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Prehistoric Illustration

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Prehistoric Illustration:

Semiotically Unlocking and Learning from Early Visual Communication

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Abstract

This paper aims to do three things. Firstly, it aims to make the case that the roots of illustration and visual communication stretch back to the dark cave walls during the last Ice Age. In doing so, secondly this paper orientates the reader into the basics of Peirce's semiotic sign-action (Semiosis), as a phenomenological framework applied to illustration to enhance visual communications with a primary target audience. This will then lead to the third aim, which is to demonstrate how semiotics pervades every image in some way, whether intentionally or not. To illustrate how Semiosis works and how it can help modern illustrators to encode stronger levels of meaning in their work; we will see how Semiosis can still unlock meaning in paintings over 45,000 years old.

Keywords: Illustration, Palaeontology, Palaeoillustrator, Semiotics, Semiosis, Sign-action, Cave Art, Peirce

1. Introduction

Modern illustrators' and visual communicators' core skills are far from 'modern.' Our distant Palaeoillustrator Stone Age ancestors, over 45,000 years ago, painted on cave walls for their society's benefit to visually communicate important messages for them. These Palaeoillustrators were modern humans just like us, and our illustration work in the 21st century still semiotically operates in the same way as it did on these lonely dark cave walls. Our ancestors clearly understood that *Symbolic* meaning is constructed within the social-cultural contexts of their society. We are only reinventing visual communication techniques and developing *Symbolic* languages, that were brought out of ancient Africa as our ancestors migrated across the globe. In every image that illustrators create semiotics is integral to its effective visual communication, whether intended or not. If we frame these cave paintings of Palaeoillustration within a Pragmatic semiotic model, we can now learn from what our predecessors visually encoded on their cave walls.

We have lost the original meaning across the epochs of time, but by examining these existing Palaeoillustrations through semiotic sign-action, we can unlock and learn from Stone Age thinking-processes. the visual communication intentions. Peircean semiotic theory of Semiosis (sign-action) offers modern creatives a time-bridge back to find insights to the roots of our modern skills. Semiosis will not miraculously translate this Stone Age

cave art (nor should we expect it to). Instead, through a phenomenological framework, Semiosis can position us closer to semiotically, learn from the first illustrators within human society.

This paper attempts to put Peirce's technical language (which has a habit of being too obtuse for creatives) into a more accessible designer-centric (or illustrator-centric) language. This is not a case of dumbing down Peirce but in finding a meta-language to bridge between the tacit world of the creative and the precise language of the Pragmatic philosophy. In order to demonstrate Peirce's technical terms from designer-centric versions, in this paper I have put Peirce's terms in *italics* and designer-centric terms in **bold**.

Over the next four sections, the reader will be quickly immersed in three researchers work who seek an understanding of the Stone Age creatives who painted the work. From this Palaeolithic research, we then turn to Peirce's Semiosis to quickly explain the fundamental points in a designer(illustrator)-centric way. Finally, we will conclude what impacts Semiosis can have on illustration practice, by applying its semiotic sign-action to the cave walls.

2. Stone Age Cave Paintings

Europe in the Upper Palaeolithic period was not densely populated. The cave painting communities in southern Europe didn't look every day on wonderful animal frescos. The location of the paintings was controlled, not just within their societal hierarchy, but also geologically. This suggests that the viewing of the paintings on cave walls[1] was aimed at a targeted audience. The very act of viewing was an experience across senses rather than a passive 'consumer of art.'

The location of the cave paintings is mostly found in the darkest areas of cave complexes. David suggests this may be a technical consideration, as absolute darkness aids his proposed Stone Age technique of projected tracing of animals onto the cave walls [1]. Or the dark locations may be a way to control visual storytelling. Azéma and Rivère propose a graphic narrative hypothesis, where the split-action within representations of movement such as the Chauvet cave bison painting can give the impression of movement to an assembled audience with intervention of flickering light from a flaming torch [2]. But more tantalisingly for us as visual communicators is von Petzinger's work on the spread and groupings of the 32 geometric marks, painted alongside the more famous animal paintings [3a,b]. These ancient geometric marks remained. active over three millennia and were distributed across a wide geographic region. This suggests an interconnected world of ideas shared beyond the individual Palaeoillustrator.

These figurative and geometric images were imbued with a meaning to an audience within the society and culture of the Palaeoillustrators. This meaning, like today, goes beyond an act of mere decoration and has a level of intent that we can examine through a sign-action framework.

In David's research, his practical drawing experimentations provide a valid reason why the cave art never really evolved stylistically over such an expanse of time, due to the technology used in creating them [4]. Azéma & Rivère provide us with evidence of sequential graphic techniques to suggest movement and possibly storytelling in the interpretation of what is visually communicated in the lamplight [5]. But it is von

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[1] As a sidenote, we now only have the wall paintings, as organic materials do not survive. But what fragmentary evidence of material culture that survives provides clues that outside the dark caves, decoration on the self and on textiles was very likely [9].

Petzinger's taxonomy of the 32 painted marks [6] that suggests a rich inherent *Symbolic* ability from our ancestors to visually communicate abstract concepts. These are encoded within shapes.

3. The Basics of Semiotic Sign-action Power

To begin to unlock some evidence of intent behind both paintings and marks, we do have a theoretical framework that can be applied. This is Peircean semiotic theory, which is a Pragmatic and phenomenological approach to semiotic signs. Philosophically pragmatic, Semiosis is a form of semiotics that concerns itself with application. It is phenomenological as the experience of its sign-action is predicated on the intended audience's interpretation of the creative's aesthetic choices [7].

Peirce's determination flow of meaning follows three stages, as part of ongoing meaning being discovered from what the creative makes. Briefly, we can summarise this semiotic sign-action as a concept to be illustrated, the aesthetic the creative choses to visualise the concept to an intended audience, and how that intended audience interprets the concept from what they see. We won't use Peirce's terms right now [8], but to grasp the basics of a determination flow, think of the client who briefs the illustrator. The illustrator produces work to answer the needs of that brief. That work will be seen by an intended audience who will see the illustration, and gain meaning from it about the concept that the brief wanted illustrated.

This is a very general and broadening example, but one that fits a commercial illustrator's day-to-day experience:

Client = brief = **concept** to be illustrated.
Illustrator = visual communicator = **representation** of **concept**.
Audience = **interpreter** of **representation** = unlocking the meaning of the **concept**[2]

Think about the power modern illustration must connotationally convey more than any obvious denotational meaning within an image. Visual subtexts can be visually communicated with a few marks, colours, etc. to convey various levels of meaning. As an example, a children's picture book will illustrate the story, but also convey character, emotions and moods. Each illustration may provide different levels of meaning that the reader can extract. A child will see and interpret one set of denotative meanings, while the parent may see and interpret a connotative level of meaning.

It is the same illustration, but through the careful crafting of the visual language used in the aesthetic, the experience of the 'receiver' (i.e., the child or parent) will decode different meaning aligned to their lived experiences. This is what the phenomenological framework underpinning Semiosis affords the illustrator, a level of sophisticated visual communication within a single image. How much meaning is interpreted and understood is dependent upon levels of lived experience.

This is Peircean semiotic sign-action's power – meaning can be semiotically crafted and encoded at different levels of **representation** within a single image.

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[2] When I use the word **concept** in this illustration context, the **concept** can be anything from illustrating a mood, a lifestyle, a story, a product, etc.

4. Encoding Semiotic Signs

In a semiotic sign-action there is what Peirce calls a *determination flow* [10]. The semiotic signs used within an image begins a flow from:

- the **concept(s)** to be visually communicated.
- through the choices in how the illustrator desires to **visually represent that concept** in the visual language (style, aesthetic, expression of line, etc.).
- from that "visual language" the intended audience **interprets** the aesthetic, gaining meaning from the image, which is communicating the **concept**.

Peirce classifies the power of sign-action in semiotically representing a **concept** over three levels (see Fig. 1). These levels go from basic to complex [11]. The highest level of semiotically **representing** a **concept** is *Symbolic*.
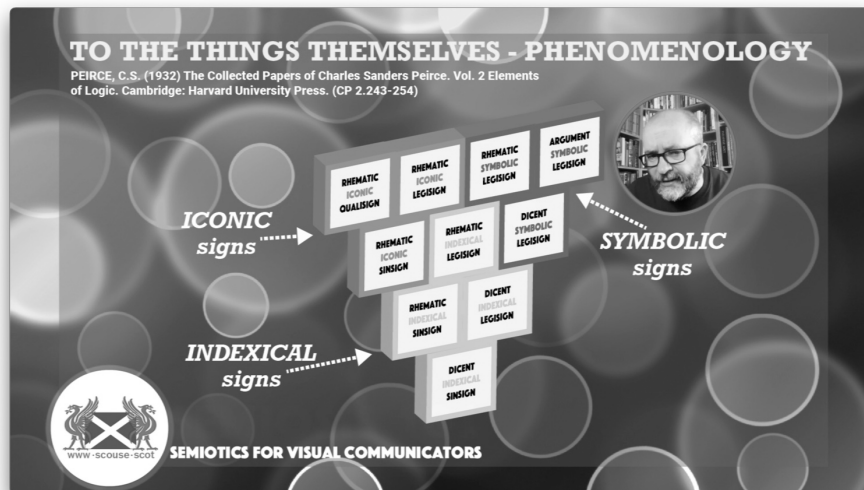

Fig. 1. The three levels of **representing** a **concept** in Semiosis (sign-action)

4.1 Semiotic Symbolic Representation

With *Symbolic* representation the meaning of the *Symbol* is a socio-cultural agreement. The *Symbol* becomes what people agree it means [12]. Think of any company logo without any words or letters. How does a logo such as this become meaningful? It does so through associated meaning (see Fig. 2). A meaning within a context that when we see these marks, shapes and colours together, in this way, we say it is 'THIS' now [13]. *Symbols* can appear simple but are quite complex in power. They appear simple because the basic visual communication building blocks that create them e.g., lines, strokes, colour, marks, etc. are the lowest level. Before we discuss these basic building blocks of both semiotic encoding

and illustrating, we will quickly discuss Peirce's middle level of semiotically representing the **concept(s)**. This is *Indexical* representation.
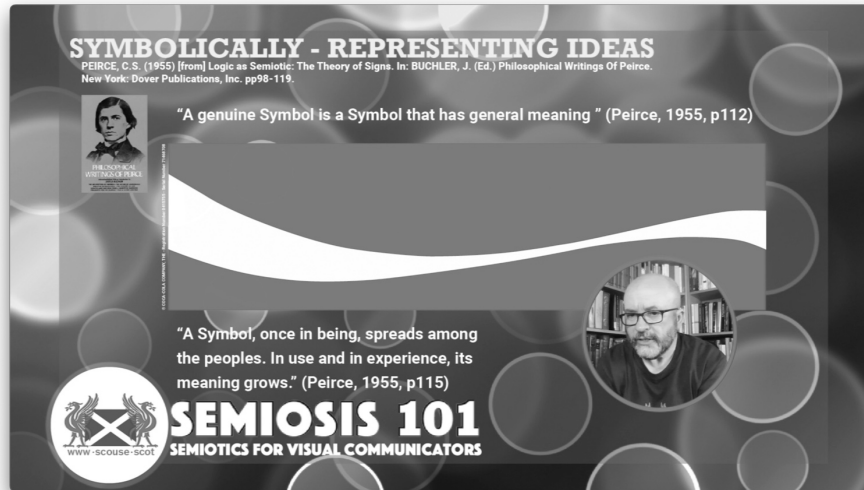

Fig. 2. As Peirce says, a *Symbol's* meaning spreads "among the peoples."

4.2 Semiotic Indexical Representation

If the highest level is a socio-culturally agreed meaning of "when we see 'THIS' we agree it means 'THAT'" now. Then the middle level semiotically helps communicate 'WHAT.' Peirce uses three terms that to creatives can become confusing, as in design and illustration his choice of terms now mean other things to us. Peirce's semiotic *Symbol* is not the same as a creative's experience of a *Symbol*. His second middle level is referred to as an *Index*. We will from now on refer to this as *Indexical* representation [14]. The easiest way to understand how this level **represents** a **concept**, this level of semiotically communicating POINTS to actual things (see Fig. 3).
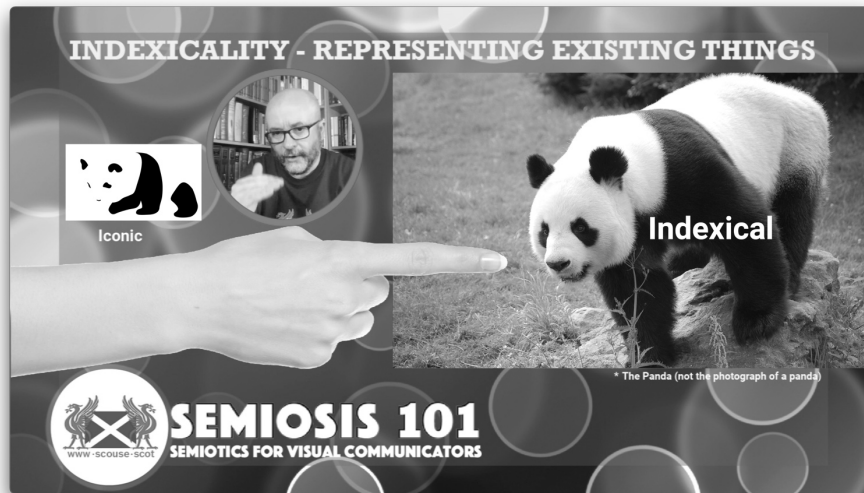
Fig. 3. Indexical semiotic pointing to actual things. The basic drawn shapes in a certain order (left) begin to suggest the qualities that resemble an animal known as a panda (right).

Think of your own index finger. You use your index finger to POINT to actual things. At this level of semiotic communication an illustrator can skilfully **represent** with a few lines shapes that can be interpreted as a tree, a car, an animal. With more consideration those drawn elements can be crafted to visually communicate a particular species of tree, a specific type and model of a car, or a recognisable animal. Once a basic tree/car/animal shape is illustrated to **represent** a specific thing, the illustrator has naturally begun to *Indexically* represent that thing. The illustrator has themselves, knowingly or not, encoded semiotic signs to help the audience recognise that that tree/car/animal is an oak/a Porsche/an aardvark, etc. These things can exist in reality or in fiction – even ideas can be *Indexically* represented.

4.3 Semiotic Iconic Representation

Iconic representation is the lowest level of Peircean **representation** of a **concept**. While we are in the context of discussing Semiosis forget all other ways you understand icon or iconic can be used in everyday life [15]. *Iconic* representation is the basic building blocks of visual communication. We discussed earlier a phenomenological framework where our audience's own experiences come to bear on how and what they interpret. Well in terms of sign-action, this lowest semiotic level uses lines, strokes, shapes, colours, marks, etc. to trigger subconscious recognition in the audience. Peirce says that:

"Nothing is a sign unless it is interpreted as a sign." [16]

Iconic representation utilises these basic visual communication building blocks to resemble qualities of things already experienced by the intended audience. These

combinations of lines, strokes, shapes, colours, marks, etc. suggest possibilities at a very simple level of perception.

To grasp *Iconic* representation, consider how a few brush strokes from an illustrator can create a shape that suggests a tree here, or a car there, or even an animal. They are just brush strokes. But, from a semiotic point of view, these strokes *iconically* **represent** enough suggestive qualities for the audience to recognise a tree, a car or an animal from them.

Encoded semiotic signs do not begin to 'power up' and begin working until the intended audience begins to perceive that the imagery is representing something to them [17]. The more they look, the encoded semiotic sign-action can subconsciously begin to unlock more and more information, enriching the experience of illustration, and communicating the **concept(s)** at different levels of perception.

5 Unlocking Palaeoillustration Meanings with Semiosis

Returning now to the work of our illustration ancestors, how does sign-action (Semiosis) help us to begin to understand the intent behind the cave paintings and marks?

As we already agree, we cannot know what the paintings meant to the Stone Age audiences. We are not THAT audience. All socio-cultural links to any original meaning contexts of those people have long been extinguished. In fact, as von Petzinger's research suggests [18], the meanings naturally evolved over the millennia the marks existed.

So let us first clarify our 21st thinking here. We see the cave paintings and chronologically categorise them as 'Stone Age,' but the expanse of time we are discussing here in which these paintings where culturally active ranges between 45,000 to 11,000 BCE. This is a mind-boggling number of Palaeolithic generations of ancestors who used the caves to paint in.

The conclusion we can take is that the specific meanings of these paintings would evolve naturally across such a vast expanse of time. So, it would never be possible to believe we could know what those people understood when they looked at the work. But this paper is only concerned about understanding semiotically the intent behind the images. While the original socio-cultural contexts of each cave image are lost to us, the rich visual languages in the cave art contain the semiotic traces of how the original visual communication was constructed.

In cave paintings there are an abundance of prehistoric animals, many now extinct. There are very few representations of human figures in comparison. There are other images of a more abstract and ritualistic nature, plus the 32 abstract marks that von Petzinger has identified. David's practical research [19] offers how the likenesses of big cats, mammoths, etc. could be faithfully and accurately drawn onto cave walls but let us concern ourselves not with the technical skills of the artist. Let us instead examine what semiotic clues to the intended visual communication can Semiosis help unlock.

Painted on the cave walls (which daylight never reached), the cave paintings would have been painted in artificial light. The irregular surface of cave walls is not a flat canvas. Many animals are painted where they are because the cave wall suggested a particular animal shape to the painter. From a Peircean semiotic point of view we can call this *Iconic* representation. The cave wall has a quality of part of an animal, so the painter drew the remainder of the body around the natural shape. In building up this *Iconic* representation

line by line, stroke by stroke, ochre colour by ochre colour, a recognisable animal emerges out of the dark wall.

In one cave it may be a bison, in another it may be a mammoth or a horse, but in Chauvet cave a stalking pack of cave lions were created on top of each other [20]. In the 21st century, we can confidently identify these as cave lions now even though cave lions are extinct, as science has proven this from fossil records. To the painters' Palaeolithic audience, they also knew that these marks on a wall represented animals that they knew from their own lived experiences outside the cave.

These *Iconic* marks semiotically begin to communicate more meaning to actual things, beyond a possible quality of resemblance to parts of a possible animal, to actual cave lions. This is *Indexical* representation at work, from the basic visual communication building blocks that forms the animal shapes. But *Indexically*, the painting of cave lions is still semiotically communicating more meaning. The painter's **representation** also allows the audience to **interpret** the sex of the big cats (mostly female).

6 Conclusions

What these Stone Age paintings *Symbolically* meant is lost to us, as we do not share the original audience of Palaeolithic hunter-gatherers' socio-cultural contexts, spiritual references or mythology. So, the closest we can semiotically get to the intended **concept(s)** as a secondary audience, of why these paintings were painted can only reach the existential level of sign-action. Without the original context to what the painter painted we are in danger of projecting our own narratives and meanings onto the work. In much the same way that any modern illustrator's image may be re-interpreted by a secondary or even tertiary audience, far removed from the original client's primary target audience the image was intended for.

This far from diminishes the original intent of the image, nor does it negate the original **concept(s)** visual communication. Any time spent crafting semiotic signs to strengthen the original visual communication of the **concept** will remain encoded. Those semiotic signs will have helped the primary target audience to understand the messages within the image they were intended to see. The residual sign-action power in the image (whether 45,000 years ago in a dark cave, or last month's editorial illustration now seen in the context of an Instagram post without the article), still has the power to communicate something to a new audience. How much of the original intended **concept** will be understood, diminishes as the socio-cultural contexts recede with each new generation of audiences. But the semiotic sign-action is still there.

We may not be hunter-gatherers on the Ice Age European steppe anymore, but we are modern humans like them. Our innate humanness to seek meaning in shapes is what allows illustrators and designers, to trigger perception in their target audiences with a simple line that has qualities to something the audience can recognise. As a modern illustrator, if you have done this (by drawing you already have!) you have been using Semiosis (sign-action) without even realising it. So have our Palaeoillustrator ancestors.

Now, by being more mindful of that unconscious sign-action, modern illustrators can enhance the effectiveness of their own visual communication abilities. By integrating the basics of Semiosis as they compose their illustrations, illustrators can improve how their

primary audience will **interpret** the meaning in their work. Our Palaeoillustration ancestors worked literally in the dark. You do not have to.

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