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Drawing with Metaphors

Mediating ideational content in drawing through metaphors

Abstract

It is not easy to express abstract concepts, such as time and society, in a drawing. The subject of this article is rooted in the educational issue of visually expressing themes represented by abstract concepts. However, it is possible to find means and devices to express such ideas. This article shows how metaphors can be used to express such ideas visually. Cognitive linguistic research argues that metaphors are crucial in the verbal communication of abstract concepts. This article also attempts to show that metaphors are important in visual communication. The cognitive linguistic metaphor theory of George Lakoff and Mark Johnson is used here to investigate how metaphors are used to construct meaning in the drawings of cartoonist and illustrator Finn Graff and artist Saul Steinberg. The article presents a few examples of how visual devices structure the abstract concept of time. It then proceeds to explain how symbols function as metonymies and provides an overview of the different types of metaphors and how they are used to express meaning in drawings. The article concludes by attempting to provide new insights regarding the use of visual metaphors.

Keywords: ideational drawing, cognitive linguistic metaphor theory, metaphor, metonymy, educational devices

Introduction

This is an article about using metaphors in drawings. The subject is rooted in the educational problem of visually expressing themes represented by abstract concepts. Students often lack the means for such visual expression, and teachers often do not possess the necessary curricular competence in this area. How can statements and themes be expressed in drawings instead of in words? How can ideas be expressed visually? What devices can be used to mediate the artist's intended message to others?

In my role as an educator in the discipline of drawing, I have found that students have not mastered the use of symbols and signs in making statements about a theme. Such themes are often abstract concepts such as time, society, love, etc. In everyday life, women and girls often express friendship and love (which are abstract and important themes) by using heart and hand symbols. However, they have seldom learnt how to develop a broader symbolic archive, nor are they aware of the types of devices available for exploiting the potential of the heart symbol. In contrast, some artists have developed a great ability for expressing these types of ideas; for example, newspaper cartoonists Finn Graff and Saul Steinberg have both developed a rich visual language. Metaphors play a pivotal role in their drawings, and their drawings can form a body of research that can be exploited in an attempt to fill the present educational lacuna.

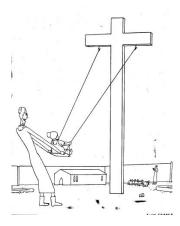


Figure 1: Finn Graff, Kristelig formålsparagraf. Graff & Mannila (1985).

When the Norwegian government proposed a law strengthening the role of Christianity in nursery schools, Finn Graff, in his role as a cartoonist, attempted to make a political comment by using visual symbols and metaphors (Fig.1). These involved expressing ideas related to the theme of Christianity, which is an abstract concept. The symbol he chose will be explained later in the article. Rather than discussing the particular metaphors he used, this article focuses on presenting the *types* of metaphor, in order to provide a brief glimpse into the field of research on cognitive metaphor as applied to drawing.

What is a metaphor, then? A most general description as a starting point may be: When an utterance is understood in an indirect way, it will (often) be metaphorical. For instance, "The *stone* fell to the ground" is a direct statement without the use of a metaphor. However, "His *hope* fell to the ground" is an indirect, metaphorical statement. The concept *hope* is abstract in contrast to *stone*, which is a tangible object. Hope is understood here in terms of another object that can fall. The function of a metaphor is to understand one thing in terms of another. The two things will have some element of similarity, which is the common trait that establishes the metaphor. Metaphor is defined as understanding one conceptual domain in terms of another conceptual domain (Kövecses 2002, p. 4). This definition is made in the cognitive linguistic view. In contrast to metaphor research keeping the perspective on verbal language, my position is that metaphors are pivotal in visual expression as well.

In order to explain and analyse how ideational abstract content is expressed in newspaper cartoons, this article relies on cognitive metaphor research. This research originates in *Metaphors We Live By* (1980), in which George Lakoff and Mark Johnson present their ground-breaking theory on metaphor. Their theory holds that metaphors are a vital part of everyday speech and affect our ways of perceiving, thinking and acting. Lakoff and Johnson analyse speech and present numerous examples of metaphors and metaphorical ideas that are useful to researchers in and beyond linguistics. Their approach to metaphors therefore frames a cognitive theory of linguistics that is useful in the conception and perception of things. It opens an imaginative terrain where the construction of meaning and poetic and rhetorical expressions are mediated. This cognitive linguistic theory on metaphor opened a new field for research, as well as visual communication. However, such research has not flourished yet in pictorial communication and the visual arts. To the best of my knowledge, my doctoral thesis (Ingebrethsen, 2008) remains one of the few works in the field.

To communicate abstract ideas through visual expression in drawings, metaphors must be used. As in verbal language, metaphors convey abstract concepts and ideas in drawings. How do metaphors work to mediate ideational content in drawings? I address this issue below, while also aiming to expand the conceptualisation of theory by introducing examples of drawings whose content is communicated by metaphors. In addition to metaphors, such pictures also use metonyms and narratives. A brief review of the central concepts and theses of cognitive theorists establishes the basis for a survey of analysed picture examples. The analyses attempt to show, firstly, devices that may be used to visually formulate ideational, abstract content and, secondly, how different types of metaphor are used to convey content in pictures.

Justification for the use of metaphor in art education

The prominent American art educator Arthur D. Efland claims that knowledge about the role of metaphor in the mental structure of meaning is vital for teachers, and that a new vision for education in art lies in imaginative cognition (Efland, 2004). He notes how the metaphor is used in art, arguing that it constitutes a space in human cognition, and that it is here that possibilities lie for new forms of expression, the expression of personal visions and social and moral issues:

The work of art becomes an arena for the discursive production of meanings and values in society. Becoming conscious of the power of metaphor has the potential to extend the reach of human communication. The arts are not transcendental realms above and beyond daily experience, but a place where novel metaphors and images stand out in experience by their exceptionality and power. Indeed, art is the honorific we give to especially notable moments. (Efland, 2004, p. 758)

Efland emphasises imagination as central and proclaims: "Moreover, it is in the arts, where the structures of imagination should be the principle object of study" (Efland, 2004, p. 769). He argues that an art education that does not acknowledge the metaphorical aspect of meaning in art is without serious purpose (Efland, 2004, p. 770). He cites Johnson and Lakoff and refers to the general cognitive activity that unfolds via metaphor in an individual's perceptual process. He maintains that because people think in metaphors and image schemas, teachers should be trained in this field of knowledge:

Teaching involves the kind of instructional prompts that bring the relevant schemata to consciousness because they are likely to be inert, or in a state of dormancy. The teacher must create the situation where such knowledge is called upon. (Efland, 2004, p. 771)

Efland argues that art teachers are involved in activating cognitive metaphors. They do so because meaningful content is entangled in those subconscious and automatised mental structures, and these are set in motion by associative picture elements. However, teachers often do not possess the theoretical knowledge about what such cognition entails. In other words, changes need to be implemented at the level of educational goals, where the constructions of imagery become a principal object of study.

Article aims and frames

Holding this perspective of what future art education ought to address and how imagery is constructed, I see a lacuna in art education. Moreover, Efland does not provide specific examples of how metaphor operates in visual media. My research may be viewed as contributing to such a description. This article aims to provide a very rough introductory presentation of some of the devices that may be used when drawing abstract themes, and it presents pictorial examples of various types of cognitive metaphors as well.

I apply cognitive metaphor theory to newspaper cartoons by Finn Graff and Saul Steinberg to investigate how themes as represented by abstract concepts are visually expressed. A newspaper draughtsman draws on the basis of his readers' understanding. He or she has to communicate visual content that is intended to be understood, and must activate some knowledge the reader has. In other words, the producer of the message works with knowledge held in common with the receivers. What the draughtsman has in hand, then, are visual elements that are easily recognisable by the readers and activate mental knowledge of current affairs. Graff's drawings are mainly sourced from the Norwegian newspaper Dagbladet, and Steinberg's drawings from two books (Steinberg & Hollander, 1979; Steinberg, Rosenberg, and Whitney Museum, 1979). (It is worth mentioning an essential difference between Saul Steinberg and Finn Graff. Steinberg's works stand alone in either newspapers or books, whereas Graff's are usually presented alongside current news stories in newspapers.) A drawing from my own hand is presented as well. Analyses of the drawings are conducted in order to exemplify one relevant aspect of the chosen drawing. Interpretation of the drawings certainly involves ambiguity. My interest, though, lies in what is seen as the "common knowledge and experiences" among viewers of the drawings.

In presenting devices, my intentions are much like rhetoric understood as an apprenticeship in speech; however, this case concerns "visual speech", or what I prefer to call visual formulation in educational pictorial production.

The problem of visual formulation of ideational content: a personal example

How can one formulate within a drawing what one perceives without using language? In order to exemplify a formulation, I present a personal case. The question of formulation itself arose at the death of an old woman.

As a result of a stroke, an old woman known to me became disabled in the right side of her body, which necessitated that she use a wheelchair. She lived alone and coped. The nights, however, brought dangerous balancing acts between the bed and the toilet chair right beside. She lived on the precipice of death for nine years, until she fell one night, broke the neck of her thighbone, and died two days later. How can one encompass this narrative in a drawing? Should it be with a portrayal of the real situation or the metaphorical precipice of death? The problem with time and changes that take place in succeeding phases of events pops up. Should it be shown that she falls, has fallen, or is dead? How can the broken neck of her thighbone be shown as the cause of her death?



Figure 2: Berit Ingebrethsen, *Thighbone bridge*. Ingebrethsen (2008).

Now that the reader has been introduced to the thematic subject of the drawing, the content can be presented with a few picture elements, shown in Figure 2. The reader knows she was a wheelchair user. The wheelchair shows her identity. So does the thigh knuckle. It is her thighbone that is broken. At the same time, the thighbone lies there as a bridge or path the wheelchair has been driven on, but can drive no longer. First, the thighbone, as a knuckle, is overlapped by the same element as a bridge. Secondly, the placement of the wheelchair upon the thighbone makes the knuckle a bridge. The other element is that the bridge conceptualisation is fulfilled by the knuckle arching over a dark landscape. Finally, the light area above is logically imagined as the sky. These four picture elements in a visual narrative combination present meaningful visual information to a viewer of the drawing. The thighbone stands as one visual picture element activating two different concepts in the viewer's mind.

This drawing may be viewed as a visual narrative. The narrative depends on metaphors and metonymies that are rhetorical figures and devices. Cognitive linguistic theory can be used to understand how these rhetorical figures shape content. Three cognitive mechanisms are pivotal in the human perception of mental content, whether speaking or thinking: metaphor, metonymy and narrative. I maintain that these mechanisms are also active in interpreting and producing pictures with indirect content. In my view, the cognitive mechanisms can first be linked to visual communication. Secondly, I view visual elements as parallel types of sensory stimuli that are able to activate concepts, although the organisation of visual elements and the capability to convey meaning differ from those of verbal language. However, all of the cognitive mechanisms mentioned above are arguably part of our mental apparatus and effective in pictorial conceptualisation.

Cognitive linguistic theory

Cognitive linguistic researchers write about common mental/cognitive mechanisms. In this sense, mental mechanism means that we, as individual human beings in a culture, organise thoughts in specific ways. In this process, spoken words are physical elements tied to the auditory sensory system and then connected in the brain to concepts that are mental elements. In this cognitive linguistic theory metaphor, metonymy and narrative are seen as cognitive/mental mechanisms. The theory gives attention to conceptualisation tied to verbal language. Lakoff and Johnson's so-called cognitive metaphor theory is embedded in general cognitive linguistic theory.

Three cognitive mechanisms

Metaphor is the first mental mechanism that I relate to the ideational content of drawing. According to Lakoff and Johnson (1980, 1999), the essence of a metaphor lies in understanding and experiencing one kind of thing in terms of another. Recall the definition of metaphor as understanding one conceptual domain in terms of another conceptual domain. In this comprehension, "A conceptual domain is any coherent mental organization of experience. Thus, for example, we have coherently organized knowledge about journeys that we rely on in understanding life" (Kövecses, 2002, p. 4). Our thoughts, therefore, are in great part metaphorical, and our speech develops by metaphors when new concepts come into being. Lakoff and Johnson analyse a register of conventional concepts that are metaphoric. Abstract concepts such as life, death, time, economy, and so on are understood in terms of better known, often more concrete, concepts. The better-known concepts function as source domains from where knowledge is mapped onto more abstract concepts in target domains. Life (as a target domain) can be understood as a journey (with knowledge from the source domain of journey). However, life has several different aspects requiring knowledge from different source domains. LIFE IS A PRECIOUS POSESSION, LIFE IS LIGHT are other metaphors (here written in

Lakoff and Johnson's marked way). Conceptualising life as a journey happens unconsciously, without our awareness, and it happens by metaphor as a cognitive mechanism. This mechanism, I want to argue, is at work in and central to communicative ideational drawings.

Lakoff and Johnson operate with two overarching categories of metaphors. One category is conventional conceptual metaphors, which is also the one that they mostly exemplify. Thus, a vast collection of examples of conventional conceptual metaphors constitutes the core subject of their research. The other category is image metaphors. These are mappings of a *one-shot* kind that is generated by two mental images brought into correspondence by the superimposition of one image onto the other. Image metaphors are treated in a minor way by Lakoff and Johnson. This latter category, however, plays a more important role in metaphor-based drawings. However, the conventional conceptual metaphors are also dominant and central in drawings (Ingebrethsen, 2008). The conventional metaphors have, to a great degree, sources holding bodily experience and knowledge tied to bodily interaction with objects in space. In this way, the cognitive linguistic theory declares itself as embodied, meaning that our thoughts and language are grounded in basic bodily experiences (Lakoff & Johnson, 1980, 1999).

The second mechanism is metonymy. Metonymy is another cognitive mechanism (Lakoff & Johnson, 1980, 1999; Langacker, 2000) that we use continuously. An example of metonymy is found in the sentence "He is reading Shakespeare". In this expression, Shakespeare does not mean the author, but a work written by Shakespeare. The author stands for and refers to the work. Producer standing for the produced is one group of several metonymy groups. Kövecses (2002, p. 145) defines metonymy as a cognitive mechanism, a process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain, or idealised cognitive model. Target here means an entity, and is not the same as target domain as used in connection with metaphor in Lakoff and Johnson's thinking. The target in the Shakespeare example is a produced work, an entity occurring in the same domain, an idealised cognitive model that also contains production and producer of works such as books, music, shoes, and so on. In this connection, I will soon show examples of metonymy in drawings.

The third mechanism is narrative. This means that thought organisation is narrative. Narrative as mental activity is constant and unnoticed and serves to make order in what would otherwise be chaos. According to Jerome Bruner (1990), we have a "readiness" or disposition to organise experience in a narrative form. Mark Turner (1996) emphasises small spatial narratives as basic in our daily life and order of consciousness. A mother pouring milk into a glass, the wind blowing leaves across the sky or a child throwing a stone are such narratives. We have experiences from childhood with such events, we know how they progress and we count on them as basic knowledge. Such events belong to our early bodily experiences such as sitting and walking, and to our experiences of objects in space. To sit and to walk are concrete actions, and our concepts and knowledge about these actions are core material when it comes to metaphorical speech and thought.

Drawing using cognitive linguistic metaphor theory

To communicate something pictorially, it is necessary to have visual symbols, visual elements that can refer to something in the intended content. Visual symbols function in the main by metonymy. Symbols can in turn activate metaphors. Such activation most often comes to pass because a metonymic symbol is one of the components in a conventional conceptual metaphor. A corresponding mental narrative fulfils the imaginative interpretation of a constructed content in the mind of the viewer of the pictorial elements.

The "Thighbone bridge" drawing viewed from a cognitive theoretical perspective

In the drawing "Thighbone bridge" (Figure 2), there are only a few visual elements, but meaning comes into being when these few elements combine with knowledge and experiences in the viewer's mind. The known story of the old woman's death establishes the context. We do not see the old woman, but thoughts about her come to the fore. This happens through the metonymic mechanism: the wheelchair and the thighbone refer to her metonymically. The wheelchair is an entity in a possession domain that includes possession and possessor. The wheelchair stands for the owner in the metonymy type POSSESSED FOR POSSESSOR, and the thighbone stands for the old woman in the metonymy type WHOLE FOR THE PART.

The same two visual elements in turn activate the conventional conceptual metaphor LIFE IS A JOURNEY. This metaphor has a structure in the source domain with a set of components: one or more travellers, a vehicle and a path from a beginning to a destination. This structure, or parts of it, is mapped onto the target concept life. We see the wheelchair vehicle that has come to a place on the bridge path where the journey ends, and we understand that the life journey of this traveller has come to an end.

In a sense, then, we understand things that happen around us in narrative terms. Narratives are about events and changes. Events happen in several succeeding phases. Something comes first, and it is then followed by something else, which includes time and motion. In one picture, it is difficult to show more than one phase. Change from one phase to another is problematic, and as more than one phase is usually necessary to tell what the cause of the change that happens is, causality can be difficult to show in a drawing. Breaking her thighbone neck was the offsetting cause of death for the old woman. The device that shows it in this drawing is to place the breach before the wheelchair. Through experiential knowledge, we immediately understand that the life journey has come to the end; the old woman is no longer sitting in her wheelchair.

The following summary illustrates how meanings may be compressed into a few visual elements when the context is known to the viewer. To construct these meanings, the viewer is influenced by the cognitive mechanisms of metonymy, metaphor and narrative. The metonymic wheelchair and thighbone refer to the old woman. The same two visual elements activate the conventional conceptual metaphor LIFE IS A JOURNEY. This conventional conceptual metaphor is combined with an image metaphor that appears in the bridge formation of the visual element of the thighbone. The knuckle of the bone and the bridge share common contours and shape. Common contour or shape is my definition of a pictorial image metaphor. As mentioned above, image metaphor constitutes the second main metaphor category; conventional conceptual metaphor is the first category in Lakoff and Johnson's theory.

Together with the dark landscape under the bridge, a scene in a narrative is created. Narrative cognitive organisation places the broken neck of her thighbone knuckle as the cause of her death. In this narrative, there is also room for the viewer to reflect about death and what might come after death.

The analysis of the drawing shows an example from each of the two main, overarching categories of metaphor, in addition to two metonymies. Next follows the discussion of a few devices to visualise certain themes, and thereafter, I show how several types of conventional conceptual metaphors take place and offer meanings in drawings.

Devices to visualise Time

Time is an abstract concept. Time is invisible and untouchable. Literally, time cannot be drawn or photographed. How, then, can it be drawn? There are visual symbols that can refer

to time, such as clocks and hourglasses, which measure time. Such symbols exist in the "bag of tricks" of picture makers. I will present some other devices found among Saul Steinberg's drawings. Time in pictures is tied to the problem of showing events as representing several phases. Order, duration and frequency are three facets in narratological analysis (Rimmon-Kenan, 1983). Cognitive linguistics opens a way for draughtsmen to depict time by showing that we understand time metaphorically as space, and especially, as motion in space. An action that has happened or is going to happen presents information about past or future time in the present of the drawing. Visual elements referring to action and motion are crucial. Time, per se, cannot be drawn; it just has to be present with visual elements referring to other phenomena. Time is therefore most often metaphorically understood as space.



Figure 3: Saul Steinberg. March-April. Steinberg & Hollander (1979).

In the drawing by Steinberg shown in Figure 3, for example, we see a cat walking on a path, entering a clearly delineated space named March—April. Lakoff and Johnson (1980) argue that a fundamental understanding of time places an observer in the present. The observer stands with the future in front of and the past behind him. This is the TIME ORIENTATION METAPHOR (Lakoff & Johnson, 1980). This metaphor combines with TIME PASSING IS AN OBSERVER'S MOTION OVER A LANDSCAPE (Kövecses, 2002) and realises an apprehension of order in the drawing. Order is conceptualised here as a linear form. In the picture, this order is concrete, and it activates the viewer's experience of an observer moving forward on a path. A spatial "logic" is therefore built in, where the length of space behind the observer correlates to the length of time passed, and the length of space before the observer correlates to the length of time ahead. This logic structures one of the so-called image schemas, the source—path—goal schema, or the path schema. This image schema is an abstract thought model incorporating a source location/starting point and a goal/destination point on a line and a moving observer. As a model, it is activated continuously in our speech and thought. We impose it on verbal expressions as well as on the reading of a picture, such as in Figure 3.

Point of time can be traced in the drawing shown in Figure 3. The cat is moving from one month to another, March and April, drawn as two land parts separated by a river. The

bridge marks the crossing between them and calls attention to the crossing action, which in this case is done by the cat. Bridges, doors and portals are objects that often convey information of point of time. Bodies in action nearby specify the point of time according to the observer role in the source—path—goal schema.



Figure 4: Saul Steinberg. Steinberg & Hollander (1979).

Duration as well as order is often understood as space. Lakoff and Johnson (1999, p. 31) present the container schema, another fundamental image schema. This schema has a bounded region in space, with an inside, a boundary and an outside. In the Steinberg drawing shown in Figure 4, it is physically instantiated in the table. The man is sitting *in* the table. The schema is also imposed on the psychical situation of waiting. For how long has the waiting been going on? The time passed is as least as long as it has taken for the plant to grow through the top of the table until the present caught in the drawing. For how long will the waiting continue? Our hunch says it can be forever, as the man is locked in the table. A device Steinberg has used is the plant object, which lets us measure amount of time in relation to growth, thereby metonymically divulging time. This, in turn, is combined with the metaphor STATES ARE CONTAINERS.

For instance, duration is often understood metaphorically: As AMOUNT OF TIME IS AMOUNT OF SPACE. Thus, a picture may show a road of great length behind a writing person conveying how long the writing has gone on. Frequency is another aspect of time that needs devices to present it in a visual form.



Figure 5: Saul Steinberg. Steinberg & Hollander (1979).

Frequency can be illustrated with a rocking chair and its repetitive movements, as shown in Figure 5. Metonymy is the mechanism that implies frequency for an action in succession. Picture makers must find iterative moving objects, such as rocking chairs, seesaws, metronomes, and so on.

Metonymy

Metonymy is both pivotal and indispensable in ideational, metaphor-based drawing. The metonymic mechanism gives access to an intended concept in an indirect way. A picture of an eye gives direct access to the concept of eye, eye as object. It also has to stand for indirect access to the concept see, seeing, which is about invisible action. This is a metonymy where object (eye) stands for action (see). The word *chair* or a picture of a chair gives direct access to the chair concept. (This should be understood in the broadest understanding and not only within the postmodern philosophy of linguistics and interpretation.) A chair word or picture gives indirect access to phenomena such as a position in a board ("He wants a chair in the board"), or to an old woman who has left her wheelchair forever. To be able to draw an abstract phenomenon, one has to use visual elements that can suggest it; one has to use symbols. Such symbols most often work through the metonymic mechanism.

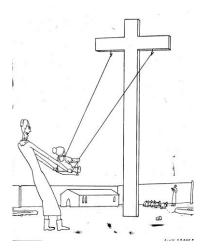


Figure 1, repeated: Finn Graff, Kristelig formålsparagraf. Graff & Mannila (1985).

In Norway, the government wanted to enact a law strengthening the role of Christianity in nursery schools. When Finn Graff (Figure 1, repeated) was going to formulate a visual statement of this situation, he needed visual elements and symbols. He therefore used the cross, which is a conventional symbol of Christianity. The cross can refer to death as well as to Christianity, depending on what surrounding elements there are in the drawing and in the external context. Because the drawing appears beside a verbal journalistic commentary introducing the thematic subject, which is the expansion of Christianity in nursery schools, the cross here refers to Christianity. The cross is part of Christianity, and as such, it is a metonymy where a part stands for the whole. The function of metonymy is reference. Such reference in a picture can be accomplished via conventional symbols such as the cross or via less conventional and more specialised symbols, such as a wheelchair or a thighbone. Metonymies flourish in verbal language, and they are necessary materials for a draughtsman to handle with creative craftsmanship.

Different Types of Metaphors in Drawings

Different types of conventional, conceptual metaphors play different roles and have different traits, according to Lakoff and Johnson. I will present some of the types as I have interpreted them in pictorial forms. First, I will point to the fact that image schemas are well-used

material in source domains for many metaphors (Lakoff & Johnson 1980, 1999; Johnson, 1987). In the preceding examples, we have come to be aware of the path schema and the container schema. The path schema is instantiated in the "Thigh bone bridge" drawing and in the "March–April" drawing. Different parts of the schema may be chosen in different expressions (Lakoff & Johnson, 1999). A starting point, the beginning of the thighbone, is shown in Figure 2. However, there is no starting point of the road in Figure 3. Likewise, we see a beginning of the future distance towards the destination, which is summer, in Figure 3, in contrast to Figure 2, where there is no future distance for the wheelchair. Such choices made by the draughtsman belong to the inventory of a visual language.



Figure 6: Saul Steinberg. Steinberg & Rosenberg (1979).

Figure 6 offers an example where the container schema is instantiated in a head. Thoughts live in the head, and here, Steinberg visualises anxious thoughts as a hare or rabbit, which culturally metaphorises the quality of anxiety.

Structural metaphor is one type of the conventional conceptual metaphors. LIFE IS A JOURNEY is structural. This means that the structure of the concept "journey", with some components (traveller, vehicle, distance, etc.), is mapped onto the structure of the target concept "life", as we have seen in the "Thigh bone bridge" drawing (Figure 2). The cognitive function of structural metaphors is to enable speakers to understand target A by means of a relatively rich structure of source B (Kövecses, 2002, p. 33).



Figure 7: Finn Graff, Det dages i øst. Dagbladet 28.12.89.

"Plant" is a source domain that offers structure to several target domains. Growth is central in the knowledge mapped onto the targets. In the drawing shown in Figure 7, Finn Graff visualises a situation after the breakdown of the Soviet Union. Gorbachev, then president of the union, is trying to control the political system in the post-Soviet republics. It is completely uncertain what type of system will develop in the near future. This system is understood here as a plant, according to the metaphor COMPLEX ABSTRACT SYSTEMS ARE PLANTS. One of the

elements in this metaphor is a gardener. Gorbachev is placed in this role, as the caretaker of a new system.



Figure 8: Saul Steinberg. Steinberg & Hollander (1979).

Orientational metaphor is another conceptual type. These metaphors provide much less cognitive structure for target concepts than structural ones do. Their cognitive function is to make a set of target concepts coherent in our conceptual system (Kövecses, 2002, p. 35). Most orientational metaphors have to do with basic spatial orientations, such as up—down, centre—periphery, etc. Several have spatial image schemas in the source domain, and they tend to be bipolar and bivalent. This is the case for up—down, where up has a positive value, while down tends to have a negative value. Steinberg relies on the STATUS IS UP metaphor in the drawing shown in Figure 8.



Figure 9: Finn Graff, Risikofri risiko. Dagbladet 23.12.00.

GOOD IS UP is activated in the drawing in Figure 9, wherein Graff formulates a certain situation from Norwegian commercial life about influence and positions. The GOOD IS UP metaphor is well suited for evaluating actions and matters. Ladders, staircases and tall towers are signs referring to spatial relations being active in visual meaning making. The metaphor implies quantity in height. The greater height and longer fall corresponds with degree of bad. Another implication not active in this drawing, but available, is quality of the steps. A ladder may have steps of steel or of breaking straws.

Image metaphor is the second main category in Lakoff and Johnson's theory. As stated previously, Lakoff and Johnson use the term image metaphor when there are two mental images that are brought into correspondence by the superimposition of one image onto the other. My definition for image metaphor in drawings is two picture elements that overlap with common shape or contour, as the bridge and knuckle overlap in the "Thighbone bridge" drawing (Figure 2).



Figure 10: Finn Graff, Helsingfors, I morgen. Dagbladet 20.03.97.

A more distinct example is offered in Figure 10, where then presidents Clinton and Yeltsin are making a toast with glasses that are at the same time halves of the globe.

New exposition developed on the use of metaphor in drawings

In my doctoral thesis (Ingebrethsen, 2008), I present the dichotomy of figurative and formal aesthetic metaphors. (In the thesis itself, I use the terms pictorial and plastic, but have since found these terms to be less familiar in professional picture tradition.) The dichotomy has its point of departure in pictorial semiotics combined with cognitive metaphor theory.

In picture analysis, one switches attention between figurative and formal aesthetic aspects. The semiotician Gøran Sonesson (1989, 1992) makes a distinction between two levels in pictures: the pictorial and the plastic levels. He explains that the pictorial level has pictorial (figurative) elements that refer to visual things in our life-world. These are elements such as chair, sun, house, etc. The plastic level has plastic (formal aesthetic) elements that (basically) do not refer to visual things. These plastic elements *are* their own qualities: a black round form does not refer to black; it *is* black. It does not refer to roundness; it *is* round. The black and the round, though, may activate meaning in a viewer. A black round form in a picture can be conceptualised as a black sun in the figurative layer and as a black round form in the spatial layer. My contribution is as follows.

Figurative metaphor is prevailing in my analyses. A figurative element can be metaphoric when it functions as a source concept or activates a source concept. In the drawing of Gorbachev and the plant (Figure 7), the plant functions as source concept in COMPLEX ABSTRACT SYSTEMS ARE PLANTS. In the drawing of the thighbone bridge (Figure 2), the wheelchair and the thighbone activate the LIFE IS A JOURNEY metaphor.

Formal aesthetic metaphor in drawing occurs when a formal aesthetic element functions as or activates a source concept. This is knowledge I bring forth in the research presented in my doctoral work (Ingebrethsen, 2008). It corresponds to many verbal metaphors with source domains containing concepts such as dark, grey, up, small, etc. BAD IS DARK or DANGER IS DARK, in my opinion, is at work in the drawing of the thighbone bridge. The dark

landscape transmits an impression of danger. In contrast is the light sky above and in front of the wheelchair. How would the meaning change if the landscape beneath were light, and the sky dark? This is a question worth asking when contemplating the drawing.

In expressions containing good and bad evaluations, we use a relatively small amount of conventional metaphorical concepts, according to Lakoff and Johnson. We evaluate phenomena by seeing them as positive or negative. In talking about such phenomena, we use metaphorical expressions such as light or dark, up or down, sweet or bitter, etc. Light and sweet are source domains for good values, and up signals positive value, as seen in Figure 9. Light, dark, up, etc. are formal aesthetic elements. When such formal aesthetic elements are source domains, they are categorised, in my terms, as formal aesthetic metaphors in a drawing.



Figure 11: Finn Graff, *To dronninger*. Dagbladet 29.12.88.

Size is one such visual element that can be used metaphorically. Big and small sizes are formal aesthetic elements with evaluative power. IMPORTANT IS BIG is a conceptual metaphor that is active in the drawing shown in Figure 11, representing then Prime Minister Margaret Thatcher and Queen Elizabeth. Size marks the relation between the two.

Combination of elements

I will end this presentation of metaphor types with three drawings showing how one figurative element can combine with other figurative elements in different image metaphors.

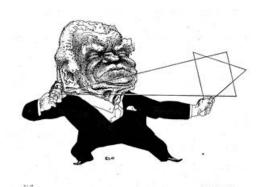


Figure 12: Finn Graff, En evig konflikt? Dagbladet 31.10.89.

In Figure 12, the Star of David, the official symbol of Israel, has overlapping shape and common contour with a slingshot. The slingshot is contrived as a shooting weapon in the hands of then Israeli Prime Minister Shamir. The weapon refers metonymically to the war that Shamir, as leader of Israel, is leading against the Palestinians.

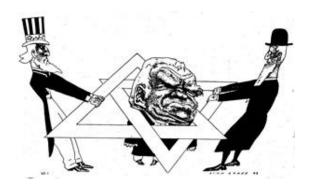


Figure 13: Finn Graff, Israel i krise. Dagbladet 23.01.92.

In Figure 13, two opposing parties strive for influence in an Israeli election. The Star of David is in two parts, which have common shape with some sort of instruments that are able to dismember Shamir.

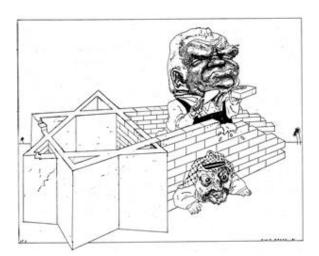


Figure 14: Finn Graff, Ikke moden for fred. Dagbladet 25.05.91.

In Figure 14, the Israeli star overlaps the top of the walls in a building Shamir is making. The shape of the star is extended in one of the tips, corresponding to the extension the Prime Minister is building. The building is source domain in the conventional conceptual metaphor STATES ARE BUILDINGS. This is a structural metaphor with Israel as the cognitive target domain. Structural elements in the source domain involve the following elements: process of building, builder, and material strength. When these elements map onto the target, they activate, in turn, an apprehension of several things: process of constructing the state, builder of the state, and stability of the state. The strength of this building is solid, because of the brick material. The extension of the building/Israeli state refers to the extension of the ongoing settlement of Palestinian land. The structural building metaphor, accordingly, is combined with the image metaphor star/building.

The combination of image metaphor with conventional conceptual metaphor seen in the last drawing is common in this genre of metaphor-based drawing (especially in Graff's works; it is less frequent in Steinberg's). Meanings are compressed into a small number of visual elements in a drawing. We have seen it in the "Thigh bone bridge", and it can be analysed in the other drawings under discussion here.

Brief summary and points of reflection

In this article, cognitive metaphor theory has provided the main theoretical component in an analysis of the structure of meaning in drawings with abstract, ideational content. Metaphor and metonymy are both pivotal in the visual formulation of this type of drawing. The aim of the article is realised in the discussion of devices used in the visual formulations of the subject "time", as well as in examples of the various types of metaphors used in drawings. The article also illustrates how the metonymical mechanism works in symbols, which a pictorial producer needs. Metonymy has referential function, serving to direct attention. Metaphor, in contrast, helps us understand one thing in terms of another, in pictures as well as in verbal expressions. The target domain, the thing that needs understanding, is often an abstract concept, while the source domain most often relates to concrete things, whether in verbal expressions (Lakoff & Johnson, 1980, 1999) or drawings (Ingebrethsen, 2008). Here, it is worth mentioning a point that tends to cause difficulty when analysing the relationship between metonymy and metaphor in images. In many cases, one element in a drawing may be viewed as both metonymical and metaphorical. Let us take, as an example, the wheelchair in Figure 2. This pictorial element refers to the owner of the chair. At the same time, the wheelchair is a component in the metaphor LIFE IS A JOURNEY. The metonymical wheelchair thus activates the metaphor LIFE IS A JOURNEY.

Herein, I have presented new and innovative aspects that result from the cognitive analyses of drawing. I have also defined figurative versus formal aesthetic metaphors. The major result lies in the understanding of how a few visual elements may be combined in a drawing, thus activating complicated meanings in a visual statement; this aspect concerns what may be termed a visual language system for metaphor-based drawing. However, this promising field of research is not explored in this article.

Research on the subject explored in this article, or in parts of it, has been conducted, of course, in other ways and in other disciplines (e.g. Forceville, 1996, *Pictorial Metaphor in Advertising*). I will mention just two contributions here, both of them in semiotics. The first is Gert Z. Nordström's early awareness of metaphor and metonymy in visual communication. He follows Roman Jacobson (Jacobson, 1971) in distinguishing between metaphor and metonymy characterised, respectively, by similarity and contiguity, or nearness (Nordström,

1983). Nordström and the educationally focused school of semiotics, however, have not opened up a wider potential in the field of visual metaphor. The second contribution is the semiotic description of metonymy proposed by Göran Sonesson (1989, 1992). Sonesson belongs to a highly academic school of semiotics, and his work focuses on the role and function of the indexical part of visual signs. However, in my opinion, index can be viewed as a parallel to the metonymy concept drawn from the field of rhetoric, and in this article, I have chosen the rhetorical position rather than the pictorial semiotic one.

I conclude this article by reiterating that this is research rooted in a lacuna in classroom practice. The new knowledge about drawing with metaphors helps me quickly understand how a student or pupil is able to make visual statements on their intended themes, and to discuss different aspects of their themes. This new knowledge can give teachers competence regarding types of devices available for exploiting the potential of visual symbols, and it can function as a tool for teachers guiding youngsters in learning how to develop a broader symbolic archive. Diverse exercises can be used, such as experimenting with variations of form, as with the variations on the Star of David in Figures 12, 13, and 14.

In class, I have experienced that the new perspective on drawing with metaphors functions well when analysing and describing conceptual content in other visual media, especially in contemporary and postmodern conceptual art. However, conceptual art works and metaphor-based drawings are often ambiguous and possess several layers of meaning, which often causes variations in interpretation. Usually, however, visual communicators depend on an intersubjective semantic core for their choice of symbols and elements. It is this type of common intersubjective meaning content that I have analysed using cognitive linguistic metaphor theory.

Working with colleagues and master students, I can see a field of further studies opening up. An example can be how tactile metaphors can be understood in aesthetic-making studies among master students. It is my hope that openness and curiosity regarding this type of cognitive visual knowledge may grow, and education of the type proposed by Efland must focus on cognitive imaginative knowledge.

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