

Assignment one

Student # 514945 - David Bell, Understanding Visual Culture, 30 April 2017

Part B: Perspective - Invention or Discovery?

Introduction

This assignment asks:

'What are the implications of saying perspective was invented, and what are the implications of saying it was discovered. Assess these two possibilities and give reasons for the one you believe is correct'. (800 words)

Definitions

In order to address this question, we first need to consider the terms 'invent' and 'discover', so here I show their definitions from the online Merriam Webster dictionary:

Definition of **invent**:

1. : to devise by thinking
2. : to produce (something, such as a useful device or process) for the first time through the use of the imagination or of ingenious thinking and experiment

Definition of **discover**:

1. : to make known or visible :
2. : to obtain sight or knowledge of for the first time

And we need a definition of the word **perspective**, a definition of which I have taken from the online Encyclopedia Britannica:

‘method of graphically depicting three-dimensional objects and spatial relationships on a two-dimensional plane or on a plane that is shallower than the original (for example, in flat relief).’

There are a number of perspective methods:

- Linear (or geometric) perspective : representing how an image is perceived in the retina of a single human eye; the most common method of perspective representation used in Western culture since the Renaissance.
- Axial perspective : used by Greek vase painters and Roman mural painters, ‘such parallels as the walls of an interior, the beams of its ceiling or the tiles of its floor were shown converging symmetrically on a central axis.’ (Honor & Fleming, 2009 :9)
- Isometric (axonometric) perspective : A method used in technical drawings and computer games whereby three coordinate axes appear equally foreshortened and the angle between any two of them is 120 degrees.
- Inverted perspective : whereby objects farther away from the viewing plane are drawn larger, and closer objects are drawn smaller, in contrast to linear perspective for which closer objects appear larger.
- Aerial perspective: dictates that distant landscape has haze and cooler colour

Invention or Discovery?

In considering whether something is invented or discovered, I want to look at some things commonly used in the practice of painting and drawing.

A number of artifacts have been invented: for example, the artist brush, paint, easel, canvas, camera obscura and photographic camera. These are all physical things which have taken human ingenuity to devise and produce - we can hold them, inspect them, use them and break them.

Then there are discoveries which arise from our practice, such as the Golden Rule and Rule of Thirds, or the effects of chiaroscuro or techniques related to tone and vision such as colour contrast. These things are not physical as such but belong in the realm of aesthetics and the visual effects on the human eye.

So where does perspective position itself - is it an invention or a discovery?

In his book *The Elements of Drawing*, John Ruskin indicates that perspective was discovered:

It is true that when perspective was first **discovered**, everybody amused themselves with it'. (Ruskin, 1857: 16)

But I wonder if Ruskin had given sufficient thought to the different types of perspective or simply had not considered that it could have been invented.

Referring specifically to linear perspective, in his book *Eye and Brain The Psychology of Seeing*, Richard L. Gregory writes:

How to paint a scene in the perspective of the eye's image was **discovered** by the Italian artist-engineer Filippo Brunelleschi (1377–1446). (Gregory, 1997: 276)

But just prior to this statement in his book he says:

It is an extraordinary fact that simple geometrical perspective took so long to develop—far longer than fire or the wheel—yet in a way it has always been present for the seeing, as the images in our eyes are perspective projections. Linear geometrical perspective in pictures is the **invention** of Italian Renaissance artists. (Gregory, 1997: 276)

So Gregory appears to be saying that by discovering the mechanics of perspective projection on our eyes we discovered an innate feature of human optics, and that these principles were then embodied into the invented method of perspective as applied to pictures.

But these eminent people seem to concentrate their discussion on linear perspective, when this is but one technique of many, as we have seen from the list of perspective methods. We do not perceive the world in isometric projection except as an approximation at a certain angle at a certain distance from objects, and it is highly unlikely that we can experience the world in reverse perspective. These types of perspective were not discovered by anything in the natural world, they must have been invented.

I want to propose my own logic on the question by relating the perspective method back to the reason for its existence: The conscious creation and representation of images onto two-dimensional planes do not occur in nature; the practices of painting and drawing are inventions arising from the creative desires of mankind. The representation of three-dimensional objects on a two-dimensional surface is also an invention, and any method which helps us make a representation of such objects, such as perspective, must therefore also be an invention.

So looking back at our lists of items invented and things discovered, where should perspective be placed? I think it sits firmly as an invention, but it is an invented method (or range of methods) rather than an invented artifact existing in the material world.

References

Gregory, R.L. (1997) *Eye and Brain The Psychology of Seeing (fifth edition)*. Princeton, New Jersey, USA: Princeton University Press [online] available from Scribd <https://www.scribd.com/read/299521537/Eye-and-Brain-The-Psychology-of-Seeing#>

Honor H. & Fleming J. (2009) *A World History of Art (revised seventh edition)*. London: Laurence King Publishing Ltd.

Ruskin, J. (1857). *The Elements of Drawing* [online] available from Scribd <https://www.scribd.com/read/320076597/The-Elements-of-Drawing#>

Bibliography

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(846 words excluding Introduction, References and Bibliography)