (Doctoral dissertation, Norwegian University of Science and Technology). Trondheim: NTNU-trykk.
- Fontana, A., & Frey, J. H. (1998). Interviewing. The art of science. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 47–73). Thousand Oaks, CA: Sage.
- Golomb, C. (1992). *The child's creation of a pictorial world*. Berkeley: University of California Press.
- Gombrich, E. H. (1972/1979). *Verdenskunsten* [The story of art]. Oslo: Aschehoug (Original work published in 1950)
- Gombrich, E. H. (1992a). *Art and Illusion. A study of the psychology of pictorial representation*. London: Phaidon. (Original work published in 1960)
- Gombrich, E. H. (1992b). *Topics of our time. Twentieth-century issues in learning and in art*. London: Phaidon. (Original work published in 1991)
- Gombrich, E. H. (1999). *The use of images: Studies in the social function of art and visual communication*. London: Phaidon.
- Gombrich, E. H., & Woodfield, R. (1996). *The essential Gombrich: Selected writings on art and culture*. London: Phaidon.
- Gombrich Archive. (2010). Gibson and Gombrich on picture perception Retrieved April 18th, 2010 from <http://www.gombrich.co.uk>
- Gudmundsdottir, S. (1991). Ways of seeing are ways of knowing. The pedagogical content knowledge of an expert English teacher. *J. Curriculum Studies*, 23(5), 409–421.
- Halvorsen, E. M. (2007). *Kunstfaglig og pedagogisk FoU, nærhet distanse dokumentasjon* [Research and development in the arts and pedagogy, closeness, distance and documentation]. Kristiansand, Norway: Høyskoleforlaget - Norwegian Academic Press.
- Kindler, A. M., & Darras, B. (1997). Map of artistic development. In A. Kindler (Ed.), *Child development in art* (pp. 17–44). Reston, VA: National Art Education Association.
- Lepsky, K. (1991). *Ernst Gombrich: Theorie und methode* [Ernst Gombrich: Theory and method]. Vienna: Böhlau.
- LK06: *Læreplanen Kunnskapsløftet 2006* [Knowledge promotion curriculum reform of 2006]. Oslo, Norway: Utdanning og forskningsdepartementet.
- Lowenfeld, V. (1957). *Creativity and mental growth* (3rd ed.). New York: Macmillan (Original work published in 1947)

- Michl, J. (2009). E. H. Gombrich's adoption of the formula form follows function: A case of mistaken identity? *Human Affairs*, 19, 274–288.
- Nielsen, L. M. (2000). *Drawing and spacial representation* (Doctoral dissertation, AHO). Oslo: Oslo School of Architecture.
- Nielsen, L. M. (2009). *Fagdidaktikk for kunst og håndverk – igår – idag – imorgen*. [Subject matter didactics in art and crafts – yesterday – today – tomorrow]. Oslo, Norway: Universitetsforlaget.
- Packer, M. J., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35(4), 227–241.
- Piaget, J. (1936/1963). *The origins of intelligence in children*. New York: International University Press.
- Piaget, J. (1973). *Barnets psykiske utvikling* [The mental development of the child]. Oslo, Norway: Gyldendal Norsk Forlag.
- Piaget, J., & Inhelder, B. (1962). *The psychology of the child*. New York: Basic Books.
- Postholm, M. B. (2005). *Kvalitativ metode* [Qualitative methodology]. Oslo, Norway: Universitetsforlaget.
- Prawat, R. S. (1996). Constructivisms, modern and postmodern. *Educational Psychologist*, 31(3/4), 215–225.
- Reitan, J. B. (2007). *Improvisation in tradition, a study of contemporary vernacular clothing design practices by Inuqioq women of Kaktovik, North Alaska* (Doctoral dissertation, AHO). Oslo: The Oslo School of Architecture and Design.
- Rogoff, B. (1984). Introduction: Thinking and learning in social context. In B. Rogoff (Ed.), *Everyday cognition: Its development in social context* (pp. 1–9). Cambridge, MA: Harvard University Press.
- Scribner, S., & Cole, M. (1972). Cognitive consequences of formal and informal education. *Science*, 182, 553–559.
- Stake, R. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Vega Files. (2010). *The Vega files*. Retrieved August 15, 2010, from <http://www.scottfrisch.org/vegafiles/>
- Vygotsky, L. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotskij, L. (1995). *Fantasi og kreativitet i barndomen* [Fantasy and creativity during childhood]. Göteborg, Sweden: Daidalos.
- Vygotsky, L. (1997). *Thought and language*. Cambridge, MA: The MIT Press.
- Willats, J. (2005). *Making sense of children's drawings*. London: Erlbaum.
- Wilson, B. (2004). Child art after modernism: Visual culture and new narratives. In E. W. Eisner & M. D. Day (Eds.), *Handbook of research and policy in art education* (pp. 299–328). London: Erlbaum.
- Wilson, B., & Wilson, M. (1977). An iconoclastic view of the imagery sources in the drawing of young people. *Art Education* 1, 5–11.