THE NATURE OF OBJECT OF PERCEPTION AND ITS ROLE IN THE KNOWLEDGE CONCERNING THE EXTERNAL WORLD

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ABSTRACT

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Havaintoon liittyvät ongelmat ovat kuuluneet filosofiaan tämän alusta asti. Käyttäen henkilön omakohtaista havaintotilannetta lähtökohtana ja filosofista aineistoa, tutkimus käsittelee tiedon ja havainnon suhdetta. Tutkimusongelmana on, miten tietää, mitä havaitsee parhaillaan. Arkielämän uskomus, että havainnon perusteella tiedetään havainnon kohde materiaaliseksi objektiksi, tullaan osoittamaan epäluotettavaksi. On mahdollista, että yksilöt, jotka havaitaan välittömästi, ovat mielensisäisiä kuvia, muotoja, ääniä, tuntemuksia, makuja ja tuoksuja. Näennäisyys/todellisuus erottelun mukaan havaintomaailma on näennäinen eikä todellinen, mielestä riippumaton ulkomaailma. Kuitenkaan erottelu ei välttämättä kiellä ulkomaailman olemassa oloa, vaan mielensisäisten yksilöiden kautta olemme yhteydessä ulkomaailmaan. Siis meillä on tietoa epäsuorasti ulkomaailmasta havaintokokemuksen kautta. Tutkimus keskittyy erityisesti George Berkeleyn väitteen perusteisiin, että materiaaliset objektit ovat mielensisäisiä ideoita, ja juuri nämä havaitaan suoraan. Henkilön ominaisuuksien kuten mielen, tietoisuuden ja aivojen välttämättömyys havaintokokemukselle tukee havainnon kausaalista teoriaa. Lopuksi tutkimuksessa kysytään perusteita, miksi havainnossa on mielensisäisiä entiteettejä. Havainto ei tavoittaisi suoraan materiaalista objektia ilman oletusta havaitsijan ja ulkomaailman välissä olevista lisäentiteeteistä. Tutkimuksen tulokset kuitenkin esittävät, että havainto ei ole riittävä syy tietää, mikä havaintoilmentymä on ja että tällaisten havaintoilmentymien olemassaolo on välttämätöntä, jotta tietää havaitsevansa ulkomaailman. Kuitenkaan Berkeleyn teoriasta ei seuraa aineen mahdottomuus. Tutkimuksen päätulos on, että yksittäiset tietoväitteet ulkomaailmasta eivät ole koskaan suoraan ja välittömästi ulkomaailman kohteista. Havaitsijan omat ominaisuudet vaikuttavat, millaisina havaittavat objektit ilmenevät havaintotilanteessa.

Avainsanat: havainto, havaintotieto, ilmentymä, ulkomaailma, Berkeley, kausaalinen havaintoteoria, aistiominaisuudet.

Questions concerning perception are as old as the field of philosophy itself. Using the first-person perspective as a starting point and philosophical documents, the study examines the relationship between knowledge and perception. The problem is that of how one knows what one immediately perceives. The everyday belief that an object of perception is known to be a material object on grounds of perception is demonstrated as unreliable. It is possible that directly perceived sensible particulars are mind-internal images, shapes, sounds, touches, tastes and smells. According to the appearance/reality distinction, the world of perception is the apparent realm, not the real external world. However, the distinction does not necessarily refute the existence of the external world. We have a causal connection with the external world via mind-internal particulars, and therefore we have indirect knowledge about the external world through perceptual experience. The research especially concerns the reasons for George Berkeley's claim that material things are minddependent ideas that really are perceived. The necessity of a perceiver's own qualities for perceptual experience, such as mind, consciousness, and the brain, supports the causal theory of perception. Finally, it is asked why mind-internal entities are present when perceiving an object. Perception would not directly discern material objects without the presupposition of extra entities located between a perceiver and the external world. Nevertheless, the results show that perception is not sufficient to know what a perceptual object is, and that the existence of appearances is necessary to know that the external world is being perceived. However, the impossibility of matter does not follow from Berkeley's theory. The main result of the research is that singular knowledge claims about the external world never refer directly and immediately to the objects of the external world. A perceiver's own qualities affect how perceptual objects appear in a perceptual situation.

Keywords: perception, perceptual knowledge, appearance, the external world, Berkeley, the causal theory of perception, sensory qualities.

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THE NATURE OF OBJECT OF PERCEPTION AND ITS ROLE IN THE KNOWLEDGE CONCERNING THE EXTERNAL WORLD

1. INTRODUCTION

a) Research Problems

This work concerns the nature of an entity of immediate perception and knowledge of it. Perception has been said to both disclose the mind-independent external world and not to disclose. This relationship between immediate perception and a perceptual entity will be examined. Thus, the research subject is a perceptual situation from the first person point of view.

The problem can be framed by asking how one can know if what they perceive is the mind-independent external world, or an internal mind-dependent appearance produced in the mind by the external world. To be more specific, how can one know whether the object that one directly perceives is the real external tree or the internal mind-dependent appearance of a tree? In particular, we can ask how George Berkeley knows that the object directly perceived is the mind-dependent appearance or idea. According to Bertrand Russell, matter is an inferred entity from the known sensible entities he called sense-data (Russell, 1914). This appearance/reality distinction has been connected to one of the most difficult problems of philosophy: do we perceive the external world? The causal theory of perception has been claimed to lead to the proposition that material objects are unobservable (Grice, 1961: 121). According to Frank Jackson, if perceiving an object requires a causal process to accompany that object, the information acquired in perceiving an object is indirect. Jackson claims that this is information directly concerning the perceptual experience, not an object located in the external world. Therefore, for Jackson, when something appears red to me, I am acquainted with a red expanse (in my visual field) and I have information about the experience. (Jackson, 1992: 445)¹

¹I will get back to Jackson's important description in chapters 1 b), 1 c) and 2 a).

My starting point is the first person point of view: *it appears to me* that there is a world that I hear, touch, see, taste and smell. This proposition is objective, and by 'objectivity' I mean that any claim, argument or view presented herein is based on the object that is examined, not on imagination, some way of thinking or some world-view.

Although it seems natural and commonsensical to hold that perception discloses the material world, not all philosophers agree with this. Philosophers from Plato to Bertrand Russell have argued that perception is being conscious of or sensing a sense-datum, a mind-dependent idea or an appearance. These are dependent on the mind, although they may be taken to refer to the external mind-independent world. There is then a veil of perception between a subject-in-itself and an object-in-itself, according to these philosophers. Jackson's example of this is the bent appearance of a straight stick half submerged in water. In this perceptual situation I am perceiving or directly acquainted with a bent shape. This shape cannot be the stick (as it is straight), and thus, according to Jackson, it must be a mental item. In general, sense-data and mind-dependent appearances are the objects of direct perception. It appears to my senses that the world and its entities are continuous and coloured. However, modern science states that the physical world around me is in essence colourless, silent and tasteless. I perceive this world by throwing a veil over it by means of my senses. Jackson then asks what these coloured expanses can be other than mental sense-data that I directly perceive. It is the veil I perceive. (Jackson, 1991: 446)

The research questions are: How can one know the nature of the object directly perceived? In particular, how do I know whether a thing that I have an experience of is a mind-independent entity or a mind-dependent appearance?

The problem of the veil of perception assumes that a causal process of the external world affects sense experiences, and this process produces a sensory veil in my mind. This veil is like a mental image of the world, and it is this image that I would perceive. Trees and flowers produce sensory ideas, sense-data or mind-dependent appearances in my mind. I would perceive internal pictures of trees and flowers between my mind and the external mind-independent world. Perception is then a causal process: if Jill is to perceive a tree, the tree must cause Jill to have certain sense experiences. This is a necessary condition for

perception. However, when we take an internal look at what is going on in our minds or we need to introspect, we may find, according to Smith and Jones, that we have before the mind's eye a special sort of item, a perceiving idea, sense-datum or mind-dependent appearance. (Smith & Jones, 1986: 85–87) These ideas are like a veil between the perceiver-in-itself and the external world-in-itself. The problem arises from perceiving the veil of appearances of the external things. The veil of perception then prevents us from knowing the external world as it is.

The circumstances of a perceiver cause the problem of the veil of perception. What a perceiver sees or hears something to be is different from what it really is. It is different because the senses are fallible: Jill perceives only if the tree causes Jill to be aware of certain ideas or appearances in her own mind. However, in illusions and hallucinations, one perceives properties that do not really exist in the external world. Rainbows are perceptual illusions. A rainbow recedes as we approach it, never to be reached. Moreover, the way a round table looks will vary with my angle of sight. The table itself retains its constant round shape, but it appears to be elliptical from certain angles of sight. Therefore, it could be concluded that I directly perceive some inner, mind-dependent elliptical item. The problem refers to whether or not I perceive some internal mental object between myself and the external world. That is, a veil is perceived by a perceiver because external things, an observer's own body and things of the physical world (if there are any external things) cause me to be aware of internal mental items in my own mind. I will argue that perception and introspection as such cannot show whether I perceive a mental item, a veil or a mind-independent object called "tree".

b) Preface

Perception depends on an object. If I really hear the sounds of cars, then there must be things that are causally responsible for my hearing the sounds. The sounds themselves make me perceive them. According to present direct realism, perception depends on the object, and this object is nothing but an external material thing. The object does not depend on the observer. According to the causal theory of perception, a material object causes a mind-dependent appearance (sense-datum, idea), and one is conscious of the

mind-dependent entity. Both these theories are realism presupposing the external mind-independent world. Due to this realism, I argue that they should also presuppose the anatomy and physiology of the human body which is necessary to perceive an object. In this work, I argue that the perception of an object also depends on the qualities of the observer. It depends on the observer's sense modalities and consciousness. Therefore, the existence of a tree may be a necessary condition for perceiving a tree. However, I argue that the simple existence of a tree does not guarantee that a tree will be perceived. Nevertheless, the nature of the directly perceived object remains a neutral issue at this point: an object either depends on the observer or is independent of him or her.

I perceive something, however. Perceiving may be to focus one's attention on something and measure it, like an arrow flying towards a target. However, this is a neutral description concerning the nature of the target object being targeted. It appears that we perceive the external mind-independent and material tree. The theory of direct realism and the causal theory of perception above argue that we perceive either the external material tree or the internal mind-dependent appearance that is causally related to an external tree. My hypothesis is that perception alone does not allow us to know whether the object directly perceived is a real mind-independent tree or a mind-dependent tree-appearance of sense experience. It is possible that we perceive the external world via the mind-dependent appearances of sense experience, if there is any external world. In chapter 6, I will present the common property argument of mental images and perceptual appearances. I will also present an objection to direct realists' argument that there is no separate level of minddependent appearance between a subject-in-itself and an object-in-itself. For direct realism, perception is directed towards a real mind-independent existence without supposed sensory content or without towards a separate level of appearance. Direct realism states that perception of a tree is constructively dependent upon a real mind-independent tree. This problem concerns the way in which the directly perceived object is positioned between the mind and the external world. I think that one key element of this problem is the cause-and-effect relation: is perception of an object due to the causal connection between the existence of a tree and the conscious perception of a tree?

We believe basic claims about the external world because they are based on perception. However, this relationship between perception and knowledge is challenging and worth explicating. For example, please consider the following: "One perceives p; therefore, one knows p." Is this inference valid? Berkeley (1734a/1996: 24) states that it is. Wittgenstein, however, claims otherwise: "From its seeming to me – or to everyone – to be so, it doesn't follow that it is so" (Wittgenstein, 1969: 2). To Wittgenstein, I say the following: I appear to perceive the real tree but this does not imply that I really perceive it. Following Jackson, I perceive the veil between myself and the external tree, and this external tree has caused its sensory idea or appearance to form in my mind. Let us imagine that the external mind-independent world does not exist. Therefore, what I perceive is a flow of mental images and sensory impressions. In sum, if I say that I know that I perceive the external mind-independent tree because of perception, my saying so is untrue. It is untrue if the external mind-independent tree does not exist.

In philosophy, the problem of the external world simply asks why we should accept the existence of a world made up of something other than ourselves and our minds. If we perceive a tree by throwing a veil of senses over it, and as a result of doing so are capable of perceiving the mind-dependent appearances causally related to the real tree, what justifies our belief that there is anything behind the veil? The consequence of such is living a perpetual dream. Our belief is justified because we seem to perceive a real tree as it is. This would mean that perception is our justification to accept a world other than that of ourselves and our minds. Jackson states another answer – that the hypothesis of the external world is the best explanation of the course of our sensory experience (Jackson, 1992: 446). If objects and events of the external world partly cause our perception, then of course the external world exists. Therefore, there exists something other than ourselves and our minds, and solipsism collapses (a thesis that only my mind and its states exist). How can we know what we appear to perceive? A response to this question has often given that there is no certain criterion to that kind of knowledge. An answer such as "I appear to perceive a real tree" can be untrue. I appear to perceive trees in the park. However, I am sleeping, and thus the trees are not real. For example, René Descartes states in his first meditation that an observer cannot infer from the entities of experience whether these

things are external mind-independent entities or the products of the mind and imagination (Descartes, 1641: 12-14). We need criteria other than "the presentation of something." According to Bertrand Russell in his study of Leibniz, we know the visible world is real, and thus we know the existence of material objects is real, when we know that something other than ourselves is the cause of our perception (Russell, 1900: 74).

This research contends that is that the observer's own qualities influence perceptual experience. What is perceived to be and what really is can be different. This is because how things appear to me is dependent on the lighting, my angle of vision and the like. Perceiving an object depends not only on the object, but also on the observer's qualities. When the conditions of an observer change, what he or she perceived before will be different from what he or she perceives now. For example, when one is sick and when one is healthy, the same food will taste differently. An ontological difference between reality and appearance is possible. In sum, maybe this whole perception of the world and the mindindependent external world are different because the properties I perceive are the sensedata of the veil which are causally related to the external world. In fact, Jackson says that the picture of the world provided by modern science is so different from the world provided by my senses that it is hard to grasp how I am epistemologically in direct contact with the world provided by modern science (Jackson, 1992: 446, 448).

It is a given that we have to start this study from the perceptual situation and the first-person perspective and that we are able to gain knowledge of ourselves. Some basic principles of logic and metaphysics are assumed as indubitable². The study is carried out from the subjective point of view (from the personal "look-out tower" or from my perspective) using data from the perceptual situation, classic theories of perception and Berkeley's theory for idealism. I will use the concepts *spatiality*, *causality*, *identity* and *implication* in the reasoning of the perceptual situation and the theories of perception. Epistemology is as important in this research as philosophy of mind or vision science, although the research also concerns philosophy of mind and phenomenology.

²I name them on pages 12 and 13.

The starting point of this research is a perceptual situation from the first person point of view. The question examined is: how can one claim to know whether an entity which is directly perceived by a person is located in the external material world or in the mind of a person? According to representative realism, perceiving a tree necessarily involves causal interaction, with that tree providing information directly about the perceptual experience caused in me by the tree. This is then information about the veil (that is, the sense-data) causally related to the objects located in the external world. For direct realism, perception takes place without the causal process and is constructively dependent on the object³. Perception produces information directly about the tree that is in the external world. According to direct realism, the information acquired in perceiving a tree is not about the perceptual experience or mental items. The sceptical problem is the question of what justifies our belief in the external world behind the veil. Living in a perpetual dream is possible. I think that this whole problem results from the impossibility of inspecting objects independent of perception. I cannot verify that the objects I directly perceive are in fact external mindindependent bodies and events, nor can I verify that the external world really is as my mind presents it to be. Richard Fumerton, for example, argues that to establish that sensations are signs of physical objects one would have to observe a correlation between sensations and the existence of certain physical objects. He continues that to observe such a correlation in order to establish a connection, one would need independent access to physical objects. Such access is not possible if all one knows directly is that certain sensations occur. (Fumerton: 1992: 339)

The first aim of this research is to examine the nature of a perceptual object, i.e. whether I appear to perceive a mind-dependent mental entity in my mind or a mind-independent material entity in the external world. The second aim is to argue against a claim that the information acquired in perceiving an object is derived directly from the external material object. George Berkeley's view is that an object of perception is *an idea* or *a mind-dependent mental entity*. Berkeley (1734/1996: 24) seems to know this because, for him,

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³The controversial question is whether direct realism should *really* deny the physiological causal process shown by science. In fact, they do not deny it. Neither do they write much about the role of the brain in perceiving an object, although McDowell, Snowden and Martin would accept the scientific view about perception.

perceiving is knowing. His reasons for why perception does not disclose the material world are investigated more closely. It will be demonstrated that his arguments and so called "Master Argument" do not lead to the impossibility of matter, but to a contradictory statement.

How can perception yield knowledge of the nature of a directly perceived object if perception can be caused in ways that do not *only* include the mind-independent external world? This problem has led different theories of perception to provide different accounts of the relationship between perception and objects. There are at least four standard theories:

- (1) **Direct realism** is the view that the objects of perception are mind-independent and external. In other words, these objects exist independently of any mind that may perceive them. It is assumed that perception depends on the object that is directly perceived and that this object is an external mind-independent entity with mind-independent properties. Direct realism is only 'direct' because there is no mental item, sensedatum or mind-dependent appearance that must first be obtained in order to perceive the object located in the external mind-independent world. Therefore, the information acquired in perceiving an object is direct, and thus the observer need not infer an external mind-independent tree from colour and shape ideas caused in the observer by a real tree.
- (2) **Representative realism** holds that the objects of perception are mind-dependent and internal. Objects located in the external world independently of any mind cause appearing ideas or mind-dependent entities in the observer. These mental items of sense experience are directly perceived by the observer, and it is from the knowledge of these mental items that she or he can derive knowledge of objects located in the external mind-independent world. Representative realism assumes that appearing ideas are dependent on the observer. The observer perceives an object located in the external mind-independent world by perceiving the veil of sense data or the mental items of sense experience, both of which are causally related to that object. Therefore, the information acquired in perceiving an object is indirect, and thus the observer must infer an external mind-independent tree from the colour and shape ideas that are caused in the observer by a real tree.
- (3) **Phenomenalism** maintains that representative realism leads to scepticism about the external world. It also holds that the objects of perception do not exist independently of any minds. The objects of perception must be perceived by at least one mind. Phenomenalism assumes that the objects of perception are mind-dependent. The object that is directly perceived is that mind-dependent mental item. Phenomenalism is 'direct' because perceiving an object means perceiving a mental item of sense-experience. Therefore, the information acquired in perceiving an object is direct, and thus the observer need not infer an external mind-

independent tree from colour and shape ideas: a real tree is a bundle of ideas of colour and shape. However, phenomenalism does not deny the existence of the external world. According to Jonathan Dancy, the world is real for Berkeley because it is independent of us. However, it is not independent of the mind, for the real world still consists entirely of ideas: they occur in the mind, but are not caused by us. (Dancy, 1987: 62) Phenomenalism can be also presented as a view that the propositions asserting the existence of physical objects are equivalent to propositions asserting that the observer has certain sensations. For example, for John Stuart Mill, matter is 'a permanent possibility of sensation' and these possibilities can be understood in terms of the entities of sensations. (Fumerton, 1992: 338–339) I add to the comment of Fumerton that if these entities of sensations are assumed sense-data, then they are mind-dependent.

(4) Adverbial theory is an alternative to the act/object analysis that the previous three theories seem to include. According to the act/object analysis of experience, every experience with content involves an object of experience to which I am directly related by an act of awareness. However, for representative realism, I am indirectly related to an object of perception. For example, in the act/object analysis, I am aware of a bent shape. But the adverbial theory says that the right way to analyse "I am experiencing a bent shape" is to say "I am experiencing (bent shape)-ly." The idea is that there is no bent shape in existence. When I appear to sense a bent shape, the truth is that I sense bent shape-ly. It is this analysis of the mode of sensing, not a feature of the object, which provides the nature of the sensory experience. Therefore, the adverbial theory is the denial of the object of experience. When I say that I experience a bent shape, I say something about the experience itself: I do not describe an object as bent or a shape which the experience is 'of'. I think that for adverbial theory, the information acquired in experiencing an object directly concerns the experience, and thus the observer needs to infer an external mind-independent tree from properties of the experience.

It is a matter of fact that I appear to perceive something. I argue that these four theories give us different answers concerning the question of the nature of a directly perceived object. I also argue that the information acquired in perceiving an object leads to different conclusions from each theory. These theories' different assertions concerning one and the same phenomenon cannot all be true. I do not understand how their different claims regarding knowledge of the perceptual phenomenon can be explained if not through their different metaphysical assumptions.

A primitive sign of perception is that of a movement. L. S. Carrier argues that there are cases in which it is plausible to assert that someone perceives a physical object such as a tree. We can infer from a person carefully walking around a tree that he or she sees it, according to Carrier. (Carrier, 1992: 105) There are also cases such as when one dodges a

bike, seizes a smart phone, controls one's arm or turns one's eyes. One acts with the help of perception. However, movement is not perceptual experience, but the object of perceptual experience as well. This leads to the action-based theory of perception:

For a subject to perceive x is for a subject to simultaneously recognize the location of x.

When we kick a rock, it does not try to get out of the way because it does not perceive anything. However, the assertion "if one did not move, then one would not perceive" can be untrue. It is true that a paralysed person does not move, but is untrue to say that she would not perceive. Therefore, the implication is that this assertion is generally untrue. It might be said that seeing something may make her want to run away, but she is not able to. The action-based theory of perception does not show the nature of perceiving an object, how it occurs or what the object of perception is. It does not show what perception of action is, but it assumes it to be an external entity.

The function of such principles concerning perception is to clarify the meaning of 'perceiving an object'. To define unclear and ambiguous terms is essential in order to avoid weaknesses in philosophical arguments. For example, when perception is used in different arguments and its definition seems ambiguous, arguments may fail. Despite the ambiguous meaning of 'perception', one may say that they know the nature of the object of perception because one perceives it. However, there have been different results concerning knowledge of the nature of the object of perception on the grounds of perceptual experience.

I argue that the concepts of *spatiality* and *causality* are useful in order to reason through both theories of perception and the perceptual situation surrounding me at this moment. When considering what I appear to perceive, four concepts are essential: (1) subject, (2) perception, (3) appearance and (4) material substance. I also think that the application of substance/attribute metaphysics could be fruitful in locating the entity of perception. For example, I appear to see a red shape, but I am not certain whether the directly seen redness and shape are in a mind-independent external substance or in my mind as mental

items. Although the nature of a subject and its material substance are included in theories of perception, the focus is on situations in which I appear to perceive something⁴. A situation in which I appear to perceive a tree can be put into the spatial structure: it seems that I and the tree are in different places. Therefore, there seems to be a distance between the perceiver and the thing. Moreover, this spatial structure can be applied to the more general structure of ontological categories by means of reasoning.

The common-sense picture of perception is that it discloses the external world. It discloses that there are no cars on the street, and thus one can cross the street. The contemporary analytic philosophy of Moore, Austin, Searle, McDowell, and the phenomenologies of Heidegger and Sartre hold as a supposed belief that a material object is that thing which one directly perceives. Let us call this *a material object hypothesis*. In this research, their argument that a material object is directly perceived by a subject is refuted by showing that it relies on ambiguities. In this work, three simple arguments will be given to show that a material object is not directly perceived. Although it is difficult to empirically identify the nature of a mental image and the nature of a perceptual object, there is evidence that they are similar entities located in a person, if the causal theory of perception is true. From this evidence one of the main theses follows: knowledge about the external world is dependent on subjective phenomena or experience. The external world is perceived via the direct objects of perception.

I want to clarify what I understand 'the external world' to mean. The fact is that something appears to exist in perceiving. It is impossible to doubt that I appear to perceive something. It is a puzzle to know the nature of that something that I directly perceive. If that something is not a mind-independent substance, then it is possible that a subject knows the external world *via a mind-dependent appearance*. Here 'externality' refers to some kind of spatial relation between things. If x is external to y, the *real* definition of 'externality' is that x and y have no parts in common. Therefore, if the world is external to the mind, it has no parts in common with the mind. If the mind and the world have no com-

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⁴It seems to me that I perceive properties, or a bundle of properties, not a thing. Act/object theorists may differ on the nature of objects of experience, according to Michael Pendlebury (1992: 9).

⁵I will give references to their theses and arguments in the second chapter.

mon parts, they must be distinct entities such that the world is external to the mind. The world is independent of the mind to which the world appears to be *in a distinct place*. 'Externality' then means 'partlessness' or 'distinctness'. This kind of definition of 'externality' may be questioned, however.

The external world is independent of the mind. Nevertheless, I would not say that 'externality' is 'independence'. It is pretty certain that the definition of 'independence' is not 'externality'. Two things can be external to each other while being dependent on each other. For example, the existence of a piece of art is external to the artist creating it. However, the existence of the piece is not independent of the artist because without the artist the piece would not exist. Some may say that minds are non-spatial and distinct. My definition affirms that two minds are external to each other. However, this definition is inconsistent with the concept of spatial relation. This inconsistency does not disprove my definition of 'externality' because the relation between a perceiving subject and the external world is spatial. Therefore, the objection is irrelevant. In addition, because two minds are not together, I can say that one mind is external to another without referring to spatiality. In sum, two minds are external to each other because they have no entities in common.

In the next chapter, a general overview of theoretical ideas and methods used in this work will be presented in a more exact manner.

Part two is a review of previous philosophical studies. I will evaluate how perception has been used as evidence of both indirect and direct connection with the external world. This is why simply perceiving an object cannot demonstrate our knowledge of the nature of the object that is directly perceived. It is also certain that the method of conceptual analysis alone is not sufficient to understand that entity. Textual evidence shows that *perception* has not been clearly explained by earlier philosophers.

Part three includes a theoretical framework, which is the causal theory of perception, and an analysis of substance-attribute metaphysics. If the causal process concerning an external object and a conscious perceptual experience leads to information directly about the mind-dependent appearances or the veil, then the objects of perception must be located in

the observer. In perception, one, self or the mind is directed at something other than perception. H. P. Grice's view of the causal theory of perception will be evaluated. According to him, perception and sense-datum are linked. I will ask if a sense-datum experienced by a person is identical to an object that has a continued and distinct existence.

The fourth chapter will start by clarifying the meaning of 'appearance'. The meaning of 'perception' is unclear as well. The general meaning of the term 'appearance' is close to that of 'phenomenon', 'sensory idea', 'sense-datum' or 'mental representation'. On the other hand, the term 'appearance' can also mean 'apparition', 'seeming', 'deception' or 'falsehood' – the saying "Appearances can be deceptive" describes this well. Therefore, the meaning of the term 'appearance' is ambiguous. The essential question is that of how to gain knowledge of an appearance that one is directly conscious of in a perceptual situation. Perception is directed at something in any case. Nevertheless, perceptual judgements can be untrue.

The fifth chapter will explain Berkeley's reasons for why a sensible object that we perceive is neither a material substratum located in the external world nor a representational item causally related to the unperceivable matter. I claim that the impossibility of matter does not follow from Berkeley's theses. The existence of matter is neither a logical impossibility nor an absurd entity. Matter is a possible entity because it possibly exists. Other philosophers such as Broad, Dancy, Pappas, Pitcher, Marc-Wogau and Russell have not carefully considered the consequences of Berkeley's theses against the existence of matter. Finally, I evaluate Berkeley's Master Argument: it is not possible to conceive of unperceivable entities. It is, however, possible to conceive of at least one thing without perception — mind. In addition, matter can be conceived of as being distinct from mind without perception.

In the sixth chapter, I will use three simple arguments to refute the thesis that I appear to directly perceive a mind-independent material object. The theses I will use are similar to the time-gap argument and the argument from the relativity of perception. The visual object of imagination and the object of experience are in the same place. They also share common qualities such as the content, subjectivity, change in virtue of conditions of ob-

servers, and the like. This leads to the conclusion that both a tree-image and a tree-experience are distinct from a material tree. Perception of an object is caused by human nature, the senses and consciousness, and mind may prevent the direct perception of the external world. The strongest objection against that consequence is that there is no extra entity called sense-datum or appearance between a subject-in-itself and a real external thing-in-itself. That is, we see books, not book-images. The possible reply would be that a person sees no mental pictures except that which they see via pictures. Those who think that perceiving an object is not the effect of causal events from the external world and does not require the human system of the senses have to show how the direct perception of the external mind-independent world is possible. They are realists as regards the external world. If they are realists, they must be realists regarding the human body.

The concluding parts will show the meaning of the findings.

c) Methods and Their Reliability

The starting point in this work is a perceptual situation in which I appear to perceive something to be hard, green and sweet. The raw data are entities of perceptual experience which are ready for the analysis. Perception of a tree is an example of such an entity. The study also deals with Berkeley's theory for idealism, i.e. we perceive physical objects, but they are really bundles of mind-dependent ideas. Therefore, we have a particular case, i. e. appearing to perceive a tree, and theories of perception should be generalizations of this particular case. Here, a methodological question is that of how to discover the nature of an object of perception. For example, how do I discover whether an object that I am experiencing is an inner item in my mind or an outer thing in the external world? The question can be presented as a propositional function: An object of perception is X. If we somehow discover what "X" is in the function, then we will solve the problem of perception.

Like I mentioned earlier, Richard Fumerton argues that to establish that sensations are signs of physical objects one would have to *observe* a correlation between sensations and the existence of certain physical objects. He continues that to observe such a correlation in order to establish a connection, one would need independent access to physical objects.

This is access one cannot have if all one knows directly is that certain sensations occur. (Fumerton: 1992: 339) I think this is correct.

The philosophical problems concerning perception have been discussed since the origin of Western philosophy, and most major philosophers have had something to say about it. Philosophers have given answers to these deep questions by *reasoning* and *thinking* rather than by using experiments, interviews or telescopes. Although the linguistic turn in the 20th century asks that we reduce philosophical problems to problems of language, to the use of words and sentences instead of useless metaphysical speculation, I think that most philosophical problems are about reality. In brief, I do not believe that only analysing words can reveal what sort of thing I am directly aware of. Reasoning can be more fruitful. It is reasoning that focuses on the entities that make statements about things true or that give evidence for statements on other things.

Let me first show, by use of the most general propositions, how scientists verify or reject theories, hypotheses or general claims. After doing so, I refer to cases of philosophy in which similar techniques have been used. First, the veracity of a general claim "X is P", which can be a theory, a hypothesis or a judgement, is considered. Second, a researcher does A, and by doing so she or he tries to demonstrate that the claim "X is P" can or cannot be true. Finally, this A is evidence that "X is P" is true (or false). Doing A might be an experiment of eye movement at a lab, collecting historical documents at an archive or recording the discussions of politicians.

This kind of philosophical study has been done by Roderick M. Chisholm in his 1942 article *The Problem of the Speckled Hen*. According to sense-datum theorists, that which is directly perceived cannot be dubious; what one directly perceives are mind-dependent sense-data or colours, shapes, sounds and the like. Sense-data provide an infallible foundation for empirical knowledge. Chisholm questioned the thesis of sense-datum theorists. By introspective evidence, Chisholm proved that sense-datum claims can be fallible. For example, according to sense-datum theorists, I cannot doubt a claim that something appears to me to be a red dot, but I can doubt whether this appearance is a real thing, a hallucination or a mental image. According to Chisholm, claims that include numbers are

highly debatable: I am aware of many words on the page of a book, but my sense-datum claim that to me there appears to be 59 words can be untrue. In this way, Chisholm demonstrated how philosophy is a researching activity.

For example, I can reason that if I am able to affect the perceptual experience with which I am directly aware or acquainted, causality has a role in perceiving an object, an event or a property. Frank Jackson advises us to stick a pin in our finger if we do not understand the term 'directly acquainted'. The painful relation we will then experience is an instance of direct acquaintance. (Jackson, 1992: 445) The realist could say that perceiving that pain is impossible without the brain and the central neural system. Likewise, if a tree causes a mind-dependent appearance (sense-datum, idea), and I am conscious of the mind-dependent entity of a tree, I reason that the information I acquired in perceiving the tree is indirect. Following direct realism, I can also reason that I acquire the information in perceiving an object about the mind-independent external tree because I appear to perceive the mind-independent external tree. My perception of a tree depends on the tree: without the existence of a tree in front of me, I am not able to see it. In sum, one source of knowledge is reasoning. The reliability of reasoning is another issue.

The next point involves the question of how one can know that the answers to philosophical problems are reliable. This is asking for evidence, justification and reasons, not only for philosophical theories in general, but also for this research. It seems that perceiving an object by itself is not sufficient reason to know the object that is directly perceived. Research is an interactive process that one undertakes in order to examine the nature of some phenomenon and find out what it is. Nowadays, sciences are divided into groups according to subjects: physics studies inanimate nature, biology studies the nature of living things, sociology studies groups, and so on. Which are then the methods of science? There are many methods in different sciences, but they all seem to boil down to *experience* and *reason* despite the fact that these two phenomena are very challenging to precisely define. If we do not know for certain what experience and reason are, how is knowledge reliable? I ask the reasons for knowing the phenomena. As a realist, I do not believe, for example, that perceiving colours, bodies, events or properties is possible without a perceiver and its

qualities. Moreover, I do not believe that perceiving in-itself implies knowing the nature of colours, sounds or events, for instance. This does not mean that perceiving an object would not inform me of something that exists, although the information would not demonstrate its essence or origin.

I use introspection and basic principles of logic and metaphysics, in addition to reasoning. These basic principles include, at least, the following:

- 1. The law of contradiction
- 2. The identity of indiscernibles
- 3. The law of sufficient reason
- 4. The deduction theorem and the interpretation of implication⁶
- 5. The substance/attribute distinction

Introspection means taking an internal look at what is going on in our own minds when, for example, we imagine, see or feel something. It reveals our inner states and processes. A substance-attribute metaphysic indicates that these inner mental events reside in a subject⁷. Therefore, there is no inner mental event without a substance which passes through that state: the sense experience of a sound lies in the perceiver. **I argue that introspection can show the similarity between objects of mental images and visual experiences, and that this similarity can be proven by taking an internal look.** However, I do not believe that the use of introspection will allow me to discover whether or not an object of perception is an outer thing of the external world. I cannot discover this because, to me, it seems that I perceive properties that might not be mind-independent such as colours and sounds. Introspection also seems to indicate that the cause-effect relation occurs between mental events.

Let us consider a mental image of a ball, for example. The image of a ball arises and I am aware of it. After the image arises, I make a judgement: I am aware of a ball. I argue that the image of a ball made me aware of itself, and I judge it to be "a ball image". I argue

⁶I refer here to David Hilbert's theory of deduction. We can give an interpretation for implication from the deduction theorem.

⁷I will present reasons why the substance-attribute metaphysic makes sense in the section 3.

that this is due to the cause-and-effect relationship. In a similar way, perceiving a tree causes the perceptual judgement of a tree: "I perceive a tree". Thus, first I perceive a tree, and second, I judge that I see a tree, not vice versa. Introspection seems to reveal the presence of the immediate causality between mental events. The experimental psychology of perception also assures that perceptual experience includes the causal connection between the existence of material objects and the conscious perception of the objects. I think that there is more evidence for the causal theory of perception than against it, and thus I do not understand why some philosophers want to criticize this assumption. My mind is an object of causal forces such as the light, energy, the wind and gravity. I can assume them to be external things.

I said that introspection, reasoning and basic principles of logic and metaphysics are useful. They are useful to study theories and their assertions and arguments. But are they a reliable method for discovering the nature of a particular perceptual entity? What is *that* which I appear to perceive now? The reliability of research increases if the findings can be duplicated. I think that everyone can admit to perceiving something and everyone can ask what the nature of that something is. The perceptual situation where one's location seems to be open to everyone: I am perceiving sounds, for instance. It is then not only replicable, but also objective. If philosophical studies are only speculation and cannot express anything objectively it does not make sense to believe in them.⁸

I think that every research process has an organized temporal structure, especially in empirical sciences⁹. Each one has a beginning and an end. Perception of an object and knowledge of the nature of the objects of perception are open questions for me. I start from a clean sheet of paper by asking what the thing that I directly perceive is. People who want to defend some theory of perception know the results of a research endeavour *before* it has been started. They have chosen a research problem and a starting point, all *before* they have analysed theories and cases. Philosophical study must also start by exam-

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⁸I think that Peter Unger's (2014) new book is an important criticism of analytic philosophy. According to Unger, analytic philosophers study empty ideas, gaining no important findings about the substantial reality. Unger argues that the ideas that philosophers study must be substantial, or objective.

⁹There are plenty of studies concerning what the research process is. See, for example, Blaxter, Hughes, and Tight: *How to Research*: 2006.

ining a subject, such as concepts or philosophers' theories, in the same way that other sciences do, and after this examination, the report will be written. The research process has an organized structure.

The history of philosophy shows that *perception* has been used by philosophers to prove different conclusions about the object of perception. On the one hand, according to Plato, Sextus Empiricus, David Hume, Immanuel Kant and Bertrand Russell, perception somehow deceives us into concluding that the world of perception is the real material world, even though it is the way of humanity to experience the contingent entities that are not necessarily the real things of the material world. On the other hand, for G. E. Moore, J. L. Austin, Edmund Husserl and Jean-Paul Sartre, perception is direct evidence of the existence of the material world. The next review shows that these mentioned philosophers do not focus much on perception as such, but rather on the objects they think they certainly know.

2. 'PERCEPTION' IN ARGUMENTS THAT THE OBJECT OF PERCEPTION IS AN EXTERNAL ENTITY

a) Classical Philosophy

1) Dualism

In this section, I seek a philosophical problem in which *the concept of perception* has played an important role in its origin and development. The argumentation has been based on the perception of an object. That is to say, in Western philosophy it has almost always been believed that the world of perception is not the real world and that perceptual knowledge is knowledge of the flow of sense experience and not knowledge of the real world. Here, 'dualism' refers to the view that we do not perceive the real external world, but its mental copy in our mind. Therefore, according to dualism, there would be two different entities: the mind-independent external world and the mind-dependent internal realm of the real world. Another point is the claim that perception never leads to direct knowledge about the external world. Our knowledge about the external world is always indirect. These two points should be distinguished from one another. *Perception* in itself

is then a justification to assert that one does not directly perceive the external world due to the distortion of the senses:

- 1. Under the different circumstances and conditions of an observer, the same thing appear to be different.
- 2. Therefore, what is perceived to be and what really is are not the same.

Perception does not give us an adequate picture of the external world. For instance, the mouth of a cup looks elliptical due to a certain angle of vision. My object of perception is directly an elliptical entity, although there would be a thing that has a mouth. Moreover, the yellow butterfly seems to be colourless because of the absence of lighting. The distance makes me perceive the sun to be smaller and different than it really is, although the sun has a certain size. Therefore, I think there is an ontological difference between reality and appearance.

Plato claimed that perception and appearance are unreliable. The most famous example of this is Plato's great cave allegory, according to which a human being's determined position is to perceive changed phenomena of the senses that he or she tends to consider the real world. For Plato, they are shadows of the real things:

"The visible realm should be likened to the prison dwelling, and the light of the fire inside it to the power of the sun." (Plato, 1997:1135, Book VII 517b)

Plato means that

"Sight may be present in the eyes, and the one who has it may try to use it, and colors may be present in things, but unless a third kind of thing is present, which is naturally adapted for this purpose, you know that sight will see nothing, and the colors will remain unseen. What kind of thing do you mean? I mean what you call light." (Plato, 1997:1128, Book VI 507e)

This "light" does not show us the real things, but copies of them: the shadows of the real things on the wall of the cave.

The antique sceptics formed the distinction between the realm of the senses and the real external world. They argue that it is wrong to assert that the appearances of the senses are reality. For example, what I perceive to be and what really is are different. A round table appears to me, but I appear to perceive an elliptical shape. A round table is not elliptical. The object of perception, an elliptical shape, is dependent on my position. Sextus Empiricus considers his own perceptions, not the concept of 'perception':

'For, as we stated above, we do not reject the things that lead us involuntarily to assent in accord with a passively received *phantasia*, and these are appearances. And when we question whether the external object is such as it appears, we grant that it does appear, and we are not raising a question about the appearance but rather about what is said about the appearance...'. (Sextus Empiricus, 1996: 91–92)

And he continues:

'Thus nobody, I think, disputes about whether the external object appears this way or that, but rather about whether it is such as it appears to be.' (Sextus Empiricus, 1996: 92)

Thomas Aquinas distinguished between mental appearances and real things in his philosophy of perception. He criticizes the sceptics' idea that we would perceive appearances of external things and not the real things of the external world like trees, birds and buildings *via appearances*:

'[What we see is not the images in our eyes, but the things they image.] In the same way, what we know is not the abstracted species in our mind. If we did, all science would be about ideas, not about real things outside the mind; and (as some ancient philosophers wrongly thought) all appearances would be true. Rather the abstracted species is the means by which we know what we know. Just as the form that makes a natural thing externally active reproduces itself in an effect (heat producing heat), so the form that makes a thing interiorly active represents its object. By the image in the eye we see the thing it represents; and by the abstracted species imaging things in the mind we understand the things it images.' (Aquinas, 1989: 134)

In fact, Aquinas submits that (1) external things cause our particular images and (2) we perceive external things through images about them; we do not perceive the images or the appearances as the Greek philosophers Plato and Sextus Empiricus claimed earlier. There-

fore, Aquinas' view seems to be that one sees the sun because the sun causes their seeing of it via the image of the sun. His proposition must be based on reasoning and understanding rather than perception. (Aquinas, 1989: 3, 41, 109, 122, 131–138, 201)

In *Meditations*, René Descartes presents his view that we cannot decide now whether we perceive the real things outside of us or mental entities within us *on grounds of perception*:

'As I think about this more carefully, I see plainly that there are never any sure signs by means of which being awake can be distinguished from being asleep.' (Descartes, 1647/1996: 12)

However, he does not seem to consider the possibility that we would not even know these perceptual objects while being awake. Our senses do not provide us any certainty of whether an object of perception is a mental entity or a mind-independent material thing. Descartes says that "They [corporeal things] may not all exist in a way that exactly corresponds with my sensory grasp of them, for in many cases the grasp of the senses is very obscure and confused" (Descartes, 1647/1996: 55). Here, he refers to understanding rather than sense perception.

The attitude of Gottfried Wilhelm Leibniz well describes the view of many classical philosophers:

"For, at bottom, all our experience assures us of only two things, namely, that there is a connection among our appearances which provides us the means to predict future appearances with success, and that this connection must have a constant cause. But it does not strictly follow from all this that matter or bodies exist, but only that there is something that presents well-sequenced appearances to us. For if an invisible power took pleasure in giving us dreams that are well connected with our preceding life and in conformity among themselves, could we distinguish them from realities before having been awakened? And what prevents the course of our life from being a long well-ordered dream, a dream from which we could be awakened in a moment." (Leibniz, 1675: 3–4)

The problem is that it is only in thoughts and imagination that one is able to compare the realities of the mental realm and the external world. By this I mean that one realizes that what occurs inside one's mind and what occurs in the outer world are two distinct things.

Perception would be a process in which a distorted copy of the outer world is produced. According to David Hume, we do not know the existence of the external entities, but impressions (Hume, 1739-1740/1969: 116). Furthermore, we do not know the causes which affect our impressions (Hume, 1739-1740/1969: 116).

What then are philosophers' reasons for claiming that perception is directed at minddependent appearances of reality? Dualism as a concept seems to include both the human inner life and the external world. According to dualists, one reason for this claim is that one does not *directly* perceive the external world although one's judgement informs them that they do. For example, a judgement such as "I perceive the sun" indicates an object of the external world. However, Locke and many later empiricists have claimed that in perceiving an object, the external thing causes a sense-datum to form in our minds, and this sensory idea is the thing that we perceive. Furthermore, if the concept of causality is associated with the concept of perception and the concept of the external world, the external world is the cause of this perception of it. This means that perceptual experience is dependent on a human person's own qualities and perceptual circumstances. Dualism then includes a claim that appearances can hide the real nature of the external world and their entities. I think that it does not make sense to interpret 'appearance' as a substance (I will get back this question in chapters three and four.) This interpretation has found some support in philosophical theories because these theories associate appearances with senses or objects of perception. They refer to the causal connection between an external object and a conscious experience of mind, and that is one reason why philosophers do not acknowledge the following thesis:

1) If the external object does not cause its appearance, the mind causes its own perceptions.

By *reasoning* and *thinking* when they perceive, philosophers have arrived at the conclusion that an external thing causes our perception of it. If they are correct, dualism (that is, representative realism) tries to argue that there is an ontological difference between the external world and mental phenomena. A perceptual appearance is not a substance, and a

person cannot perceive the causal connection between an external object and a mental event.

Bertrand Russell was especially important in the development of the idea of the object of perception based on the physiology of the human body. For example, he writes in a letter from 1915:

'..., for I hold strongly that the sense-datum is *not* mental – indeed my whole philosophy of physics rests upon the view that the sense-datum is purely physical. The fact of being datum is mental, but a particular which is a datum is not logically dependent upon being a datum. A particular which is a datum does, however, appear to be causally dependent upon sense-organs and nerves and brain.' (Russell, 1915/1986: 88)

However, Ludwig Wittgenstein continues to be sceptical in his On Certainty:

"From its *seeming* to me – or to everyone – to be so, it doesn't follow that it *is* so. What we can ask is whether it can make sense to doubt it." (Wittgenstein, 1969: 2)

Many classical philosophers' descriptions of *perception* seem to be ambiguous, which weakens the reliability of their arguments: their meaning of 'perception' is unclear. By this, I mean that if we do not exactly know the nature of perceptual experience, how do we know what it is that we perceive? Can we directly acquire the information of the external world by perceiving an object? Russell, for example, *thought* and *reasoned* that a sense-datum is something physical due to it being dependent on the observer's physiology. He did not *perceive* physicality of colours or sounds. He *inferred* the physical nature of sense-data.

Two world's theory or dualism has been claimed to lead to external world scepticism, although it does not seem to be an idea of the antique sceptics; e.g. we know how the external world appears to us. We know what we perceive to be, not the absolute reality independent of experience and reason. In fact, a veil of perception would prevent us from perceiving the entities located in the external world. This is the topic of next chapter.

2) The Veil of Perception

The general view seems to be that the thesis of the veil of perception requires that external things are the cause of sense-data¹⁰. External things cause sense-data in our minds, and this data leads us to believe that *we are directly aware of external things* in perceiving an object. These mind-dependent appearances and ideas stand like a veil acting as intermediaries between external things and the conscious subjects. As Frank Jackson states, I perceive external things by throwing a veil over them by means of my senses. Jackson then asks what these coloured expanses can be other than mental sense-data. It is the veil I perceive. (Jackson, 1991: 446) Sensible ideas, or sense-data¹¹, that are produced in our minds by mind-independent things hide these mind-independent things. According to the veil of perception thesis, we perceive sensible ideas:

- 1. Perceiving x is always perceiving sensible x.
- 2. Some mind-independent entity x is not sensible.
- 3. Perceiving x is not both sensible and non-sensible.
- 4. Therefore, there is no perceiving some non-sensible x that is mind-independent.

But it is not clear that 'by means of my senses' implies knowing the veil. The information acquired by means of my senses can be information of the external world. It is, however, controversial whether the veil of perception leaves room for perceiving external things *directly*.

According to representative realism, the one and the same external tree causes similar appearances of the tree to different persons. The present appearance of the tree is independent of the past ones. Furthermore, a person's background knowledge and prejudices do not influence the present appearance of the tree. On the other hand, the personal conceptual system stored in the memory influences the interpretation of the present appearance. Therefore, for representative realism, the present perceptual appearance is about the external object, and the interpretation of 'a tree' is about the content of appearance. If I

¹⁰This is clearly Frank Jackson's view. See his 1991: 445. See also Chisholm, 1997: 3-41; Smith & Jones, 1986: 85-88; Grice, 1961: 121-153.

¹¹I assume that the technical terms 'idea', 'sense-datum' and 'appearance' are synonymous in referring to an inner entity.

must say what I am perceiving, the consequence of the veil of perception thesis is such that I do not describe a real tree, but rather I describe its appearance or a mind-dependent idea. For example, my claim "this is tree" refers to a tree's appearance, and this direct awareness of appearance is about a real tree causing my mental state of it. More generally, the idea is as follows:

"The interpretation of an appearance \rightarrow an appearance of the object \rightarrow the object."

There would then be two *about*-relations: a term about its reference and an appearance about its object. It seems to me that I know a term and its reference by introspection. However, how do I know that a relation between an appearance and an object occurs at that moment? The model above would clearly indicate that the direct interpretation about the external object, such as that about a mind-independent tree, is impossible. That is, a claim is *indirect* and *mediated*.

The anti-sceptics insist that this model leads to complete ignorance about the external world. That is the reason why it must be rejected. Although visual sensation, say, greenness or a shape, and perception would necessarily be causally dependent on an observer's qualities and perceptual circumstances, this does not necessarily mean that one knows the veil between the external world and the mind because one does not perceive a visual sensation or perception of the green shape, but rather a content of a combination of greenness and shape. That is, in perceiving a green shape one is directly aware of these qualities of greenness and shape. For example, in the 1950s a vision scientist named James L. Gibson questioned the notion that we perceive the mind's construction about the real world. We would perceive the sensible objects, or primary and secondary qualities that depend on perceiving them, not material objects with their properties. By 'the sensible objects' he meant colours, sounds, touches, smells and tastes. This would mean that objects of the external world and their qualities lie behind the veil of perception. He did acknowledge that perception includes causality, but causality does not imply the perception of a mental picture constructed by the mind and based on sensations in the sense-organs. For Gibson, the information acquired by perceiving a tree is about the object of the external world, although there is a causal process that takes place between a tree and the conscious perception of a tree. (Gibson, 1950: 12-14) However, he bases his view on non-philosophical conception: "Normal sight is an astonishingly good guide for getting about and doing things." (Gibson, 1950: 1) Gibson asks: "If the solid visual world is a contribution of the mind, if the mind constructs the world for itself, where do the data for this construction come from, and why does it agree so well with the environment in which we actually move and get about?" (Gibson, 1950: 14) For Gibson, things are *not* the product of a mental capacity called perception. He did not think that a cause-effect relation in perceiving an object leads to seeing an inner mental world.

Finally, according to the anti-sceptics, the sense-datum theory leads to the claim that we do not perceive through the veil of perception. Their inference 'sensing a sense-datum \rightarrow knowing the veil of perception' is too hasty because it is possible that one perceives the external world via senses. That is to say, the more believable inference would be 'via sensing a sense-datum \rightarrow knowing something else than the veil of perception'. For example, one knows phenomenal properties of visual sensations, such as redness and roundness, by being directly aware of these qualities in perceiving. Nevertheless, inferring something else from the redness and roundness does not show what that something else is. It is possible that there is nothing beyond the sense-data of redness and roundness. There is nothing beyond the veil. Frank Jackson explains that we see the objects around us. We see an object in virtue of seeing the veil, the sense-data, causally related in the right way to that object. Then Jackson asks a fair question: what justifies our belief that there is anything behind the veil; and if we are somehow justified in believing that there is something behind the veil, how can we be confident of what it is like? (Jackson, 1966: 446) For example, Thomas Aquinas' (1989: 134) judgement that 'What we see is not the images in our eyes, but the things they image' is not a knowledge proposition, but an assumption.

b) Contemporary Analytic Philosophy

1) The Analytic Method Reconsidered

The application of philosophy focusing only on language and theories is not a reliable method to obtain knowledge about one's mental phenomena or the phenomena of the external world. The analysis of theories and propositions seems to give information about the theories and propositions themselves unless the starting point is empirical or logical *facts*. The analysis without experience is blind. By analysing the concept of 'perception' it is impossible to know what perception is and how an object of perception occurs. For example, although it seems clear that one senses colours, it is impossible to know what experience of colours is on the grounds of pure conceptual analysis.

The sense experience should once again be central to philosophy. This refers to empiricism, because the senses disclose the world, not words. In addition, empiricism does not exclude conceptual analysis, because this research concerns perception and what can be derived from the immediate perception. The analysis is about the phenomenon. However, this is not what contemporary analytic philosophers understand by "analysis", notices Dean Zimmerman (2007: 7–11).

Independent of the logical positivism and its extreme forms in the early 20th century, contemporary analytic philosophers do not hold that "analytic" only refers to the view that all important philosophical problems can be resolved by some kind of careful attention to language, according to Zimmerman (2007: 7). He says that for Bertrand Russell, "logical analysis" did not mean "linguistic analysis" – the reduction of philosophical problems to puzzles about language (Zimmerman, 2007: 8). Russell's belief was such that facts can be understood by analysing their constituents (Zimmerman, 2007: 8). However, of course, they were intent upon turning philosophical problems into linguistic problems. Zimmerman (2007: 9–10) continues to say that today's analytic philosophers do not think all philosophical problems can be eliminated by some magic bullet of "linguistic analysis". To my mind, however, the starting point of analysis lies in the theories of today's analytic philosophy, and this is problematic.

Zimmerman (2007: 11) says that every philosopher still believes various philosophical theories: "the ones that seem, after careful reflection, to do the most justice to the sorts of evidence that count in favour of philosophical theories." What kind of evidence is that? He answers as follows: "The theory's ability to retain most of their firmest pre-theoretical convictions about the subject matter it purports to describe; the naturalness of the theory's fit with other philosophical views they hold; the theoretical virtues it displays such as

simplicity or the unification of what seemed to be disparate phenomena." (Zimmerman, 2007: 11). I must say that this "evidence" does not prove a theory to be true or untrue. In fact, it does not lead to the truth or falsity of a considered theory. We should follow different methods in philosophy.

Let me first show by the most general propositions how scientists verify or falsify theories, hypotheses, or general claims. After showing, I refer to cases of philosophy where have been used the similar technique. First, a general claim "X is P", which can be a theory, hypothesis, or a judgement, is considered if it is true or false. Second, a researcher does A, and by A she or he tries to demonstrate that a claim "X is P" cannot be true or it is true. Finally, this A is evidence that "X is P" is true (or false). Doing A might be an experiment of eye movement at a lab, collecting historical documents at an archives, or recording talks of politicians.

This kind of a philosophical study has been done by Roderick M. Chisholm in his article *The Problem of the Speckled Hen* in 1942. According to sense-datum theorists, what is directly perceived cannot be dubious. And what one directly perceives are mind-dependent sense-data or colours, shapes, sounds and the like. Sense-data give infallible foundation for empirical knowledge. Chisholm questioned their thesis. By introspective evidence Chisholm proved that sense-datum claims can be fallible. For example, for sense-datum theorists, I cannot doubt a claim that it appears a red dot to me but I can doubt if this appearance is a real thing, a hallucination, or a mental image. According to Chisholm, claims that include numbers are highly debatable: I am aware of many words on a page of a book but my sense-datum claim that it appears to me 59 words can be untrue. In this way Chisholm demonstrated how philosophy is researching activity. (I will return to Chisholm's studies in section four.)

When we want to find out what is going on outside of our mind, we would do best to use all our *senses*, because without sensations it would never cross our mind that something external even exists. Conceptual analysis does not produce knowledge about how things really are outside of ourselves. Analysing the concept of 'perception' does not prove how perception occurs or what the objects of perception really are. The concept of 'perception'

as such does not reveal how perceiving an object leads to knowledge of an external thing independent of perception. The meaning and reference of perception matter. Reasoning, for example, is an act of mind, but there is also a thing that is reasoned. That thing that is reasoned is not words, but facts, such as a perceptual situation in which I am perceiving something.

Conceptual analysis does not bring empirical knowledge about the facts of the contingent world, but rather it brings facts about language in itself. The analysis of the concepts of 'perception' and 'the object of perception', beyond the sensing everyday reality, produce unreliable inferences. From the phrase 'object of perception' those who investigate words automatically infer that what one perceives to be and what really is are the same:

- 1. "One perceives houses"
- 2. "Houses are material bodies"
- 3. Therefore, "one perceives material bodies"

Nevertheless, the concept of 'perception' is undetermined in their arguments: perceptual judgements do not demonstrate how one perceives or what a sensible or perceived object is. It seems that perception is their evidence that the object of perception must be outside of the observer. Perception, as an act of mind, directs the objects which are something other than an observer, and the objects are located in a different place. However, it seems that the objects of perception are not *always* unperceived entities. For example, if my object of perception is an elliptical shape, then it cannot be mind-independent because the real shape is round. However, analysing a statement such as "My object of perception is an elliptical shape" cannot lead to information regarding what sort of entity the elliptical shape is. The object of perception depends on the circumstances and the conditions of a perceiver. In sum, analysing perceptual statements can mislead us.

A. J. Ayer might say that there is something wrong about these statements in the argument above. There is something wrong with them, because, according to Ayer (1973: 58), the two purposes of the theory of knowledge are "to determine what sorts of propositions can be known to be true and to explain how these propositions can be known to be true".

Now, our statements are perceptual. However, knowing if our statements are true based on perception differs from knowing if they are true based on perceiving sensible entities. Ayer mentions Hume and Locke and their statement that objects of perception are simple ideas of perception. If this is true, beliefs in the existence of physical objects are confused and erroneous according to Hume, says Ayer (1973: 59, 61, 62). In the argument above, the trouble is such that material objects are identified with the simple ideas while also being attributed a continued and distinct existence (Ayer, 1973: 62). By following David Hume, Ayer claims that the impressions which we receive from the senses cannot be representations of anything 'distinct, or independent, and external' (Ayer, 1973: 62).

According to Ayer, although direct or naïve realism appears to be strongly grounded when it comes to the perception of physical objects, the difficulty in the argument above is making sense of the sceptic's contention. That is to say, our access to houses, trees and animals is *not* direct. (Ayer, 1973: 68) Here, Ayer means that every physical object is perceived through the medium of something else; an entity of a different sort (Ayer, 1973: 70). One objection against the argument above, Ayer mentions, is the observation by introspection that the immediate object of perception has not *a continued and distinct existence*. Therefore, when I perceive a tree, I exactly perceive something other than a real tree, something *impermanent*. However, by 'the external thing' we have meant 'a continued entity that has a distinct existence from us'. In sum, Ayer seems to believe that the argument above is not as self-evident as common sense expected. (Ayer, 1973: 72–3)

Perception judgements have a structure of 'x perceives y'. Therefore, perception is a relation. In a similar way, 'being aware of', 'x judges y' or 'x looks to be y to z' can all be interpreted as relations, but this fact does not lead to any other fact: we have no certain information of what these related entities are. By this, I mean that language cannot show the nature of the related entities.

The concept of 'perception' as it appears in the statement 'x perceives y' is vague because it is a two-place predicate. While perception is not a two-place predicate, it may be described by means of a two-place predicate. It is not a grammatical term. Perception is an

act of mind. According to Tim Crane (2006: 21–24), the claim 'Perception constructively combines with the external object y' is true. The following argument is sound:

- 1. A and B have at least one joint part.
- 2. Therefore, A combines constructively with B.

However, if we assume that perception is A and the external object is B, then A and B have no exact parts combining them. Perception is not a body, but an event, and the external object may be an event or another person. That is why a claim such as 'Perception A combines constructively with the external object B' is untrue – they lack a joint part. For example, in an article by Haddock and Macpherson, disjunctivists like Snowdon and McDowell do not seem to say much about the causal nature of perception or its relation to the brain and the sense organs, even though disjunctivists are realists in regard to the material world. Perception does not involve causality. In a similar way, Byrne & Logue, Sturgeon, Sedivy, and McDowell do not write a word about the causal nature of visual perception or its relation to a perceiver's qualities. In addition, they do not even mention the concepts "brain" or "sense organs", even though, according to science, perceptual experience is caused by the central neural system. I argue that our perception can be prevented or deprived. For example, damage in my nervous system can prevent me from perceiving an object. In brief, if perception is a relation, it must be a causal one, because one can be deprived of perception by manipulation.

Finally, analytic philosophy's method of concentrating on words is not a reliable way to obtain information about a phenomenon which is in no way conceptual, not even theoretically. The arguments and their premises, reconstructed by the logical relationship of concepts, make them highly implausible and ambiguous.

¹²See, for example, Adrian Haddock and Fiona Macpherson (eds.): "Varieties of Disjunctivism", 2008.

¹³Byrne & Logue, 2008; Sturgeon, 2008; Sedivy, 2008; McDowell, 2008. See these articles in Adrian Haddock and Fiona Macpherson (eds.): Disjunctivism: Perception, Action, Knowledge; 2008. These scholars do not seem to be familiar with the theories of perception of empirical psychology.

2) A Criterion to Know What One Perceives

Some contemporary analytic philosophers, like McDowell, Snowden, Martin, and Austin, assert that *perception itself* or *presence of something* is a good criterion to state that the objects of perception are mind-independent material things. In this chapter, I focus on so-called direct realists or anti-sceptics and their conditions for perceiving an external mind-independent thing. I examine *how to know* what I directly perceive.

The theory of perception that the philosophers above express seems to be as follows:

For a subject, to perceive x is to be the presence of x to a subject.

For example, one perceives a tree because a tree is present and one's perception depends on the tree. Therefore, a subject perceives a green two metre tall tree because a tree is present and it is green and two metres tall. According to anti-sceptics, this material object hypothesis is true: perception depends on the object, and the object of perception is a material object that is present when one perceives it. This means, for example, that the inference 'visualizing an object $y \to an$ object y = a lump of matter' is a fallacy, but the inference 'perceiving an object $x \to an$ object x = a lump of matter' is not a fallacy (here, the symbol ' \to ' meaning 'implies'). However, it is possible that the object of perception is not a lump of matter, and thus the latter inference is a fallacy as well. Furthermore, the visualized object of experience may be material because it is an event involving neural cells, and thus the former inference is not a fallacy. The reconstruction of the argument of direct realism for the thesis that one perceives external mind-independent things may be the following:

- 1) Perception discloses an external mind-independent world.
- 2) Therefore, perception discloses external mind-independent things.
- 3) And therefore, one perceives external mind-independent things.

According to G. E. Moore, when a thing x is met in space, one can say to know that there is an x that is external to one's mind, and that x is an external object. He means that 'external to' would be synonymous with 'to meet in space' but 'to meet in space' would not be synonymous with 'the presence in space'. (Moore, 1959: 130, 134–135, 137–140, 143) Moore writes:

"..., from the proposition that there is at least one thing of that kind there *follows* the proposition that there is at least one thing to be met with in space: e.g. this follows from There is at least one star', from There is at least one human body', from There is at least one shadow', etc. And I think we can say that of every kind of thing of which this is true, it is also true that from the proposition that there is at least one 'thing' of that kind there *follows* the proposition that there is at least one thing external to our minds: e.g. from There is at least one star' there follows not only There is at least one thing to be met with in space' but also There is at least one external thing', and similarly in all other cases." (Moore, 1959:143–144)

It seems that Moore's argument is as follows:

- 1. 'There is an F, e. g. a star.'
- 2. Therefore, 'There is a thing to be met with in space.'
- 3. And therefore, 'There is an external thing.'

These two consequences are deduced from the first proposition. Moore writes about *propositions* in the paragraph above. It is to infer from one proposition to another proposition and from this second proposition to the third proposition and so on.

Moore seems to connect 'x perceives that F' with 'There is an F', and thus 'perceiving F' and 'existing F' would have the same meaning for him. First, he states:

'That is to say, from the proposition with regard to anything which I am perceiving that it is a soap-bubble, there *follows* the proposition that it is external to *my* mind.' (Moore, 1959:145)

Later in the same paragraph, he describes:

"I think, therefore, that from any proposition of the form 'There's a soap-bubble!' there does really follow the proposition 'There's an external object!' There's an external object external to all our minds!' (Moore, 1959:145)

To my mind, it is certain that from the statement 'S is perceiving that there is a soap bubble' the statement 'There is a soap bubble external to S's mind' does not follow logically. In brief, "I am perceiving that it is a soap bubble" does not imply "It is external to my mind". From 'S is perceiving an F' the statement 'There is an F or there is not an F' follows logically.

One objection against my interpretation might be that Moore shows the existence of things around us, and therefore shows the existence of the external things that is "met in space". In fact however, Moore justifies his proof of the existence of external things by believing in evidence of perception. In a claim such as "I am perceiving that it is an F", the value of F must be an external thing. Perceiving an F is not sufficient reason to claim that F is an external thing. To claim that it is cannot be derived from perception alone.

Although Moore says that one perceives a soap bubble, a soap bubble does not exist only when one is perceiving it. The propositions 'I am perceiving that it is a soap bubble' and 'There is a soap bubble' are two different propositions, because 'perceiving an F' and 'there is an F' are two absolutely different facts. The latter is deduced from the former, but their logical connection is not as clear as Moore tends to assume. Perceiving F does not show what the nature of F is. Moore's premise is implausible because the phrase 'I am perceiving' is undetermined and ambiguous in his paper. Therefore, Moore did not prove what the nature of the object of perception is. However, that does not mean that he did not show that there are now things outside of us. He shows the existence of things outside of us, but the object of perception does not have a continued and distinct existence separate from that of a perceiver as we tend to think external things have.

On the other hand, the linguistic arguments do not demonstrate how things are in reality. From proposition 'A' the proposition 'B' may follow, which is clear, but the language does not logically or really imply the facts of the world. Therefore, the following argument is not valid:

- 1. There is the sentence "There is an F".
- 2. Therefore, a fact is realized from the sentence that there is an F.

In the same way, the following argument is also invalid:

- 1. There is a sentence "S is perceiving an H".
- 2. Therefore, a fact is realized from the sentence that S is perceiving an H.

All in all, Moore's argument is:

- 1. S is perceiving $F \rightarrow$ there is a F.
- 2. S is perceiving F.
- 3. There is an F (from 1, 2).
- 4. Therefore, there is an external F (from 3).

This argument is inconsequential because a perceived F is not necessarily an external material substance.

For that reason, M. G. F. Martin's criterion that the *presence of something* in perception implies a mind-independent material entity is not sufficient. He asserts that "mindindependent objects are present to the mind when one perceives" (Martin, 2002: 393). In addition, Martin (2002: 392) says, "What is obvious to us, according to this line of argument, is that our experience is of mind-independent objects. There seems no hope of explaining this aspect of phenomenology purely in terms of non-physical sense-data." His suggestion is that 'there are reasons to think that one's experience relates one to the mindindependent world, and yet does so in a non-representational manner.' (Martin, 2002: 378). Martin seems to think that because there are reasons to believe that one's experience relates one to the mind-independent world, one is sometimes in immediate relation to mind-independent objects. However, perception and experience do not unveil a substance qua substance, and thinking that one's experience relates to the mind-independent world does not imply it actually does or does so in a non-representational manner. Those who claim that perceiving x is such that x is present and x is a mind-independent object do not consider that proposition as inverse (Austin, 1962 cited in Martin, 2002: 389; Searle, 1983 cited in Martin, 2002: 388): it does not necessarily follow from the presentation and perception of x that x is a mind-independent object. For example, a visual field (which is a sharp or poor picture seen by the eye) is present, but it is not in the external world and it is possible that one could be directly aware of the details of this field. It is difficult to realize why so many analytic philosophers are given to understand that nothing *occurs* to their senses when they perceive. They would not need eyes, ears, etc. in order to perceive an object. The presence of something does not demonstrate whether one perceives or not. But, of course, when perceiving, something is present in most cases.

It is challenging to understand why the debate about arguments concerning hallucination and illusion are so central to contemporary philosophy of perception, as if there were no other arguments which underline what perception of an object is. The argument can be presented in the following way:

- 1. We directly perceive non-physical objects in cases of hallucination and illusion.
- 2. There is an indistinguishable erroneous perception for any veridical perception.
- 3. If two experiences are indistinguishable, they have the same kind of objects.
- 4. Therefore, we directly perceive non-physical objects in veridical perception (from 1, 2, and 3). (Hopp, 2012: 2)

When the senses present something, the crucial question is how one claims to know that one perceives right now (Descartes and Leibniz thought that there is no reliable criterion). It has often been thought that anything that is known must satisfy certain criteria in addition to being real. Bruce Hunter mentions some traditional suggestions as follows: "whatever we are immediately conscious of in thought or experience, e.g. that we seem to see red, is evident". Whether a criterion is some irreducible necessary truth or a matter of brute metaphysics, its correctness is not self-evident, although criteria should make a thesis evident. So, the question is whether sense experience itself as criteria would make evident some propositions about perceived reality. According to Descartes and Leibniz, we would need criteria for the claim that we are really perceiving, not dreaming. (Hunter, 1992: 82–83) This would mean that there is some 'that' or a criterion 'C' that indicates perceiving an object. It is a criterion to confirm that I am really perceiving an object. When 'that' is absent, it indicates that I do not perceive, but rather, I dream or imagine an

unreal object. Unfortunately, this kind of a question is not considered necessary or useful in contemporary philosophy of perception.

One justification given for this lack of necessity and use has been that perception involves the mind-independent material object because the character of the material object determines the character of the perceptual experience without a causal connection. Laurence Bonjour (2007: 23) writes that these characters would be determined constitutively according to disjunctivism that includes direct realism. Because it is a fact that hallucination and veridical perception are two fundamentally different entities, it follows that they would refer to two different kinds of objects. They would refer to a sensible particular and a material body according to direct realism. It is typical of analytic philosophers not to give an exact definition of perception; it seems that perception of an object just happens, even though it is an act of mind. However, nobody knows exactly why and how perception occurs. It is impossible to understand any subjective state when an assumption is such that no psychological phenomena cause them to be realized. This means, for instance, that one's mental pain or poor eyesight is something one just suffers. According to direct realism, perception is evidence and justification of knowing that which the senses present to us without knowledge of perception.

However, based on the contents of this chapter, it is not justified to infer that any contemporary theory other than direct realism, sense-datum theory or representative realism is true. Generally speaking, it does not make any sense to argue that if theory x is true, then theory y is false, or vice versa, such as Paul Snowdon does when he argues for disjunctivism in his article 'Perception, Vision, and Causation' (Snowdon, 1980-1: 185–186). As a theory, a sense-datum theory or representative realism does not demonstrate why a sense-datum or a perceptual appearance is an entity called a thing. Empirical instances should give evidence for the theory that it is a thing. They should do so because a perceptual appearance may be a constituent of a perceptual event in the same way a mental image is a part of a visualization process in imagination, a rainbow is a part of an event of light reflection, or a sound is a constituent of an echo event.

As John McDowell (2007: 343–344, 348–349) asserts, perception discloses the world rather than hides it from us. This is the view which 20th-century phenomenology shares with the school of anti-sceptics. This view is easy to acknowledge, but difficult to hold.

c) Phenomenology: Perception without the Senses

According to Edmund Husserl, Martin Heidegger and Jean-Paul Sartre, perception is openness to the world. The material world is as one perceives. However, they do not explain much about the conditions of perception, nor *their occurrence of phenomena* that the words "perceiving an object" should predict. What they explain is *what* they perceive from the first-person point of view. Perception is a world-disclosing experience about bodies and affordances, among which subjects are as well.

The written sources show that the world is the world of perception for phenomenologists. Perception is direct evidence of what exists. Although doubting the empirical scene is the world, and bracketing the world as 'the world' (Schmitt, 1967: 59), Edmund Husserl seems to accept the existence of the world and the real bodies we perceive (Husserl, 1913/1931: 110–111). Nonetheless, the result of bracketing the objective world is that the experienced reality which we had previously taken for granted "now becomes 'mere phenomenon'" (Schmitt, 1967: 59–60). The change of attitude from dogmatism to philosophy, or from 'the natural standpoint to the phenomenological one', occurs when questioning or wondering about *that* which one earlier considered a truism (such as the sensed is the external world). Husserl calls this a phenomenological reduction, or doubting (Husserl, 1913/1931: 108–110; Schmitt, 1967: 59–60).

It is not, however, justified to interpret Husserl's way of looking at perception as having been questioned or 'bracketed'. By 'perception', Husserl means that "To have something real primordially given, and to 'become aware' of it and 'perceive' it in simple intuition, are one and the same thing." (Husserl, 1913/1931: 51), and "Every perceiving consciousness of *the embodied (leibhaftigen) self-presence of an individual object*, which on its own side and in a pure logical sense of the term is an individual or some logico-categorical modification of the same." (Husserl, 1913/1931: 127), and "'Perception' in the normal sense of the word does not only indicate generally that this or that thing appears to the

Ego *in embodied presence*, but that the Ego is *aware* of the appearing thing, grasps it as really being, and posits it." (Husserl, 1913/1931: 315), and "...; and the <natural> experience that is presentive of something *originality* is *perception*, the word being understood in the ordinary sense. To have something real given originality and 'attentively to perceive' and 'experience' it in an intuiting simpliciter are one and the same." (Husserl, 1913/1982: 5–6), and "In the normal sense of the word, '*perception*' not only signifies universally that some physical or other *appears 'personally' present* to the Ego, but that the Ego *attentively perceives* the appearing physical thing, seizing upon, positing it as actually existing" (Husserl, 1913/1982: 266). Therefore, Husserl's introspective 'evidence' seems to prove what the nature of perception is. Does perception involve evidence of what *the objects of perception* are?

In fact, as the analytic school does, he describes the objects of perception as if perception were direct proof of what they are (Husserl, 1913/1982: 51–53, 80, 82–83, 86–88, 220, 310, 312, 318; 1913/1931: 128–131, 257–260). For example:

"In 'outer perception' we have primordial experience of physical things, ..." (Husserl, 1913/1931: 51).

And

"But if, in *this* way, we try to separate the actual Object (in the case of perception of something external, the perceived physical thing pertaining to Nature) and the intentional Object, including the latter <as> really inherently in the mental process as 'immanent' to the perception, we fall into the difficulty that now *two* realities ought to stand over against one another while only *one* <reality> is found to be present and even possible. I perceive the physical thing, the Object belonging to Nature, the tree there in the garden; that and nothing else is the actual Object of the perceptual 'intention'." (Husserl, 1913/1982: 219)

Perception is evidence that one perceives physical things whatever the nature of perception is.

Martin Heidegger, for example, describes this in his 'The origin of the work of art':

'We never really first perceive a throng of sensations, e. g., tones and noises, in the appearances of things – as this thing-concept alleges; rather we hear the storm whistling in the chimney, we hear the three-motored

plane, we hear the Mercedes in immediate distinction from the Volkswagen. Much closer to us than all sensations are the things themselves. We hear the door shut in the house and never hear acoustical sensations or even mere sounds. In order to hear a bear sound we have to listen away from things, divert our ear from them, I. e., listen abstractly.' (Heidegger, 1935: 95).

Heidegger has a strange idea of 'sounds and noises in the appearances of things' because things like shapes, colours and sounds are not *in* the appearances of things, but they are themselves appearances which may be directed at things, if representative realism is true. Furthermore, we would have sensations about the sound or colour entities, which means that the object of sensation is not the same as the sensation. In brief, one does not sense a sensation or perceive a perception. Heidegger argues that we perceive the things themselves, e.g. the door shut in the house. We would hear the storm, not a mental item of the storm. I do not think that Heidegger's view implies the impossibility of the immediate perception of the mind-dependent appearances. He justifies his judgements with perception. However, from judging that one perceives such and such, it does not necessarily follow that one really perceives such and such. Heidegger takes it as a given that the outer object is what we perceive.

Jean-Paul Sartre eliminates the dualism of the appearance and the real absolute being, but it is hard to recognize reasons for that conclusion by examining *Being and Nothingness*. He infers *from what appears to himself to be an appearance*. It means that the appearance is a real entity, the real entity is a phenomenon, and the appearance is a phenomenon. This argument replaces the dualism of the real being and its appearance (Sartre, 1943/2003: 1, 2, 3, 4, 6). He writes:

"But if we once get away from what Nietzsche called 'the illusion of worlds-behind-the-scene,' and if we no

longer believe in the being-behind-the-appearance, then the appearance becomes full positivity; its essence is an 'appearing' which is no longer opposed to being but on the contrary is the measure of it. For the being

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¹⁴Tim Crane seems to not completely understand that text passage (Crane, 2003: 1–2). He says that many of us will agree with Heidegger that in normal perceptual experience the 'things themselves' seem much closer to us than a 'throng of sensations'. However, we are sensing things that have been called appearances, and these things are not necessarily 'things themselves' or mind-independent entities. In sum, appearances might be closer to us than things themselves. This 'throng', that is, does not seem to mean objects of sensation, because Heidegger uses the terms 'in the appearance of things' or 'tones and noises' to refer to appearances which are sensed by us, these terms could not be considered examples of sensations as Crane claims.

of an existent is exactly what it *appears*. Thus we arrive at the idea of the *phenomenon* such as we can find, for example in the 'phenomenology' of Husserl or of Heidegger – the phenomenon or the relative-absolute. Relative the phenomenon remains, for 'to appear' supposes in essence somebody to whom to appear." (Sartre, 1943/2003: 2)

It seems clear that when the absolute being, such as a book, is an appearance, and thus what appears to somebody is identical to the phenomenon and the appearance, i.e. the book is an appearance, only the appearance exists. What I mean is that nothing external to the appearance of a book causes it to exist. It exists by itself. In *Being and Nothingness*, Sartre does not mention why something starts appearing or appears to someone. He also uses Husserl's idea of 'the phenomenological reduction' in his own way (Sartre, 1943/2003: 2, 4): the real mind-independent existent reduces to the appearance. But Sartre's view is very strange: because nothing visually appears to the blind, it seems that there is nothing external to the blind. There is no appearance of a book; therefore, there is no book. That is Sartre's inference, which follows from the reduction of the real existent to the appearance. The question 'Is an appearance perceived by a person located in the external material world?' is a fundamental one because it has been always thought that appearance is in the mind and is not real.

According to Sartre, one perceives these appearing existents, behind which nothing absolute exists:

"It seems that we have arrived at the goal of our inquiry. We have reduced things to the united totality of their appearances, and we have established that these appearances lay claim to a being which is no longer itself appearance. The 'percipi' referred us to a percipiens, the being of which has been revealed to us as consciousness. Thus we have attained the ontological foundation of knowledge, the first being to whom all other appearances appear, the absolute in relation to which every phenomenon is relative." (Sartre, 1943/2003: 13)

This means that for Sartre, *consciousness* has become the absolute which perceives appearances. Sartre bases this 'knowledge' on imagination. It is impossible to know whether consciousness perceives by means of external perception or introspection.

Phenomenologists seem to argue the following:

- 1. One perceives an object that is extended and has other properties we call physical (Here, I think here of Descartes' wax example in Meditation II).
- 2. Therefore, there is an object that is a physical thing (the identity proposition).

However, the conclusion does not follow from the premise. The argument is invalid. But perception is the general reason for the claim that one can say they know physical things. The argument is such that 'Because I perceive them, I know that the objects of perception are physical things'. Nevertheless, the argument seems to somehow be question-begging, since one has to assume that the objects of perception are physical when giving a reason for why 'I perceive them', with the word 'them' referring to physical things.

Although phenomenologists do not know the causes of perceptual processes within a person, they are ready to verbally vindicate that they directly and immediately perceive the world and the real things out there. Phenomenologists describe their own mental state and infer from the content of perception that this is the real world. In their theory of perception, a perceiver's qualities are not necessary. Many phenomenologists and existential philosophers have described each human person as having some kind of basic holistic state during his or her lifetime which embodies or illustrates his or her existence in the world. Such a general mental feeling or way of being in life would be explained as 'nausea' by Sartre, 'care' by Heidegger or 'anguish' by Kierkegaard. Their ideas may be veracious. If such a mental state occurs and remains over time, it must have causes which realize it. Otherwise, the mental pain of anguish exists only when one is conscious of it, and thus it would be the product of one's consciousness. More generally, it would mean that experiences exist at random somewhere in a human person as unconsciousness, and he or she becomes conscious of them. However, nothing causes experiences. That general statement is not a general truth: that mental pains exist without causality is a false claim. In the same way, perception does not exist because of the presentation of the real bodies. It requires energy which causes changes in the qualities of a human person. We know the change of things in sense experiences.

d) Cognitive Science: Reliability of Perceptual Knowledge

The external world is defined differently in cognitive science and philosophy. The term 'the external world' refers to that which is outside the observer's body. The inner realm refers not only to the mind, but also everything that occurs inside the human body or more generally, inside a living organism. It was mentioned earlier that philosophy understands the human body as being included in the external world.

Cognitive scientists research perception by asking a person to perform a task which unambiguously corresponds with the phenomena called 'perception'. Cognitive scientists have considered *introspection* an unreliable method to obtain empirical data about perception: a participant investigates her or his own internal processes and reports them during the perception task. Ulric Neisser describes why introspection proved unsatisfactory a hundred years ago:

'Introspection is a sloppy tool, yielding results that may be biased by the act of observation itself. Different observers may give divergent introspective accounts of the 'same' process, and there is no way to resolve their disagreements.' (Neisser, 1976: 2)

Michael W. Eysenck's example about this process is as follows:

"One problem is that it isn't possible to check the accuracy of the conscious thoughts people claim to have. Külpe argued that people sometimes have 'imageless thoughts', whereas another prominent psychologist (E. P. Titchener) claimed that *all* thoughts have images. This controversy couldn't be resolved by introspection." (Eysenck, 2012: 6)

Eysenck mentions other problems associated with reliance upon introspective evidence such as 1) people are unaware of processes influencing their motivation and behaviour and 2) people are consciously aware of the outcome of their cognitive processes rather than those processes themselves (Eysenck, 2012: 7). His example of this is:

'For example, what is the name of the person who became American President after George W. Bush? I imagine you rapidly thought of Barack Obama, but without any clear idea of how you produced the right answer' (Eysenck, 2012:7).

Philosophers, however, have known such problems for more than 2000 years. One example of a problem this has led to is that of the mind-body problem and the problem of the external world: How can one know the causes of the connection between mental events and perceptions of the supposed matter? That is, from a first-person point of view, one is unaware of causes which affect the perception of a round shape or thoughts about the next summer holiday. For Locke and other empiricists, there are only sensible entities appearing spatially and temporally. What introspective evidence reveals is the existence of sensible entities which can be compared with each other, such as thoughts, images, visible colours, feelings and decisions. These are entities which philosophers have always acknowledged. There has been good reason to state that which exists in the mind – it has almost nothing to do with the real world.

Although uncritically taken for granted by some philosophers (they cite Thomas Reid's distinction), the use of the object as a criteria for the distinction between sensation and perception is open to doubt. Although visual experience is about objects, these objects of perception are not always external mind-independent things. There are sense-data like colours, sounds and depth. Visual sensations exist. Their function of engaging an object, or an aspect of an object, does not prevent them from being sensations. For example, before perceiving a red shape, a sensation and attention must be activated. Cognitive science accepts that sensation differs from perception, but they do not explain the difference in the same way philosophers do. For example, according to Gibson, a visual field is a sensation, and perception is the interpretation of a visual world because

'The field is bounded whereas the world is not. The field can change in its direction-from-here but the world is not. The field is oriented with reference to its margins, the world with reference to gravity. The field is a scene in perspective while the world is Euclidian. Objects in the world have depth-shape and are seen behind one another while the forms in the field approximate being shapeless. In the field, these shapes are deformed during locomotion, as is the whole field itself, whereas in the world everything remains constant and it is the observer who moves.' (Gibson, 1950: 42)

James L. Gibson does not believe perception to be based on sensations. However, he does not claim that sensations do not exist: a visual field and optic flow in movement do exist, but perception is something more active than being aware of the real objects. (Gibson, 1950: 11–14, 26–43, 57–58, 120–121, 124–126, 127–128; 1966: 2, 266–269; 1979: 238–256) A load bang and a flash of light are auditory and visual sensations. The examples above suggest that *the object* does not distinguish perception from sensations.

When comparing introspection with cognitive scientists' own actions, their arguments for the claim that introspection is unreliable ultimately fail because they contain a contradiction in terms. Cognitive scientists do rely upon their own perceptual processes when judging the perception of test subjects. This means that they rely on introspection, that is, consciousness of their own perception. Their knowledge is based on the idea that it is impossible for human persons to transcend sense experience. Nevertheless, this idea yields to a fallacy:

- 1. Introspection is an unreliable base of knowledge.
- 2. A cognitive scientist's own introspective processes are a reliable base of knowledge regarding the nature of things outside his or her own processes.
- 3. Therefore, introspection is both reliable and unreliable (a contradiction).

If people are aware of the outcomes of perceptual processes, but unaware of the processes themselves, then how can it be that cognitive scientists are aware of the processes? The fact is that all we have to rely on is perception. How can we obtain objective knowledge about subjective experience if our knowledge claims are based on experience – our own experience? Such objective knowledge is empirical.

Finally, the theories of perception of cognitive science include *causality* and *connection* as basic conceptual assumptions (Helmholtz, 1878/1977; Wundt, 1873-74/1904; Fechner, 1860/1966; Koffka, 1922, 1935; Gibson, 1950, 1966, 1979; Neisser, 1976; Marr, 1982; Gregory, 1980, 1998). It is impossible to understand contemporary philosophy's resistance to the theoretical statement 'x perceives y, and y is a cause of perception of x'. It is much more reliable than the folk belief 'I perceive x because I perceive it'. Contempo-

rary philosophy overlooks the causal connection between perception and objects. This criticism refers to the causal theory of perception.

3. A STARTING POINT: THE CAUSAL THEORY OF PERCEPTION

The starting point of this study is the causal theory of perception. I use this theory because it is plausible that perceiving an object is dependent on factors such as a perceiver's psychological and physiological state, the lighting, angle of vision and the like. Under certain circumstances, a tree causes its sensory idea to form in my mind. I am directly aware of this idea of the tree or its mind-dependent appearance. However, this may not be the best explanation for the cause of perception. In fact, if the whole of perception has a cause, what is it? The best explanation possible is that a perceiver's own qualities, such as mind and consciousness, are necessary for the perception of an object. **Realists** are justified in assuming and explaining that, more exactly, the brain is the cause of perception. When perceiving something, the best explanation is that my brain causes perception of something that is in front of me. This is an inference from the best explanation.

Moreover, the idea of a tree lacks the wooden nature, mass and size of a real tree. *A cue* for the causal theory of perception is **a change** in a perceiver when one perceives it. The colours, sounds, shape and size of the tree appear to a subject, and they seem to change all the time. Changes are events, and nothing occurs without cause. Therefore, appearances do not occur without cause. The way that trees are perceived by us is not the way they really are. In my opinion, the causal theory of perception sounds credible.

The following is a model of this:

[A subject – an object-appearance] \leftarrow [an object]

The model above is true if, and only if, there are facts making the model true. For example, the fact can be that the existence of an object causes Mrs. Smith to have a sense-datum or an appearance of it. The simple existence of the external object is not sufficient reason for Smith's mental state. Her own qualities of mind and consciousness affect per-

ceptual experience. She is directly aware of a sense-datum or a mind-dependent appearance, and she has indirect information about the external object based on its appearance.

This model is a conceptual formation which may refer to contingent states of affairs and aspects of the external world. According to Mikael Leiman, theories are semiotic formations that refer to aspects of the material world – they do not mirror reality¹⁵. However, abstract terms cannot refer to the material world, and every theory includes terms which are not empirical, such as 'necessity' and 'a relation'. This model follows from the more general proposition that a subject has a connection with an object:

a subject THE CONNECTION an object

perception

interaction

action

thought

speech

exchange, etc.

The explication is wholly located in the relationships between the concepts. By this, I mean that we do not consider the nature of the subject and the object or whether the real entities corresponding with these concepts exist. It is the relation of a concept with parallel concepts.

The essential question is, if the immediate object of perception is a tree, what reasons have I to assume that there is an external cause? Moreover, is this immediate object of perception like its cause? If science is right, it cannot be, because the cause of perception is the brain. Although the brain would construct a representation, it represents an external world (or so we believe), not the brain itself. The representation refers to some thing, a

¹⁵Professor emeritus Mikael Leiman presented his views on theoretical research and theories in a workshop at University of Helsinki in 2010. The workshop was organized by the National Doctoral Program of Psychology in Finland. PowerPoint slides are in the author's possession.

tree or a woman, outside **the brain**. However, philosophers such as H. P. Grice do not refer to the brain when analysing the relationship between perception and its object.

H. P. Grice uses a causal explanation in his work *The Causal Theory of Perception* from 1961. His meaning of the word "perceive" is such that "I am perceiving M" is equivalent to "I am having (or sensing) a sense-datum which is caused by M" (Grice, 1961: 122). Grice says that, as a consequence, the causal theory of perception has been assumed to involve the proposition "The material objects are unobservable" (Grice, 1961: 121). The notion of perceiving a material object can be reconstructed by some concept more appropriate to an ideal or scientific language. This would be the task of a philosopher of perception, according to Grice (Grice, 1961: 121–2). He does not consider cognitive science, but one possible interpretation of Locke: an object would, in certain standard conditions, cause an observer to have certain sorts of ideas or impressions (Grice, 1961: 122).

Although perceiving would involve having or sensing a sense-datum, Grice says that giving a satisfactory explanation of the meaning of the technical term 'sense-datum' is the primary difficulty (Grice, 1961: 123). I assert that introspection does not show the nature of a sense-datum, but of existence. Grice suggests that the expression 'sense-datum' can (and should) be defined by reference to such standard locutions as 'So-and-so looks Φ (e.g. blue) to me' or 'I seem to see something Φ ' and so on (Grice, 1961: 123). Let us then consider expressions such as 'looks' and 'seems'. Grice legitimately asks whether "It looks indigestible to me" should change a sense-datum sentence into "I am having an indigestible visual sense-datum" (Grice, 1961: 124).

In example, a general objection can be made as follows: when someone states "It looks red to me," a certain implication is carried which is disjunctive in form, according to Grice. It is implied that either the object referred to is known or believed by the speaker not to *be* red, *or* that it has been denied by someone else to be red, *or* that the speaker is doubtful whether it is red, *or* that someone else has expressed doubt whether it is red. (Grice, 1961: 124) Grice calls this the 'doubt or denial' condition, or the D-or-D condition. However, there are many cases in which the D-or-D condition is not fulfilled, and there would be something odd about me saying "That looks red to me." Grice means that I

would neither deny nor doubt that something looks red to me if "I am confronted by a British pillar box in normal daylight at a range of a few feet." (Grice, 1961: 124–5) I would add that this box looks smaller than it really is, although the box seems to be red in normal daylight. Therefore, the D-or-D condition is fulfilled relative to the size of the box.

What Grice (1961: 133) *seems* to suggest is that the fulfilment of the appropriate D-or-D condition is a necessary pre-condition for the use of an *L*-statement. The D-or-D condition is not a truth-value of an L-statement. An *L*-statement is, for example, 'It looks red to me'. However, Grice mentions that an *L*-statement can be false even if the D-or-D condition is unfulfilled. So, Grice knows well that the pillar-box is red. He neither denies nor doubts it in saying 'It looks red to me'. Otherwise, he has a disease which causes red things to look to him as if they have a different colour. In these circumstances, he says "That pillar-box looks red to me." The D-or-D condition is not fulfilled. Moreover, the *L*-statement is false. (Grice, 1961: 134) When Grice (1961: 134) asks "For what is this prima facie reason for doubting whether the pillar-box really is red?" the answer may be that external mind-independent substances have no colours in their surfaces.

Let us return to the thesis that 'X's sense-impression should be causally dependent on some state of affairs involving M' is a condition of 'X perceives M'. Grice firstly enquires whether the condition is necessary. He says that the suggested condition is necessary. Although the existence of a clock on the shelf is required for the statement 'X sees a clock on the shelf' to be true, this seems to be enough for Grice. There may be some method by which an expert could make it look to X as if there were a clock on the shelf on occasions when the shelf was empty. Or it might be, describes Grice, that it looked to me as if there were a certain sort of pillar in a certain direction at a certain distance, and there might actually be such a pillar in that place. But if there were a mirror interposed between myself and the pillar, which reflected a numerically different (though similar) pillar, it would certainly be incorrect to say that I saw the first pillar, and correct to say that I saw the sec-

¹⁶I doubt this interpretation. If I state "It sounds sad to me", I can acknowledge that my statement is false. It means "It is not sad at all". Appearing statements have meaning denying something or someone to be some kind of a thing or a person. (See, for example, Chisholm, 1966: 303–7.)

ond. (Grice, 1961: 142) Therefore, the condition seems to be necessary, but it can hardly be sufficient.

Grice suggests that the best procedure for the causal theorist is to indicate the mode of causal connexion by *examples*. He suggests saying that for an object to be perceived by X, it is sufficient¹⁷ that it be causally involved in the generation of some sense-impression by X in the way that, for example, when I look at my hand in good light, my hand is causally responsible for its looking to me as if there were a hand before me. (Grice, 1961: 143)

Grice seems to consider the object itself a sufficient condition for perceptual experience, although he also refers to "the effect of the presence of an object upon the observer's sense-organ and nervous system" (Grice, 1961: 121–122). Finally, he examines whether the causal theory of perception implies that material objects are *unobservable*. If we do not observe material objects, then we can infer them. Therefore, the causal theory of perception implies that the existence of particular material objects can only be a matter of inference. He says that "perceptual consciousness is fundamentally an inference from effect to cause" (Grice, 1961: 146, 147). If appearance is the only guide to reality, then the causal theory of perception is designed to solve this problem, and the existence of material objects is a matter of causal inference from the occurrence of the sense-impressions. But Grice claims that such inferences cannot be rationally justified:

"Now a model case of causal inference would be an inference from smoke to fire; the acceptability of such inference involves the possibility of establishing a correlation between occurrences of smoke and occurrences of fire, and this is only possible because there is a way of establishing the occurrence of a fire otherwise than by a causal inference. But there is supposed to be no way of establishing the existence of particular material objects except by a causal inference from sense-impressions; so such inferences cannot be rationally justified" (Grice, 1961: 149).

Why is it impossible to establish the occurrence of particular material objects other than via a causal inference, according to Grice? Maybe the smoke-fire model is not analogous to the sense-datum-matter model, and the smoke-fire model should be rejected (Grice, 1961: 149, 151). Nevertheless, Grice concludes that some version of the causal theory of

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¹⁷Grice really seems to think that it is sufficient. He uses the concept *sufficient* in his article.

perception may be acceptable when he writes "(1) It is true that X perceives M if, and only if, some present-tense sense-datum statement is true of X which reports a state of affairs for which M, in a way to be indicated by example, is causally responsible, and (2) a claim on the part of X to perceive M, if it needs to be justified at all, is justified by showing that the existence of M is required if the circumstances reported by certain true sense-datum statements, some of which may be about persons other than X, are to be causally accounted for." (Grice, 1961: 151–2)

What is this "X" in Grice's analysis? I think a person or a perceiver is a necessary factor in perceiving an object M. That is, if a perceiver does not exist, then an act of perception does not occur. One cannot have a sense-datum of a red shape without a person. This leads one to reconsider the identity theory of appearance and its object. If appearance is identical with the brain processes, it cannot be identical with the real thing independent of the mind. However, a person is not a brain process, or so I reason. Roderick M. Chisholm reasons in a similar way.

Grice's justification lacks *a person* because he considers a mind-external object sufficient (not only necessary) cause for having a sense-datum: the existence of M is required if the circumstances reported by certain true sense-datum statements are to be causally accounted for. Admitting the existence of mind-dependent appearance means that a person's own qualities are a necessary factor in having an appearance called "a sense-datum". Chisholm's discussion about the identity theory of appearances and brain processes in his *Theory of Knowledge* underlines the role of *a person* in formulating the identity theory:

"In formulating the theory, we presuppose that there is such an entity as the *person* who is being appeared to; the process that the identity theory would identify with a neurological process is, in our particular example, that of Jones' being appeared to redly. What is directly evident to Jones, it will be recalled, is the fact that he is being appeared to redly. The identity theory does not itself imply that Jones is identical with any physical body or with any property, state, or process of any physical body." (Chisholm, 1966: 102)

The model, which I presented earlier in this chapter, and the connection form can be analysed more generally within the substance-attribute-relation framework. This is a substance-attribute [s - A] metaphysic that is suitable for analysis of the perceptual situation

of where a person is. In chapter four, we will see that it does not make sense to call the sense-datum or the mind-dependent appearance a substance, because doing so may lead to the so called 'sense-datum fallacy'. This substance-attribute-relation analysis framework will be used with the concepts of *connection* and *causality*. By this, I mean that there is a causal connection between the perceiver and a real thing, and it is this connection that enables her to be able to sense anything at all.

a) The Analysis Framework: Three Categories

Three basic categories of the analysis framework are (1) substance, (2) attribute and (3) relation. This may be the simplest and most understandable distinction and the one most people use in order to comprehend their empirical situation.

Of course, the distinction could be continued to include abstract, concrete and fictive entities or modalities such as impossibility, possibility and necessity. However, this study is limited to a particular perceptual situation. The question is about the connection between the mind and the world.

This analysis framework divides the model into three parts because it presents 1) a relation, 2) two substances and 3) attributes. For example, perception is an attribute because it is an accident, and an accident is an attribute of a substance. Therefore, perception is an attribute of a subject. The disposition to activate is also an attribute because it is an attribute of a substance. For example, the disposition of an object to activate a subject's senses is an attribute of an object because the external object is able to reflect light.

In a perceptual situation, the model means:

- 1. A subject x perceives an object y because x's perception is causally dependent on the existence of y and x's own qualities.
- 2. An object y is the cause for perception of a subject x about y.
- 3. However, the existence of y is not sufficient cause for perception about y. If an appearance does not occur within a subject x, neither does a conscious perception. Damage to the brain can prevent them.

The philosophical problem has concerned what it is object y of perception that is perceived by a subject. Is it a sense-datum or a mind-dependent appearance, or a substance of the external world? Reasons to this problem would have to present why researchers have arrived at certain alternatives. Because what is perceived to be and what really is can be different, a claim that the object of perception is a material mind-independent thing is not generally true. For example, my angle of vision can cause me to perceive that some thing has an elliptical shape even though the real shape of the thing is round. Therefore, the shape of perception is not a real thing.

The attributes of a substance are specified in the next chapter.

b) Criteria of Substance

The concept of substance is not as strange as it may seem. We are in the habit of associating predicates with one and the same subject, e.g. a speech is associated with Sam and perception is associated with Jill because Sam is speaking and Jill perceives. Such associations are not made regarding a stone and a table. When telling our own life story, we take it for granted that we would talk about one person (or ourselves), although our story would be connected with other people. The elimination of our selves seems to be paradoxical and irrational in spite of the vague meaning of the notion 'self'. Selves are substances. Although 'substance' is a technical term in philosophy, it is a familiar concept in everyday life.

One description of a substance is that of a thing whose existence is not dependent on the existence of any other things. Such a description fits only God, because God is said not to be dependent on any more fundamental entity. This kind of view about substance finds expression in the philosophy of Spinoza, according to which a substance is not an attribute of another substance. In other words, substance is not predicated on another entity. According to this description, substance is an independent thing.

Identity in change has been a condition for substance. It means that a thing's essence remains although it changes. Change, as Bertrand Russell rightly states, implies a subject

which preserves its identity while qualities are changing (Russell, 1900: 42). For example, if it is said that I am the same person that I was, it implies that my present and past attributes are the predicates of the same subject (Russell, 1900: 42). Likewise, when one saw someone in the garden a moment ago and now looks at a book, mental states connected with them, such as seeing and looking, do not make one think that one is now a different person than the person they were a moment ago. When a material body loses and gains its parts, it does not yield to two or more substances – it has changed because it has different attributes than it did before changing.

One criterion of a substance is then:

1) A subject of change.

A substance corresponds with a subject because, unlike qualities and relations, it is not a predicate. That is, a substance would be an independent entity. It does not mean that a substance is independent of other substances, but that it is not an attribute of other substances. For example, we do not predicate a man to a tiger but perception to a woman. In the same way, we predicate a roof to a building, or in front of to an observer and a perceived object. To point a gun is a predicate, not a substance, because pointing a gun at the crowd refers to a person x who has people in his or her sights. Thus pointing a gun is an attribute of a person x. Then we get further details which indicate that another person y coerced a person x into pointing a gun at the crowd. However, nobody in any way connects a person x with another person y such that x would be an attribute of y.

Therefore, the second criterion of a substance is:

2) A substance has attributes but is itself an attribute of nothing.

In next chapter I will analyse how a substance differs from attributes and relations.

c) Comparison of Substance to Categories of Attribute and Relation

It is clear that perceiving an object is a referential phenomenon relating to the senses. But perception is always *someone's* perception, and thus it is an attribute of a more fundamen-

tal entity. In the same way, a lack of perception in itself does not prevent the identification of a fundamental entity. A human person's mental states change from one to another: perception about x changes to visualization of x. However, a person remains throughout the changing states. Thus, perception or perceptual experience is not a substance, but an accident or an attribute. Attributes do not meet the two above-mentioned conditions of a substance because:

- 1. Attributes can change.
- 2. Attributes can be predicated to other entities, as a sense of "attribute" implies.
- 3. Therefore, attributes are not substances although both attributes and substances are entities.

Before and after, distance and external, these are both temporal and spatial relations. However, they have no corresponding particulars about which we would have a perception; e.g. we cannot name an empirical object which would be after or external. As words, relations are two- or multi-place predicates; as things, they are ideal objects. They can be predicated to at least two substances or state of affairs. By this, I mean that we do not perceive that there is a relation, but there are x and y, and x is external to y. For example, that woman is not in my mind, but is external to me. Relations can be attributed to other entities, and that is the reason why they are not substances. I am not the woman's predicate.

Relations as ideal universals do not change. Nevertheless, the relation statements formed from subjects do not maintain their truth values over time; e.g. A (while growing) can be smaller than B in t1. Then, A becomes bigger than B in t2, and thus a relation statement 'A is smaller than B' changes to become untrue because of a change in the quantity of A in relation to B. Nonetheless, the identities of A and B endure.

Therefore, it is also clear that relations do not meet two criteria of a substance:

- 1. Relations can change when subjects change.
- 2. Relations can be attributed to some other entities.

3. Therefore, relations are not substances.

Finally, let us consider the causal theory of perception. The definition of the concept 'perception' has been analysed as a two place predicate, but it demonstrates only the nature of a concept because the phenomenon 'perception' is not a two place predicate, but a mental occurrence in a human person or living creature. Thus, *the arising* of perceptual phenomenon from external factors is a real event. Secondly, if a perceiving subject and a perceived object do not exist, there arises no chain of events which produces the perception of an object. Thirdly, a subject has qualities which make perception possible; e.g. if one has neither consciousness nor the senses which would respond to a stimulus, a conscious perception about themselves and another person does not occur.

The model involves two substances: a subject and an object. They are not predicated to each other, and if a perceived object disappears, it does not imply that a perceiving subject does. On the one hand, it can be said that I am Jack, and therefore Jack can be predicated to a self. However, Jack seems not to perceive himself, and if Jack can perceive his body and Jack is his body, it yields the conclusion that a subject and an object are one and the same entity. On the other hand, perceiving one's own body implies perceiving some part of one's own body, such as hands and legs. This therefore means that parts of a body are attributes of a subject. That is, a body would be a quantity of a subject, not a substance: a body is predicated to a subject. As a result, the model includes two substances.

I have analysed certain categories and their mutual relations in this chapter. Nevertheless, whether a theory of perception predicts a future situation in which a human person will start to perceive is an absolutely different matter. Theories, as symbolic systems which include abstract terms, do not indicate that we would know what a theory predicts.

4. THE KNOWING AND THE MEANING OF 'APPEARANCE'

a) How Can We Know What Appearance Is?

It is clear that I appear to perceive things. My visual field is full of shades of colours, shapes and movement, and lightness or darkness. Things are said to be appearing when one perceives. The problem is the nature of these sensible things that are directly evident to me and knowing these things. It is clear to me that I perceive an elliptical mat having some size with a green surface. However, what I perceive to be and what the mat really is must be different. I understand that its real shape is not elliptical and its perceived size is smaller than its real size. This difference must be caused by my situation and my angle of vision. The shape and the size of perception are dependent on my perception of them. They are produced in my mind by the external mind-independent mat. This kind of argument is the consequence of representative realism. According to representative realism, the meaning of 'appearance' is that of a 'mental item being between a conscious subject and the external world'. This 'veil' would prevent one from knowing the external world as it is.

It is known that things appear to us. The existence of a particular squareness-experience is known when one is aware of squareness in vision. One tends to use appearance-phrases on the basis of sense experience: Squareness appears to me visually. Phrases like "it appears that", "it looks like", "it sounds as if", "it feels like", "it tastes like" and "it smells like" are subjective and relative to a perceiver. However, it is not known what the appearing entities are by means of introspection. One theory is the substantival theory of appearance, which leads to the proposition "A tree's appearance is a substance", for instance. Therefore, there would be two substances, a tree and the appearance of a tree. To claim that a thing and its appearance share common properties yields strange consequences such as that of a tree and its sense-datum having a certain weight. Maybe it would be better to say that a tree is substance, and its appearances are not substance, but properties. Perceiving an object is being directly aware of certain properties such as greenness and shape, for instance.

Most people insist that they are connected with the material world and their objects when they perceive. For example, Jill sees a book, or a material mind-independent body outside of her. Nevertheless, according to representative realism, Jill's judgment about what she perceives can be untrue if the existence of a book causes the sense-datum of a book to enter Jill's mind through her body. What is present in her perception can be the mind-dependent appearance rather than a mind-independent entity. Jill eyes (or measures) a mental item dependent on her mind. Thus, perceptual judgments would refer to sense-data or mind-dependent appearances, not the objects of the external material world. The previous examples mean that a common-sense picture about what people say to perceive can be untrue. If *perceiving an object* is dependent on the circumstances and a perceiver's physiological and psychological states, from this assumption follows the possibility that we would not *directly* perceive the external world. The way things are perceived and the way they really are may differ. The objects of perception are (at least sometimes) sense-data if representative realism is an adequate theory of perception.

What is it that is investigated when one asks what the nature of appearance is? It is a definition of appearance which is investigated; more exactly, it is necessary and sufficient conditions for something to be an appearance. Traditionally, Locke and later empiricists have claimed 'appearance' to be a sense-datum, sensory idea or mind-dependent impression that is produced in our minds by external things. In perceiving an object, empiricists say that we are directly aware of an appearance. A tree experience exists only as a conscious object. A sound being heard and an impression of light being seen can be candidates for appearance. However, to interpret 'appearance' by means of the categories 'object', 'substance' or 'quality' can be misleading. Would it be more plausible to consider appearance as an event occurring within a subject? A red figure of appearance occurs or a red figure appears in relation to and within the subject who perceives it. I will get back this question later when I present the 'sense-datum fallacy'. In addition, Chisholm also criticizes the substantival theory of appearance.

The question of the nature of appearance is justified because introspection demonstrates that 1) perceiving an object has a limited temporal duration, or this event comes into ex-

istence, lasts and vanishes, and 2) perceiving an object changes over time. If something comes into existence, and if it changes, this process must be an event-like entity. Furthermore, the event implies causes which actualize an event in a more fundamental entity. Therefore, if an appearance is a mental event, it must have causes and occur in another thing. I mean that in perceiving an object, an object appears to a perceiver, and that appearing would be an event rather than a substance. An appearance inheres in that other thing. That other thing is a human person or an animal (if there are any) which is aware of appearances such as seeing squareness, colours, hearing sounds, feeling pain, and coldness. These appearances change and have limited duration. Change is an event. Let us see what the antique sceptics could teach us about the nature of the object of perception.

According to the antique sceptic Sextus Empiricus, we know that a thing appears to us, but cannot know whether a thing exists independent of us or what kind of an entity it is in reality. For example, according to him, the perceptual claim "A book is blue" describes the appearance which is present in perceiving an object; therefore, it does not describe a real thing situated in the external world. A presupposition is that the qualities 'being a book' and 'being blue' would inhere in the object independently of the mind. But the question 'Is a book blue?' is not an appearance, but rather a question which concerns an appearance; under suspicion is whether the substance is a book and whether it is blue in its essence, not whether an appearance of a blue book presents itself to the observer. That is, we know that the qualities of being blue and being a book appear in sensing them, but we do not certainly know whether there is in reality a blue book independent of the observer. (Sextus Empiricus, 1985 cited in Sajama & Kamppinen, 1987:18-19) Therefore, Sextus Empiricus acknowledged the existence of perceptual appearance. However, it seems that the sceptics did not show how they knew what perceptual appearance is. That is, it cannot be known by means of introspection what the nature of appearance is or how it arises, and thus the issue of how to generally define appearance is open. According to Sextus Empiricus, the existence of an appearance of a blue thing is not open to doubt. The problem is that of whether it is a natural phenomenon located in the external world or a minddependent entity within a subject.

Although the existence of appearance would be self-evident, there are many hypotheses about its nature which are inconsistent with each other. Appearance would be 1) a material object, 2) a sense-datum, a sensory idea, or an impression that means a mind-dependent mental entity to which a material object is reduced or 3) a mind-dependent sensible entity which represents the qualities of the external material substance. The first hypothesis of direct realism would have us claim that when perceiving a book, we do indeed directly perceive a material object external to us. The second hypothesis of phenomenalism presents that we perceive an idea or a mind-dependent appearance which exists as some kind of an object of consciousness in our mind, and the material object is identical with it. For example, analytic phenomenalism means that concepts relating to material things can be changed to concepts presenting phenomenal or sense-datum concepts. The two mean the same thing: "a material object" means "a sensible perceptual datum". The third hypothesis of representative realism assumes that we perceive a mind-independent material book via a sensible idea or a mind-dependent appearance that is a mental representation of the external object in mind, and thus we would be immediately aware of mind-dependent representational appearances. These examples suggest that the reference of the concept 'appearance', or its meaning, is not known because they cannot all be true. But I can conclude two things: 1) 'appearance' is interpreted as 'substance' rather than 'attribute' as with the verb 'appearing', and 2) for phenomenalism and representative realism, 'appearance' is a mental entity, a sense-datum or an idea in the mind. Direct realism denies that the object of perception is a mental item that is directly aware: perceiving an object is not perceiving a sense-datum, but a material thing. For direct realism, perception depends on the object, not vice versa, and the objects of perception are material things.

One main problem in these three theories is that they present perception as a passive mental state. The function of perception would be having beautiful conscious sensations about the external world. Perceiving an object just is. Nothing causes perception. The second problem is that they are not able to explain why some external material objects exist of which the observer has no perception: quantum particles exist, although nobody has perception of them. Another example of this is when a perceiver has problems recognizing what is present: a face appears, but she or he is not able to perceive it (face blindness). If

these theories claim to know that the perceived phenomenon is matter, not the minddependent appearance, they should explain by giving justification, evidence and reasons. Furthermore, if these theories' passive view of perception were true, or if perception had no causes, it would be impossible to manipulate or prevent one's perception, and that is unconvincing. In fact, the different forms of representative realism can answer the first problem because the concept of 'causality' is included in their theoretical models. On the one hand, the theory of perception of representative realism involves a puzzle, namely what that is when perceiving an object: the external material thing or a content of a mental representation. On the other hand, how do we know that appearances of roundness and shape, or a round shape appearance, represent something that is a round shape? According to Bertrand Russell and Roderick M. Chisholm, representative realism has been said to involve us knowing only our insides or brain states (Russell, 1914: 128–130; Chisholm, 1995: 37). It can also lead to the sense-datum fallacy: there would be a real thing that is a round shape, and a mind-dependent appearance that is a round shape. This strange conclusion is caused by the substantival theory of appearance (I will return to this subject later). Nevertheless, it is very controversial to claim that perception is a passive mental state. While it is the most meaningful of these three hypotheses, representative realism also presents perception as too passive. Perceiving an object is like "sniffing at something that is directly aware" or "eyeing the details of an empirical entity".

The idea in this research is: because one "source" of knowledge about the external world is said to be perception, we must focus on perception and how it occurs when we are in such a mental state. The nature of object of perception cannot be shown by perceiving. For example, the object can be dependent on the circumstances of the place where a perceiver is, although direct realism claims that perception depends on the object. I do not think this is sufficient for perceiving an object. A perceiver's own qualities are necessary for perceiving an object. If we do not know what perception is, then how can we know what is perceived. If I say that I perceive printed matter, I cannot justify it by perception because then I beg the question. It is a vicious circle.

Finally, it is reasonable to define the first central concept which is 'the external world'. There are, of course, different definitions of the term 'the external world' in philosophy and other sciences. In fact, it generally refers to the material world.

'The external world' is usually defined by cognitive scientists as the world that is outside of a person's body, and thus 'the internal world' would mean the 'inside of a person's body'. Nevertheless, the term has been used in philosophy to mean the outer reality which may be situated outside of a person's mind, i.e. the reality independent of human perception and thought. The external world then includes all things and events which exist independent of a perceiving and thinking person. A city with its buildings is an entity of the external world, and a traffic jam in a city is an event occurring in the external world. They exist independent of the perceiver. Furthermore, for one person, other men and women are also entities of the external world outside of that person's mind. Therefore, the definition of 'the external world' is:

The external world = Df. The physical reality without any common parts with an observer's mind. (See p. 11-12)

The external world includes one's own body, if one has any. For example, when perceiving his own bodily movements, they are present to Jack as sensible, just as any other entity appears to him. Therefore, the external world includes Jack's body. However, the external world does not mean a reality of objects and events independent of the human community whose members perceive it outside of them.¹⁸

But if the perceptual object is not a thing of the external world, but the flow of the experience of the world, then what is it and how does it differ from other appearances such as imagination, dreams and hallucinations? These questions are considered in the next chapter.

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¹⁸ Although social perception is said to differ from object perception because of empathy or hatred, other humans are after all others. They are distinct from the point of view of one person. They seem to be external to the mind perceiving them. See for example Pappas, 1992: 381.

b) The internal and External Appearances

One characterization of the external appearance (or a sense-datum, an impression or a sensory idea) is that it is more lively and powerful than the internal appearance. For example, the representational content of an angry person is a much more lively and powerful experience than a mental image of an aggressive person. (Hume, 1739/1969: 49–50; Locke, 1704/1975: 104–106, 119, 121) On the other hand, a dream or hallucination is often as lively and powerful as sense perception (Descartes, 1647/1996: 12–14). This characterization does not then give a reliable criterion to distinguish an internal appearance from an external one.

Another characterization has presented reasoning for how to distinguish them. The basic conditions have been 1) *contradiction* and 2) *non-predictability*. For example, a hallucination of a flying book is in contradiction with perceptions presenting simultaneously, and thus it would be internal. The flying book is in contradiction with previous experiences of books: they do not fly, but this one seems to fly. Likewise, a prediction made on the basis of dreamed flying books about a future perceptual situation in which one would see a flying book will not probably come to pass. The decision to act on grounds of a hallucination may yield a fatal consequence: for example, from a judgment of 'I have wings' to an action of 'Jumping from a bridge'. (Descartes, 1647/1996: 61–62; Leibniz, ca. 1676 cited in Russell, 1900: 224–225; Russell, 1900: 72) Although perception seems to be about the external thing's consistency with other perceptions and its success in prediction, these two conditions are not sufficient to know whether something appearing to us *right now* is an external thing or an internal appearance.

The real entity can be called external because it is distinct from one who perceives it. Two entities are distinct if, and only if, 1) x and y do not share any common parts and 2) x and y are situated in different places. Therefore, if the conditions are realized, a perceived x, which appears to us, is external because x is situated in a different place than we are. We are not joined with x and have no parts which would be part of x. In sum, a perceptual object seems to be external because our attention is connected with something which ap-

pears to be outside of us. From that judgment, it is possible to form an attention-based theory of perception:

For a subject to perceive x is for a subject to focus attention on x which appears to a subject.

One sign of perception is to focus one's attention on something which appears to the senses. Or, perhaps that something turns one's attention on itself: a light in the darkness draws one's attention to the light automatically. It attracts one's attention because it somehow causes a sensation in one's attention. Perception includes attention, but so does hallucination. Direct realism states that perception differs from hallucination because a perceiving person or animal focuses its attention on something real and existent, and not on a false impression.

It is possible that something appears to the senses but he or she is neither aware of it nor pays attention to it. Unawareness means that one does not perceive what is going on. Well-known examples are those of change and inattentional blindness: we may fail to see a change in a person or even the unexpected object in front of us (Simons & Levin, 1998: 644–649; Simons & Chabris, 1999: 1059–1074). But focused attention is not sufficient for the theory of perception because individuals may attend to a subjective experience and its particular content or an optical illusion (both of which are internal), such as childhood memories or speed blindness.

Internal appearance, on the other hand, is called a phenomenon which has no spatial position and is inside a subject. It is 'inside' some other entity or 'a part' of something else. Nevertheless, when I say that inner appearance is in mind, it does not mean that mind is an empty space, or 'a box', which has filled with psychological entities; i.e. mind and its states are neither bodies nor spatial even if they have a physiological foundation. They should be analysed as temporal entities:

If mind exists, it has a temporal dimension but not a spatial one.

Mind continues temporally, but so do bodies and waves. This subjective phenomenon appears now and another phenomenon appears shortly afterwards: a subject has different mental states in different times. She or he also has the ability to report that she or he is aware of a thought about New York, a feeling of joy, or an image of a centaur, but she or he does not have processes with which to produce these appearances. A general feature of appearances is their temporal limited scope, i.e. they last a limited time. Appearances are supposed to differ from the entities of the external world because these mind-independent objects would remain after perceiving them via the senses. Although nothing appears, the mind-independent entities endure. However, internal appearances have neither possession in space nor impenetrability. It is possible to suppose appearance to be mind-dependent, and thus it would be a false impression of the reality. However, this is not yet my view on the subject.

Let us suppose then that the external appearance is spatially organized without being spatial or three dimensional itself, due to mind-dependency. It is not a material body. For example, an appearance of a table has no weight but that which the table has. A visual sense-datum or an external appearance would be like a three dimensional picture. The external appearance presents particulars in different places from one another and us: there seems to be colours, shapes, sounds and touches in different places as well as in the visual field of sense experience. These colours, shapes, etc. are contents. The entities of the internal appearance are within and dependent on us. The essential questions are now:

How can one say to know whether or not the external appearances are mindindependent if they are not spatial and exist only when presented to the senses? Are they only included in the temporal dimension with other subjective phenomena?

These are very important questions because the hypothesis is that an entity that is perceived is a material object. For example, a tree of perception is a material thing; the object of perception is generally a material thing. The external appearances are either in the objects of the external world or in sense-data which depend on the mind. The question is that of how I can know if the external appearance is the mind-independent object or a mind-

internal dream-like entity, for instance. By this, I mean whether the object of perception is, at least sometimes, the external appearance.

In the context of *the materialistic theory*, it could be said that internal phenomenon is that which turns one's attention to one's own body; e.g. a feeling of hunger is located in the stomach, a headache in the head and the act of thinking in the brain. On the other hand, the external phenomenon is something which turns one's attention to the outside of one's body. But then the perceived object, a perceiving person and a cognitive mode are not sufficient to individuate a perception time, e.g. Mr. Jones perceives a book. A perception is *strictly* individuated when we know which sense organs perception occurs by. That is, a visual perception of a red circle is located in the *eyes*, a perception of purr-hearing in the *ears* and a tactile perception of hardness in the *hands*. From the materialistic point of view, sense organs are required in perception.

In the materialistic theory, a close connection to the sense organs distinguishes a perceptual external appearance from an internal one. The hearing of voices might be challenging to classify as internal or external. The lack of a sound source may reveal that a flow of sounds is internal. How things appear to a person depends on that person's psychological and physiological state. Therefore, if these states are manipulated, different appearances will arise. Regarding the materialistic theory, the issue of how such knowledge has been obtained is controversial. In Western philosophy, the sources of knowledge have been thought to be (1) external perception, (2) introspection, (3) memory and (4) reason. Knowledge of the structural properties of perceived things such as sizes, shapes, positions and local motions, the perceptual conditions of where a perceiver is, and a perceiver's nature are all dependent on these sources. Nevertheless, they are all considered to be *subjective phenomena*. (Chisholm, 1966: 91–95)

According to Immanuel Kant, internal and external appearances differ from each other because internal ones are in temporal relations and external ones in temporal and spatial relations. On the other hand, for Kant, both are internal sense-data because they are within a subject produced by external "things in-itselves". Nevertheless, I say that time and space are not appearances. They are neither moments nor a time in the past, neither places nor

three dimensionality in an empty space. If I should describe time and space as substances, I should intuit them:

'But all thought must, directly or indirectly, by way of certain characteristics, refer ultimately to intuitions, and therefore, with us, to sensibility, because in no other way can any object be given to us.' (Kant, 1787: 59)

Kant also uses the concepts 'outer sense' and 'inner sense'. The former means a property by which we represent objects to ourselves as outside of ourselves, i.e. in space. The latter means that we intuit our inner states and ourselves, representing them in relations of time. (Kant, 1787: 61) According to Kant, time and space are not objects that are given to us in perceiving.

Moreover, Kant seems to propose that 'appearance' is the undetermined empirical object. Intuition refers to the undetermined empirical object in the senses, although it can also mean mathematical intuitions. It is one way the mind refers to objects in the senses when the mind is affected by objects. (Kant, 1787: 59) His example is as follows: after something appears to mind without determination, the representation of a body is distinguished by what belongs to sensation and what understanding thinks about it; the former is included in impenetrability, hardness and colour, and the latter in substance, force and divisibility, for instance. Furthermore, appearance is leftover 'pure intuition', which is a mere form of sensibility. This pure intuition also exists without a present actual object of the senses. By this, I mean that I think of an object of perception as belonging to a general idea: I see a tree and I think of it as falling under the category of 'thing' or 'particular'. For Kant, these forms of reason are, for example, 'extension and shape' and 'time and space'. (Kant, 1787: 60)

Appearance is clearly localized by Kant to the subject in whom appearance occurs (Kant, 1787: 59, 75, 81). The external appearance is not a material object. This 'appearance' can be interpreted as 'appearing', not as 'substance'. A material object is something which exists independent of my thinking and perceiving, but appearance is not. To me, appearance always exists: I appear to perceive colours, shapes, sounds, and/or properties. If these

sensible properties exist only when perceiving, the objects of perception must be mind-dependent entities. If the external appearance is an appearance of a tree, and it is a tree's appearance that one perceives, it is clear that there are two entities, (1) a tree and (2) its appearance, not one. In addition, Kant's definition of 'appearance' refutes the material object hypothesis because the concept 'empirical' is not identical with the concept 'material', and an empirical entity does not necessarily imply materiality (compare with dreams, illusion and hallucination). In other words, I think that the external appearance is not the same as a material substance of the external world unless material things are ideas in the mind. I argue that 'external appearance' falls under the category of 'substance' in Kant's theory. Kant acknowledges the existence of appearance although its existence does not reveal its nature. But in the end, he identifies external appearance with matter. I do not believe that 'external appearance is matter' is a *true* analytic apriori judgment, using Kant's words.

Nevertheless, the concept 'appearance' seems to have two different meanings which must be clarified.

c) Two Meanings of 'Appearance'

The claim 'Something appears to someone' differs from 'Something appears to be something'. For example, the statements 'A colour of redness appears to me' and 'That book appears to be old' have different meanings. The colours, shapes, movement, buzzing, roaring, softness and coarseness of perception require the senses and sense experience. In contrast, when saying that a book appears, seems, or looks to be old, we refer directly to states of affairs of the external world. Nevertheless, what we say may be untrue. The colour red appears in the visual field: claims about it may be untrue. Or

- 1. F appears to a subject and
- 2. a thing g appears to be F.

These are different kinds of statements. Let us consider, for example, a visual object of perception. I see an aspect of a shape and a colour of a part of its surface rather than the whole supposed material object and its innermost qualities. That is, when visually perceiv-

ing a colourful shape, I am not aware of the whole, but of part of an object of perception in the visual field. The object of perception is a colourful shape, and this shape is an aspect of the supposed external thing. Susanna Schellenberg has creditably shown that a subject always perceives from a place and a side. That is one reason why an aspect of the object appears to the senses, and not the whole object (Schellenberg, 2007 and 2008). For example, a car appears in different ways when its bottom or front end is in sight because an observer perceives these parts from underneath or in front of the car.

Roderick M. Chisholm, on the other hand, considers it to be that things appear to the senses, but then criticizes the possibility that the appearance would be white or a body, or that it would have a backside and a bottom. He states, for example, that an appearance of a thing and a material substance do not share every quality. It seems that he considers the appearance to be a substance. Because a substance of the external world affects as an appearance of a substance, it can be said, by playing with concepts, that both a material substance and the appearance of the substance are green. (Chisholm, 1966: 94–95) In fact, Chisholm criticizes the view that appearance is a substance, because it leads to the sensedatum fallacy.

In general, he proposes that "... the inference from 'Something appears F' to 'Something presents an appearance that is F' is not general valid". His example is:

"From The man appears tubercular,' we may not infer The man presents an appearance which is tubercular,' and from The books appear worn and dusty and more than two hundred years old,' we may not infer The books present appearances which are worn and dusty and more than two hundred years old. (Chisholm, 1966: 95)

The inferences of Chisholm are valid. Nevertheless, to state that an appearance is a substance having qualities is very controversial, because an appearance of something always is present to somebody who is aware and thinks what appears. Therefore, an appearance would be a quality of the subject on which it depends. An appearance would occur in a subject, not in a real something external to a subject. "Appearance" refers to qualities, to instances of redness and roundness, when we are sensing. These qualities may exist in a material body that is a substance here or they are not real qualities of the material body,

but apparent qualities. I mean that in perceiving an object, qualities appear while substances never appear. The whole man with the look is an appearance in Chisholm's example.

But how, after all, does Chisholm *know* that an appearance corresponds one-to-one with something external which causes there being appearance in our minds? Introspection demonstrates that appearances are *sensible qualities* which appear to observers in perception, such as colours, shapes, movement, sounds, hardness and wetness. Using Chisholm's concepts, an appearance may be a concrete substance. However, to define an appearance as a concrete substance on grounds of it seeming to be something can mislead us. In fact, this is also Chisholm's criticism against the substantival theory of appearance. In short, things do not appear in perception, but in qualities. For example, something appears to be F; i.e. it appears to be a round shape which would be part of the surface of the external object. Nevertheless, these statements mean that F (that is, a round shape) appears, and it does not appear to be *some thing* being round and a shape: being F and being a round shape are qualities. These statements lead to the conclusion that sensible qualities appear in perceiving an object. On the other hand, Chisholm changed his views about perception later in the 1990s and continued to focus on the causal theory of perception. (Chisholm, 1995: 35, 36, 37, 38, 39)

Finally, it is possible that the statement "An object appears to be outside of me" is untrue if an object appearing in perception is *a content* of a sense experience. The object of perception is a sense-datum or a mind-dependent appearance. The existence of the real substance would somehow be causally responsible for there being a sense impression of an appearing object, and this substance appears to be external. Thus, the claim "I see a book being external to me" can be untrue because the way that a book is perceived is not the way that a book really is. That which I see is the mind-internal appearance of a book. This view has been thought to lead to the sense-datum fallacy. In next chapter, I concentrate on the criticism that sense-data is not necessarily the infallible foundation of empirical knowledge.

d) Sense-datum Fallacies

Sense-datum fallacies relate to the foundation of empirical knowledge and the object of perception. H. A. Prichard in the 1930's and later Roderick M. Chisholm doubted the idea that sense data are the infallible foundation of empirical knowledge, or that the sense-data or appearances are objects of perception. Because statements about material things are unreliable for empirical knowledge, statements about sense data, or *the given* to the senses that an observer is directly aware of, had to provide a certain base for empirical knowledge. This was the view of Bertrand Russell and Alfred J. Ayer in the early 20th century.

The sense-datum was caused by the existence of the external thing, and an observer's statements are about the sense-datum that he or she is directly aware of. For instance, a real tree conveys its sense-datum to me, and I describe the sense-datum or mind-dependent appearance. My statement is not about a real tree, although I may assume it to be so. The idea was that I cannot doubt what 'the presence of the immediate' is, and my statement about it is reliable. However, Chisholm claimed in his article *The Problem of the Speckled Hen* from 1942 that our statements about the sense-data can be also mistaken.

Chisholm says that "at least one type of basic propositions—that which is enumerative—is quite capable of being believed erroneously and, in consequence, is not incorrigible" (Chisholm, 1942: 368). He asks us to consider the visual sense-datum which is yielded by a single glance at a speckled hen. After asking us to do so, he asks how many speckles the datum comprises. Chisholm assures us that our judgment that there are forty-eight speckles might very well be mistaken. Therefore, our statements about the sense-data may be untrue, although the theory of the given assumes otherwise. The sense-data had to provide a strong base for empirical knowledge. Chisholm did not mean that there are not sense-data or sensory appearances, he meant that the basic propositions of mind-dependent sense-data are as vague and imprecise as perceptual propositions of mind-independent

physical things. (Chisholm, 1942: 369, 373) I agree, and I think that Chisholm's article from 1942 is correct in its assertions.

In his 1966 work *Theory of Knowledge*, Chisholm gives some examples of the mistaken inferences of appearances. He starts from the fact that perceiving an object is the result of a complex physiological and psychological process. The ultimate product of this process is a conscious sensation. By 'sensation' Chisholm means the same as the concepts 'sense impression', 'appearance', 'idea' and the like – it is some sort of mind-dependent entity. He continues that this entity depends upon the condition of a perceiving subject. In fact, according to Chisholm, the ways in which things appear to us when we perceive them depend in part upon our own psychological and physiological condition, or upon the condition of our brain. (Chisholm, 1966: 91).

Chisholm then states that in a situation where perceiving a tree is dependent on the condition of the brain of a perceiving subject, two things are implied, which he attributes to Democritus's inferences. It implies (1) that we do not perceive what it is that we think we perceive and (2) that external entities are not what we tend to believe they are. (Chisholm: 1966: 91). Chisholm follows Aristotle by separating ways of appearing from properties of physical things: terms such as 'white', 'yellow', 'bitter' and 'sweet' refer to these properties a physical thing has if it appears white or yellow to the observer because of being white or yellow. These terms refer to ways of appearing if the ways in which things appear to the observer are white or yellow. For instance, if a tree is green, it has properties or dispositions in virtue of which a tree appears green to the observer under favourable lighting conditions. (Chisholm, 1966: 93). Chisholm then gives some examples of mistaken inferences between things and their appearances.

Now, Chisholm considers both concrete things and appearances as substances. In my opinion, there are two substances, which are the observer and a possible mind-independent lump, say, a tree, and their attributes, as I said in the third chapter. Let us look at Chisholm's good examples. One mistake is such that because the *appearing* whiteness of a thing depends upon the condition of the observer, one infers that the thing's

being white is also something that depends upon the condition of the observer (Chisholm, 1966: 94). I would reason that appearing white and being white are different things for Chisholm.

Second, according to Chisholm, it is possible to err in the other direction. With respect to certain truths about the things that appear to me, one can suppose that these truths also apply to the appearances. One such wrong inference is that if I perceive a tree, then I also *perceive* a tree's appearance. Chisholm assures us that when a tree as a stimulus object has acted upon my sense organs, I perceive a tree, and thereby it causes me to be appeared to. However, he says, the appearances of things are not stimulus objects that affect our sense organs. Chisholm then infers that the appearances themselves are not something that we perceive. (Chisholm, 1966: 94).

Remember, the appearances are considered as substances, and this is Chisholm's opinion as well: 'When we say "The appearance of the thing is white," our language suggests that we are attributing a certain property to a substance' (Chisholm, 1996: 95). The third mistake is such that from the fact that a physical thing appears white, one might mistakenly infer that the thing presents an appearance which is white (Chisholm, 1966: 94). I would suggest that the thing presents an appearance of whiteness to the observer, not a double substance of a thing that is white. I am not certain that a mind-dependent external tree has a green colour on its surface even though the lighting conditions of observation are favourable.

However, I do agree with Chisholm when he says that "the inference from 'Something appears F' to 'Something presents an appearance that is F' is not in general valid" (Chisholm, 1966: 94–5). There are adjectives which are such that, if we replace "F" with any of those adjectives, then, according to Chisholm, "Something appears F" will be true and "Something presents an appearance which is F" will be false. His example is such that from statement "The books appear worn and dusty and more than two hundred years old" we may not infer "The books present appearances which are worn and dusty and more than two hundred years." (Chisholm, 1966: 95) I think that Chisholm is right. However,

Chisholm asks if the appearance can be white in the sense in which a rose can be white. Does it also have a certain weight, an inside and a backside? While being aware of an image of a house, nobody thinks that the mental image of a house has a form of glass, wood and concrete. It is like a portrait of a landscape that mimics the river Seine and the buildings by it. The river in the portrait is not wet, for instance. Moreover, when I appear to perceive a small tree, the size that is perceived by me to be small and the real size of a tree are different. I do not claim that this tree's impression is small, but I am directly aware of an appearance of smallness. For me, an appearance does not fall under the category of substance, and it seems that this is the point of Chisholm's criticism (Chisholm, 1966: 94–5). Prichard argues that there is no sense-data that I am able to perceive.

In his 'The Sense-datum Fallacy' from 1938, Prichard's main thesis is that there is no such thing as a sense-datum as Bertrand Russell and H. H. Price use the term (Prichard, 1938: 210–211). According to Prichard, they are begging the question (Prichard, 1938: 213). The article's main theme is the nature of the objects that we perceive and the possibility that perception could be a kind of knowing. He starts from Berkeley's assertion that the things we perceive depend on our perception of them (Prichard, 1938: 200). By 'perception' Prichard simply means "that from which in recent times the term 'sense' is sometimes substituted, i.e. the sense in which it is used to stand for a certain generic mental activity or state of which, when we reflect, we think seeing, feeling, or touching, hearing, tasting, and smelling to be species" (Prichard, 1938: 200). In opposition to a thesis of naïve realism that the object of perception is a body (for instance, a table), Prichard joins Berkeley and many others in admitting that we perceive a secondary quality. That quality, like a colour red or a sound, is not a sensation, but a sense-datum. (Prichard, 1938: 201). These qualities should be dependent on our perception of them. Prichard aims to show their independent nature, and in doing so, demonstrate the absence of sense-data.

Contrary to the sensation interpretation of objects of perception, Prichard makes an important separation from the line of thought of N. Kemp Smith. First, 'sensation' can be interpreted as a process of apprehension and, second, as an object apprehended. For Smith, if sensation is a mental process, then sensation is subjective. But if sensation is an

object revealed in and through such mental processes, then it cannot be regarded as a subjective entity. To quote Prichard: "Though red is known only as sensation, it is undoubtedly an objective content. It is not a state of the subject, but an object to the subject" (Prichard, 1938: 202). In my view, Prichard tries to argue that the existence of red, a sound, or an odour is an object independent of any mental processes; an object cannot be subjective, or for instance, the state of a subject. Or can it be?

Following G. E. Moore and N. Kemp Smith, Prichard thinks that perceiving is a species of knowing: having a sensation of a blue colour is a kind of knowing about that colour. 'Knowing' is 'being aware of', 'experiencing' or 'apprehending' a colour or a sound. (Prichard, 1938: 203–5) Prichard's idea is based on a concept that if perceiving something is *to know this something*, then the thing perceived is *independent of* our perceiving it. However, for Berkeley, each kind of perception is a secondary quality, and the various secondary qualities which we perceive are by their very nature dependent on our perceiving. Consequently, to perceive something cannot be to know it. (Prichard, 1938: 207–8) Prichard then refers to Bertrand Russell's view of sense-data and sensation which Russell presents in *Problems of Philosophy*.

Prichard (1938: 210) claims Russell's view that what we perceive is not a body, but a secondary quality. He also thinks that Russell considers perceiving to be a special kind of knowing. According to Prichard, Russell gave 'the sense-data' the meaning of 'things immediately known in sensation'. Prichard also argues that perceiving is a source of knowing the existence of things immediately known in sensation (the existence of the sense-data). (Prichard, 1938: 210)

For Prichard, such things cannot be immediately known in the sensation that Russell calls the sense-data. Prichard argues that it is merely verbal to speak of a something as sense-datum which is being apprehended. To be being apprehended is not a characteristic of any thing. His example is that of eating a number of things such as some cheese, some bread and some salt. Together these things form a certain numerical group, but their membership to this group is not based on them having a certain common characteristic like 'things

which are being eaten by me'. However, being eaten by me is not a characteristic of some cheese, some bread or some salt. In a similar way, if I am apprehending in the form of perceiving a particular colour, a particular sound and a particular feeling of roughness, none of these is a something which is being apprehended by me. Thus, Russell's idea of sense-datum regarding the colour which I am seeing is not about the colour via my perceiving the colour. That is, it is giving a name to something that is independent of perceiving it and thus knowing it in special kind of way. (Prichard, 1938: 211–3) This is Prichard's view of the sense-datum fallacy.

In fact, I think that I can perceive not only secondary qualities, but also primary qualities. I appear to perceive hardness, solidness, size and shape. Prichard would say that primary qualities are independent of someone perceiving them. I say that that claim is not generally valid. Let us imagine a round shape. I appear to perceive an oval shape because of a certain angle of vision. The object of my perception is an oval shape that I directly perceive. This oval shape is dependent on my position, i. e. on a perceiver. What I perceive to be is an oval shape, and what really is a round shape. This oval shape cannot be the entity, as it is a round shape. The entities must be different, and an oval shape is a mental item dependent on my perceiving it. In sum, primary qualities are not necessarily the properties of mind-independent things.

e) Chisholm on the Status of Appearances

Roderick M. Chisholm evaluated the foundation of the sense-datum theory and the way in which this theory provided a strong base for the empirical knowledge obtained since the 1940s. I already presented Chisholm's article *The Problem of the Speckled Hen*, and now I continue by presenting the article *The Problem of Empiricism* from 1948. In this article, Chisholm examined the relationship between ordinary thing statements and sense-datum statements. Chisholm refers to C. I. Lewis' thesis that any statement which refers to a material thing may be fully conveyed in statements which refer to sense-data or the sensible appearances of things. For example, for Lewis, an ordinary thing statement such as "That is a doorknob" will show that the statement entails an unlimited number of statements referring to sense-data. Chisholm continues by saying that the sense-datum statements are

"analytic consequences" of the thing statement. (Chisholm, 1948: 512). The problem, says Chisholm, lies behind showing that the relation between a thing statement and a sense-datum statements (and its roots) is in the relativity of sense perception (Chisholm, 1948: 512).

For Chisholm, a red appearance or sense-datum depends partly on the thing and partly on the conditions under which it is observed. For example, says Chisholm, if one knew that the thing was red and that the lighting conditions were normal, one could predict that the thing would present a red appearance. If one knew that the lights were out, or that the observer had a certain type of colour blindness, one could predict that the thing would present some other appearance. In sum, it is the thing-perceived and the observation-conditions working jointly which determine what is to appear. (Chisholm, 1948: 512–3)

According to Chisholm, the facts of "perceptual relativity" suggest that the statement "This thing is red" does not entail any statement of sense-data. They suggest that a sense-datum statement is entailed only when "This thing is red" is taken in conjunction with another thing statement referring to observation-conditions. Lewis' translatability thesis requires that both observation-conditions and things-perceived be definable in terms of what might appear. However, Chisholm argues that the facts of perceptual relativity indicate that it is the joint operation of things-perceived and observation-conditions which determines what is to appear. (Chisholm, 1948: 513) In my opinion, Chisholm is correct.

Chisholm gives two examples that show that "This is red" (P) is not an analytic consequence of "Redness will appear" (R), P does not entail R, according to Chisholm. With some other thing statement, referring to observation-conditions, P does not entail R, but instead, it entails not-R. So if "This is red" and "This is observed under conditions which are normal except for the presence of blue lights; and if this is red and is observed under conditions which are normal except for the presence of blue lights, redness will not appear", then "Redness will appear" does follow. If P and S entail not-R, then it is impossible that P entails R, according to Chisholm. He concludes that "This is red" (P) does not entail "Redness will appear" (R). (Chisholm, 1948: 513–4)

At this point in the article, Chisholm discusses how sense experience can justify the knowledge of things. Chisholm argues that the translatability thesis, i.e. to translate thing statements to sense-datum statements, seems not to be successful because it multiplies thing statements and presents old difficulties again. (Chisholm, 1948: 514) The relativity of perception may make the information about external things indirect and fallible. For example, how things appear to me depends on my angle of vision, and thus I have information of small oval-shaped objects of perceptual experience although they are not really oval and small. However, in his article, Chisholm (1948: 517) does not say much about sense-data being a strong foundation of empirical knowledge.

The perceptual relativity implies the mind-dependent status of a red appearance, although Chisholm does not examine the nature of perceptual appearances in *The Problem of Empiricism*. I tend to claim that the perceptual relativity also includes shape and size appearances. What are these sense-data and what are the sensible appearances of things if they are the objects of experience but they are not external things?

In *Theory of Knowledge*, Chisholm considers the possibility that they are brain states. Appearances or sensible mind-dependent ideas of external things can be added to the category of 'what is physical' if they are identified with entities that are located in the brain of a person. This kind of "identity theory" can be defended, thinks Chisholm, on the grounds (1) "that there is known to be least a close correlation between appearances and what is cerebral or neurological, and (2) that in order not to multiply entities beyond necessity it is reasonable to suppose that a strict identity is involved rather than a mere correlation between entities that are distinct". (Chisholm, 1966: 99) If the identity theory can be proven true, we should not assume the existence of any entities other than physical things and their properties and states in the contingent world (Chisholm, 1966: 99). I call this "the contingent world" because *the reality* may also include abstract entities.

According to Chisholm, the identity theory is better suited for a substantival theory of appearances than the adverbial theory of appearing. He says that the sentence "Jones ex-

periences a red appearance" could be said to be like "Jones eats a red tomato". This expresses an intimate relation between Jones and some other substance. In a similar way, he continues to say that appearances are parts of the brain – chunks of grey matter, or cells, or strips of nervous tissue. Therefore, people would perceive appearances. That is, people perceive the insides of their own bodies, not external mind-independent things. (Chisholm, 1966: 99–100) Chisholm now quotes Thomas Case, a nineteenth century advocate of physical realism.

Chisholm (1966: 100) says that Case "seems to have committed the 'sense-datum fallacy'. Chisholm evaluates Case's inference "From the hot within we infer a fire without". This means, according to Chisholm, that Case assumes that when the "fire without" appears hot there is an appearance "within" having the property that the fire appears to have. Chisholm refers to Aristotle's distinction between the sensible and dispositional uses of property words. According to Chisholm, Case assumes that the process we ordinarily call perceiving is really just a matter of framing hypotheses and making inferences, and thus Case is able to conclude that we come to know external things by first examining the insides of our heads. (Chisholm, 1966: 100) This is a substantival theory of appearances. Chisholm criticizes the claim that "An appearance of fire is hot" is a true statement. I do not think that Chisholm words are the whole truth.

The object of perception can be dependent on a perceiver's perceptual situation, which leads to the claim that one perceives a mental item or a sensible appearance of a thing. That is to say, one is directly aware of something that cannot be a property of an external thing. For instance, a round table cannot be elliptical, but the elliptical shape really is what I see.

One alternative is to interpret 'appearance' as the process of appearing, rather than interpret it as certain substances called 'appearances'. This version of the "identity theory" would express that that process which is Jones' being appeared to redly is really something that is to be found in her brain. (Chisholm, 1966: 101) The theory would tell of a physical account of that process which is Jones' being appeared to: (1) there is going on in

Jones' head a certain process—some kind of vibration—and (2) that this neurological process is the very same process as the one that we are now describing as Jones' being appeared to redly (Chisholm, 1966: 101). Finally, Chisholm makes five general points about this version of the identity theory which states that an appearance is a physiological event in a person, and thus it cannot be an external thing independent of a person.

One point for Chisholm is such that for supposing that there are two processes—that of being appeared to and also a certain neurological process—there is only one. The identity theory "explains away" the need for supposing two processes. (Chisholm, 1966: 102) Chisholm's second point is important: "if we knew that the theory was true, then we would know something about certain neurological processes that no one knows now, namely, that they take place redly" (Chisholm, 1966: 102). Finally, Chisholm points out that in formulating the theory we presuppose an entity being, a person, who is being appeared to. However, the theory does not imply that Jones is identical with any physical body or with any property, state or process of any physical body. What is directly evident to Jones is the fact that *she* is being appeared to redly. (Chisholm, 1966: 102) In his later years, Chisholm changed his mind.

Chisholm (1995: 35) writes in 1995: "In writing about the theory of knowledge, I for many years defended the view that what philosophers call 'appearances' are not individual things but are ways of sensing. I had said that, under certain circumstances, ways of appearing could be called 'ways of being appeared to'. But in later years, after I turned to ontology and to the theory of categories, I came to see that appearances can *only* be individual things." Appearances can be identified, according to Chisholm, by varying the conditions under which an external physical thing is perceived. Therefore, one may vary the appearances without any need to introduce any changes in the thing itself. His examples are the stick that is made to look bent by immersing it in water and the white cloth that is made to appear pink by looking at it through rose-coloured glasses. (Chisholm, 1995: 35) Chisholm's view seems to be representative realism. Let us see if I am right.

The traditional example of making a sound is the question "Does the falling tree make any noise when there's no one in the forest to hear it?" Chisholm points to two things here, following Aristotle. The experiencing subject's property of sensing a noise is not a dispositional property of a material thing, or a tree, but *the subject's property*. The dispositional property of a material thing may give rise the appearance of a tree. (Chisholm, 1995: 36)

He continues with the fact that there are truths of the following sorts: "I sense an appearance which consists of a triangular red thing being to the left of a circular blue thing." After the example, he asks us to consider the hypothesis that the objects of visual sensing are *surfaces* within *the subject's own body*. The hypothesis implies that the subject needs a body in order to sense, according to Chisholm. This hypothesis enables us to deal easily with the example of the spatial nature of sensing. Chisholm says that what the subject is sensing contains a red triangle being at the left of a blue circle. (Chisholm, 1995: 36) He concludes that the objects of visual sensing are certainly spatial (Chisholm, 1995: 37).

Chisholm then wants to defend the hypothesis that all objects of sensing are individual things. He does so by examining the relation between sensing and perceiving. (Chisholm, 1995: 37) By sensing, Chisholm means as follows:

"D1 S senses an appearance of x = Df. S senses an individual thing and does so in such a way that his sensing is a function of a process external to S's body; i.e., systematic variations of such a process will produce systematic variations in a way in which S is sensing."

And by perceiving Chisholm means:

"D2 S veridically perceives x to be F = Df. S senses an appearance that is F; and the appearance that S senses is an appearance of something that is F." (Chisholm, 1995: 37)

The first occurrence of the schematic letter "F" refers to a *dispositional property* of the external thing x. The "F" in "appears to F" should refer to a *nondispositional* property of the subject S. (Chisholm, 1995: 37) How does sensing a nondispositional property of *the*

subject enable it to know something about the external thing? Chisholm's general definition of perceiving is as follows:

"D4 S perceives x = Df. S senses an appearance of x." (Chisholm, 1995: 38)

Sensing, says Chisholm, is pre-eminently qualitative. He states "Our qualitative experience—what we have called 'sensing' (or 'appearing')—is 'subjective' in being dependent for its existence upon the existence of the sensing subject experience." (Chisholm, 1995: 38). He adds that the fact that there are sentient beings having such qualitative experiences is a fact, an objective fact, about the nature of this world (Chisholm, 1995: 38).

In earlier years, Chisholm defended the adverbial theory of appearing, and now he defends a theory that appearances are individual things. His two general epistemic principles are now:

"(1) For every x, if x senses an appearance that is red, then it is evident to x that he or she senses an appearance that is red."

"(2) Being appeared to in a way that is red tends to make probable (confirms) that one is sensing an appearance of an external physical thing that is red." (Chisholm, 1995: 39)

The redness of the external physical thing is dispositional, that of the appearance is non-dispositional, according to Chisholm (1995: 39). The remarkable point is such that Chisholm now admits that which he denied in 1966. That is, an external thing and an appearance in the subject can be red. The second point that I would like to make is that there are two different things in Chisholm's later theory: a tree and an appearance of a tree. They are two distinct entities because the former is in the external world and the latter in the subject who senses an appearance. My theory resembles that of Chisholm.

Next, I will present a brief summary of the adverbial theory of appearing. Its basic thesis is that, while we do experience in some way, we do not perceive mind-dependent appearances or sense-data that are individual things.

f) The Adverbial Theory of the Object of Experience

The adverbial theory is the alternative to the act/object analysis of the object of experience. It stems from a desire to separate the object of experience from the object of perception. I am not sure that this separation is meaningful, however. The idea is simple. If I say that I am experiencing a red dot, I should not say that I experience an object. I should say that I experience red dot-ly, meaning that a red dot is an attribute of my experience, not a red substance at all. Therefore, when I am overcome by a hallucination, illusion or dreams, I need not to claim that I perceive a red demon, because such a substance does not exist in front of me. Rather, I experience red demon-ly.

Moreover, if I walk slowly, the word 'slowly' designates my motion or an event, not a slow cat that I see. According to the adverbial theory, if I see a red thing, then I see redly, and this word 'redly' designates my mental act, not a red property belonging to an external thing. Therefore, one property is attributed to another property, not to a substance. The conclusion would be that, by experiencing, the information I get is somehow information about experiencing. This conclusion is controversial, however.

According to Michael Pendlebury, the adverbial theory of experience proposes that the grammatical object of a statement attributing an experience to someone be analysed as an adverb. For example, "Rod is experiencing a pink square" is rewritten as "Rod is experiencing (pink square)-ly". (Pendlebury, 1992: 9) The act/object analysis, however, contends that the truth of a statement requires the existence of an object of experience corresponding to its grammatical object. This kind of analysis accepts the existence of a pink square in the statement "Rod is experiencing a pink square". The core of the adverbial theory consists in the denial of objects of experience. (Pendlebury, 1992: 10)

It is unclear for me, however, if the adverbial theory can avoid the sense-datum fallacy. The substantival theory of appearance states that I experience an appearance of a tree, but the adverbial theory claims that (1) a tree appears to me or (2) I have an experience of appearing tree. The second statement expresses that there are two mental events, experiencing and appearing, and that is implausible. (Pendlebury, 1992: 128–9; Chisholm, 1966:

100). Another problem in the adverbial theory is 'the many-property problem': if I have an experience of a round circle, I am directly aware of a single object that is a round circle or I am directly aware of roundness and a circle, or of two objects (Pendlebury, 1992: 128–9).

Finally, in the next chapter, it is worth considering what 'perceiving' is in 'perceiving an object'. If perceiving is an act of mind, its activity implies the distinction of perception from pure experience.

g) Activity and Passivity in Perception

The concepts of *perception* and *imagination* have different meanings. First, it is clear that we do nothing in order to have sensible particulars in front of us even though we are able to change our own mental states. By closing our eyes, moving our arms close to our eyes or pinching our own cheek, we change our mental states. One's will does not change the appearance of a book to that of a cat, even if one would want to change it by power of thought. The observer does not cause objects of perception. He or she passively receives the external causes which draw something into his or her centre of attention, and he and she possibly recognizes it. In sum, a subject is a passive centre of the external causes in perception: she or he does not conduce to what appears to the senses and how they have arisen. An assumption is that the past appearances do not influence the present appearances of a subject.

Second, imagination is more active than perception, which requires background knowledge and the memory system. For example, the observer produces a mind-dependent phenomenon of a centaur of which he or she is aware of in visualization. There is no instance in perceiving an object which corresponds with a conscious phenomenon of a centaur, because that imagery is not located in the visual field. In general, one does not claim that one sees a centaur, although the hallucination is an exception. Imagination is much more dependent on a person than perception, which is a bottom-up process or a process from reality to mind.

These two examples suggest as follows:

- 1. Perception occurs here and now, and is dependent on the body of a person and a thing of the external world.
- 2. Imagination is more active, includes the past and anticipation of the future, and depends on the body of a person.

Perception and imagination are different in the context of the materialistic theory. Visualisation is a physiological and psychological event, while perception entails external stimuli such as light energy and a material substance. Nevertheless, visualized x and perceived x may have similar contents, e.g. the experience of the Statue of Liberty, but refer to exactly the same existing entity: the real Statue of Liberty. Both instances are similar, but the real statue is not similar to the experience of the statue. On the other hand, perception and imagination can be simultaneous and parallel processes: one has been focusing one's attention on the details of a face of Marilyn Monroe, and at the same time, one is imagining how a profile of Marilyn Monroe looks. Therefore, visualisation can refer to a future situation about which the statement 'If I were in that place, I would perceive a profile of Marilyn Monroe from one side' would be. The concepts of perception and imagination involve meanings in which the origins of these mental phenomena are different. That is, they are the effects of different series of events. There is much evidence in cognitive science for these kinds of views. (Eysenck, 2012: 53–62; Kosslyn, 2003 and 2005; Pylyshyn, 2002 and 2003) (I will return to this matter in chapter 5a.)

It has traditionally been thought that a concrete particular exists in two different ways: (1) a bare form in mind and (2) a real form, or as a material thing, in the material reality based on Aristotle's distinction. A visualized tree x1 and an existing tree x2 are two distinct things, although x1 would refer to x2. For example, a book which one imagines in one's mind is less real because it has fewer qualities. An imagined book has no place in the external world because it presents as some kind of a form of consciousness in one's mind. Therefore, a book existing in the external world as a material form has more qualities, and thus it is more real than a bare form of mind-dependent appearing object. From these examples follows a problem:

If an imagined x and an existing x are two essentially different entities, which set is *a* perceived x included in? Is it an entity of consciousness, or the reality?

It follows logically from the questions that a perceived x is not included in both categories. I assume that the object of perception is not always a material thing, although Michael Pendlebury (1992: 9), for example, claims that it is.

Although things do appear in the senses passively, perceptions would not be pictures arising in the eyes or tactile sensations in fingers. We process or perceive *what* is seen or felt. Perceiving is like 'sniffing' or 'measuring' that which is present, and that produces a process-based theory of perception:

For a subject to perceive x is for a subject to process x which is present to a subject.

We perceive x when processing the details of the object x of experience. It requires having a sensation and noticing a constituent of the sensation. That is, to process what appears to the senses necessarily leads to having attention on the object of perception. If nothing appears to us, and we then turn our attention on it, we need not perceive it. We do not perceive any tree in such a situation. But when processing what we see, hear or touch, we really focus on and perceive some thing p. For example, among the audience, a perceiver can pick out someone he or she knows and then, after a while, a perceiver recognizes who the person is: 'He is over there among the audience (where-perception); yes, he's Jack, not his brother (what-perception)'. In sum, if one processes what is seen or heard, one does not fail to perceive.

There is no one universally accepted definition of "perception", but various definitions which are inconsistent with each other. Furthermore, because there are various views on perception, this indicates that we do not exactly know what perception is and how it occurs. Because we do not know what conscious perception is, it also reveals that we do not know what it is that we seem to perceive, i.e. the nature of the object of perception. **Perception** has been said to be at least 'information pick up' by Gibson (1966 and 1979), 'information processing' by Neisser (1976), 'hypothesis forming' by Gregory (1980), 'be-

lief forming' by Armstrong (1961), 'becoming aware of something which is given' by Husserl (1913/1931), 'empirical consciousness of appearances' by Kant (1787) and 'being aware of bodily things through the senses' by Descartes (1647/1996, the second meditation). **Sensation**, on the other hand, is a subjective sensory experience, or, according to cognitive science, perception without interpretation.

Perception is defined in this research as follows:

Perception = df. Empirical data processing. Or processing what appears to the senses on which one focuses one's attention.

If perception is the processing of a sensible object, sensation is having a sensible object without actively processing. Sensation temporally precedes perception. For example, a flash of light is just a visual sensation arising from the activation of vision. If the activation of vision does not occur, neither does visual perception. Not having a sensible image of Marilyn Monroe's face involves not perceiving an image of Marilyn Monroe's face. The transformation of light energy to nerve impulses in the eyes is *a necessary condition* for there being a conscious visual perception of Marilyn Monroe's face. Perception requires sensation, although these two phenomena are not the same.

Some theoretical assumptions have come up which would be good to highlight:

- 1. Perception is more active than just having a conscious mind-dependent appearance of a tree.
- 2. Problems in perception prevent one from perceiving, even if an external entity exists.
- 3. Past perceptions may affect present perception about x, which means, for example, that if one has never perceived Marilyn Monroe, one does not recognize Marilyn Monroe's face in the picture. Therefore, a person does not perceive Marilyn Monroe in the picture. It is possible that one does not even perceive a face because of face-blindness.

When George Berkeley perceives something, does he also know the nature of that something? He uses a logical principle, a law of contradiction, in proving what type of entity the object of perception is. In the next section, we will see what follows from Berkeley's thesis for the mind-dependent objects of perception.

5. GEORGE BERKELEY'S REASONS WHY AN OBJECT OF PERCEPTION IS NOT A MATERIAL SUBSTANCE

a) A Contradiction

George Berkeley argues for the claim that a sensible object or a perceptual impression is neither a material substance nor a mental copy of the real archetype, but an idea in mind. On the other hand, according to Howard Robinson, Berkeley's strategy can be presented such that (1) to enquire what properties matter is thought to possess and (2) after enquiring, to show that it does not possess any of them. Primary and secondary qualities and a substratum would not be mind-independent things of the external material world. (Robinson, 1996: xvii)

Berkeley's main argument against the claim that a sensible object is a mind-independent material substance is such that it is a contradictory proposition. If x is one and the same entity, perceiving x and not perceiving x is a fallacy. A red line, for example, exists when it is perceived, but it does not exist when nobody perceives it. Berkeley's thesis is that a non-perceived substance does not exist. This consequence is not deduced from the premises in the following argument:

- 1. Sensible entities, such as colours, shape, movement and smell, exist when perceiving them
- 2. Sensible entities exist in the external thing when not perceiving them
- 3. Therefore, sensible entities exist when perceiving and not perceiving them

Berkeley is right when he says that the quality *sensible* occurs only in perception, because sensibility is not a quality of a thing that a perceiver is not able to sense. A sensible thing

exists only when one has a sensation of it. Matter is thought to be such a thing. If sensible entities exist when they are perceived by the senses, the second premise is not true. This leads to the contradiction mentioned by Berkeley. He reasons that the right way to choose words is: when perceiving, sensible entities exist, and when not perceiving, they do not exist. (Berkeley, 1734/1996: 25–27, 33–34)

Differing from contemporary philosophers, Berkeley does describe *perception*. It is closely connected with mind-dependent ideas or the objects of knowledge, but it is dependent on something more fundamental:

'But besides all that endless variety of ideas or objects of knowledge, there is likewise something which knows or perceives them, and exercises diverse operations, as willing, imagining, remembering about them. This perceiving, active being is what I call mind, spirit, soul or myself.' (Berkeley, 1734/1996: 24)

Because perception occurs in a subject, and because the objects of perception exist only when a subject perceives them, from these propositions it follows that the objects of perception, or ideas, occur in a subject, according to Berkeley. Therefore, the argument would be:

- 1. The existence of sensible entities is dependent on perception.
- 2. Perception is a mental event.
- 3. Therefore, the existence of sensible entities is dependent on a mental event.

This does not mean there are no perceptual objects without perception. Because the nature of the object of perception is subjective, it can be also deduced from the argument that a sensible entity or empirical object is neither a material substance of the external world nor an attribute of such a substance. Thus, the statement 'Perception presents mindindependent x's' is untrue and contradictory because x, which we perceive, does not exist without perceiving x. George Berkeley furthers this view in both *Principles of Human Knowledge* and *Three Dialogues between Hylas and Philonous*. (Berkeley, 1734a/1996: 25–27, 33–34; 1734b/1996: 134). In *Three Dialogues between Hylas and Philonous* Berkeley (1734/1996: 134) defends a thesis that "any immediate object of the senses, that is, any idea, or combination of ideas, should exist in an unthinking substance, or exterior

to all minds, is in itself an evident contradiction". Berkeley's account is the defense for the perceptual dependence of primary and secondary qualities.

Berkeley could well admit that perception is about a thing and that perception presents things as they really are (Hopp, 2012: 3–4). Nevertheless, contrary to many contemporary analytic and continental philosophers, he would argue that a thought such as "a perceived thing is material and is located outside of mind" is untrue. In other words, **Berkeley infers the nature of perceptual appearance from the nature of perception**. A rhetorical question could ask what perception is other than a subjective phenomenon which 'one does not meet in space' in the words of G. E. Moore.

In summary, according to Berkeley, it is an ontological fallacy to state that appearance is a material entity or an attribute of such an entity. The implication is then:

'There is a perceiving $x \rightarrow x$ is a material entity'

This implication is untrue because x is x, and while 'There is perceiving x' is true, 'x is a material entity' is untrue. For Berkeley, 'perceiving' is not 'material', but vice versa: material things are mind-dependent ideas. Still, it remains unanswered why a sign 'x' as it appears in the implication would refer to an entity that is located in mind.

b) The Appearance and the Matter: Two Entities

One demonstration of the existence of matter is the contention that matter is the external cause of a sense-datum or a perceptual appearance about it. Berkeley, nonetheless, refuses that (1) perceived x is a material entity in perceiving x and (2) a material entity causes a sense-datum x of a material entity or a perceptual appearance x (Berkeley, 1734b/1996: 156–157). We already understand Berkeley's reasons for rejecting the first proposition. He refuses the second proposition on the grounds that matter alone cannot cause perception in us. This refusal means that even if matter existed outside of a person, there would be two distinct entities: a perceptual appearance within a person and matter located in the outer world. Therefore, the object of perception is neither a mind-independent material thing nor a sensible quality, redness, contour of a shape, or a slamming sound, *in a material*

thing. Evidence of this is that the arise of a perceptual visual state requires other factors which have force to realize that state into existence. For example, seeing a face of Marilyn Monroe requires light, the brain and a memory system. The distinction is essential, but as a thought, it does not prove the existence of an outer reality. For Berkeley, these other factors are also objects of perception, and the object, e.g. a tree, is dependent upon perception of it, not vice versa.

Berkeley's argument that matter cannot cause a mind's perception of it is simple:

- 1. That which is inactive or passive is not a cause of something else.
- 2. Matter is inactive.
- 3. Therefore, matter is not a cause of something else, such as a mind's ideas or perceptual appearances. (Berkeley, 1734b/1996: 157)

What is understood by 'matter'? Matter is something solid and extended that neither moves nor thinks. Berkeley then justifiably asks:

"... yet how can that which is inactive be a cause; or that which is unthinking be a cause of thought?" (Berkeley, 1734b/1996: 157).

One criterion for the distinction between a mind-dependent idea and a material entity is that an appearance or an idea is relative (*to perception, not to a mind*) while a material entity is thought to be absolute. On the other hand, Berkeley denies the existence of the unobservable material entity because it is not in relation to any mind. Therefore, it is not mind-dependent (Berkeley, 1734a/1996: 25, 28, 40; 1734b/1996: 133–134, 136). As mentioned earlier, Howard Robinson reasons that Berkeley's one strategy is 'to enquire what properties mind-independent matter is supposed to possess and to show that it could not possess any of them' (Robinson, 1996: xvii). His second strategy, according to Robinson, 'starts not primarily from reflecting on the content of the concept of matter, but from reflecting on the nature of thought – on what it is for something to be, or be the content of,

an idea – and concluding that there cannot be a concept or idea of anything essentially independent of mind' (Robinson, 1996: xvii-xviii).

In the next chapter, we continue with the colour-shape hypothesis. This hypothesis maintains that a red colour would be a visual idea in mind and a shape is a quantity of the real object. The real object is not dependent on a perceiving human person. George Berkeley's statement is such that both are visually sensible and mind-dependent. They are in relation to the sense perception.

c) What One Perceives Are Sensible Qualities

In *Principles of Human Knowledge* and *Three Dialogues between Hylas and Philonous*, George Berkeley presents various arguments in order to show that both primary and secondary qualities (which appear to a perceiving human person) are not in the external unperceivable substance. In fact, what appears in the visual field is a sensible quality, even though people have a tendency to refer to it as 'a material body'. Berkeley's assumption is that the 'object' depends on perception, and perception means perceiving sensible qualities.

Let there be a colour-shape that is supposed to be a perceived aspect and exist in the material substance. The unperceived substance can be deduced from them (Berkeley, 1734b/1996: 133–134). Berkeley's starting point is that the real object, a tulip, and the visual idea about it are different entities because the former would exist without perception. After stating this, he continues by asking what object is meant in this situation:

'What object do you mean? The object of the senses?' (Berkeley, 1734b/1996: 133).

The sensible object is immediately perceived, which differs from sensing: there is a mind that perceives and an object that is perceivable (Berkeley, 1734b/1996: 133).

The assumption is: red and yellow is perceived by a human mind.

The conclusion is deduced from the assumption: a tulip is not within a perceiving mind, but the visual colour ideas of redness and yellowness are.

This conclusion means that the sensible secondary qualities are not the attributes of an external substance. Nevertheless, the substance in itself is located outside of a perceiving mind. It is mind-independent. René Descartes and John Locke thought that material substances have primary qualities such as a shape and an extension, but the colour redness, when we sense it, would only exist as some sort of sensory constituent of the sense experience. For example, a book has the power to cause a red sensation in our minds.

Berkeley's objection is as follows: we see only colours, a shape and an extension. Seeing is the reason why redness and yellowness appear together with a shape and its contour. The immediate object of the senses is an idea, or a fusion of ideas, which is dependent on perceiving it. Therefore, neither primary nor secondary qualities exist in the external substance which is not supposed to see or think. (Berkeley, 1734b/1996:133–134)

In fact, in various other parts of his work, Berkeley shows that a colour and a shape have no location outside of mind (Berkeley, 1734a/1996: 27–30; 1734b/1996: 120–126, 127–128). One reason for this was mentioned above: it is contradictory to state that a colour-shape hypothesis is true, or that the colour red and a round shape exist in the unperceived substance, because the colour and shape exist in relation to a perceiving mind and appear only when perceiving. They do not exist as unperceived or absolute entities. On the other hand, the correct claim 'colour and shape are ideas of the mind' does not follow directly from Berkeley's claim and reason. A red-round-spot of perception does not imply a red round spot is necessarily a mind-dependent idea. I consider the object dependent on perception as an implication that the object is mind-dependent.

In the next chapter, I will examine Berkeley's likeness-principle, which refers to the thesis that one idea can be similar to nothing but another idea. That is to say, what appears in perception is not also in existence, but it is similar to another idea in perception. 'In perception' and 'in existence' refer to different states of affairs.

d) Likeness: One Sensory Idea is like another Sensory Idea

One reason to refuse the existence of material substances is to argue that the sensible object, when one perceives it, can be nothing but a sensible object that depends on perceiv-

ing. It would then be neither an unperceived matter nor a copy of an original material thing to the senses. Berkeley argues against the thesis of representative realism by judging that

'though the ideas themselves do not exist without the mind, yet there may be things like them whereof they are copies or resemblances, which things exist without the mind, in an unthinking substance' (Berkeley, 1734a/1996: 27).

He answers:

"...an idea can be like nothing but an idea; a colour or figure can be like nothing but another colour or figure. If we look but ever so little into our thoughts, we shall find it impossible for us to conceive a likeness except only between our ideas." (Berkeley, 1734a/1996: 27)

Berkeley seems to consider ideas and original things external to ideas to share no properties; two things that have no common properties are not alike, and therefore, a likeness between ideas and original things does not occur. For example, one idea of a red figure is like another idea of a red figure that is experienced by a mind. The idea of a red figure is not like an original real thing because the idea does not have properties that the real thing has: the idea is not physical, material or extended.

Berkeley then asks whether or not these supposed original external things are perceivable. If they are, then they are ideas, he says. On the other hand, if they are not perceivable, then it is controversial whether or not a visible colour or a visible figure is something that is invisible. Generally speaking, Berkeley rightly wonders how something visible is something invisible. (Berkeley, 1734a/1996: 27; also 1734b/1996: 146) If the distinction between appearance and reality occurs, one can never verify that they are similar.

We are to understand matter to mean an inert, senseless substance in which extension, figure and motion do actually subsist. However, these things seem to exist only when perceiving them, and they seem to exist as objects of perception. On the grounds of reason,

Berkeley infers that appearances or ideas cannot be like something that does not have the same properties as ideas.

The problem for direct realists is that when one perceives x, how can one's perception of x can be like a thing y that has nothing in common with x? One never has an experience of an original thing y.

Berkeley assures us that they cannot be alike, and thus the notion of matter contains a contradiction. (Berkeley, 1734a/1996: 27; 1734b/1996: 146)

Berkeley's argument may be formed as follows:

- 1) x is an idea and y is a material thing.
- 2) Things that have no any similar properties do not resemble each other.
- 3) Ideas and material things have no similar properties.
- 4) Therefore, x does not resemble y.

It follows from the argument that if x is an idea, then it is not included in the category of matter, because no entity can be a property of both an idea and matter. But why is an idea, which we perceive now, not like something that absolutely exists independent of us? For example, a vision of the yellow shape of the tree is like it really is without anyone's vision of it. Therefore, 'it' is both the visual idea and the existent. That is to say, 'it' exists as the yellow shape of the tree. Berkeley argues that the former is the idea of the yellow shape of the tree and the latter is 'an unknown somewhat', which he denies (Berkeley, 1734a/1996: 58–59).

Because *knowing is perceiving* for Berkeley (Berkeley, 1734a/1996: 24; 1734b/1996: 146), perceiving x yields knowing x. However, perceiving x does not produce the knowledge that x is an idea located in mind. Perception is not sufficient reason to judge or say to know what *that* is which is seen or heard. What is certain is that if x occurs inside of a human being, it does not occur outside of her or his essence, and if x is the mind's entity, it is not an entity of the external world.

Finally, Berkeley's four proofs for the non-existence of matter do not necessarily imply the non-existence of matter. That is, a proposition such as 'A sensible object is perceivable and unperceivable' is a contradiction and logical impossibility. However, 'There are sensible objects in mind and matter in the external world' is not a logical impossibility, because it is logically possible that the appearance of matter and matter itself both exist as distinct entities. From a contradiction, inactivity, sensibility of objects and likeness-principle, the non-existence of matter does not necessarily and logically follow. There is at least one situation in which both entities exist. These four premises are plausible according to the claim that perceptual appearance is an idea in mind:

'A contradiction, inactivity, sensibility of objects, likeness → object of perception is an idea in mind'.

But, from the premises, it does not follow that there is no matter:

'A contradiction, inactivity, sensibility of objects, likeness → there is no matter'

The conclusion above is untrue because it is possible that there is matter. The existence of matter is possible, although Berkeley's *esse est percipi* thesis is necessary truth and equivalence: "Each idea exists if and only if it is perceived" (Pappas, 1995: 127–128; Marc-Wogau, 1957: 327, 334–335). On the other hand, an objection may be offered to Berkeley's arguments on the grounds of the vagueness of the term 'perceiving'. This term appears in Berkeley's theory as superficially determined because he does not clearly say how a mind perceives. His master argument declares that it is not possible to conceive mind-independent matter without ideas. Berkeley's master argument for the non-existence of matter does necessarily imply the non-existence of matter. Why would we be justified in speaking contradictorily?

e) Berkeley's Master Argument Represented

Berkeley knows that one perceives ideas, because according to him, knowing is perceiving. But why should an unperceivable object be a perceptual object? Berkeley asks us to give an example about something which is unconceived. His position is a *tautology* because one perceives or conceives ideas, and ideas are ideas *in the mind* (Berkeley, 1734b/1996: 139). He is certain that contradictory things cannot be conceived: "Is it not as

great a contradiction to talk of conceiving a thing which is unconceived?" (Berkeley, 1734b/1996: 139). Direct realism cannot deny Berkeley's Master Argument. Nonetheless, let me give a test which demonstrates that another impossible thing does not necessarily follow from a tautology.

If the tautology "necessarily P is P" is true, then its contradiction "not possibly P is Q" is also true. My presupposition is that a thing P is distinct from a thing Q: if a thing P is P, then it is impossible that P is Q.

Necessarily, if a thing P is identical with a thing P, then it is not possible that a thing P is identical with a distinct thing Q, because a thing P is not a thing Q. For example, a left hand is not a right hand. However, I think that Berkeley's thesis is such that we cannot conceive a thing which is unconceived, and thus there are no unconceived things. If I claim that I conceive an unconceived thing, then my claim is a contradiction. That is, if I conceive a thing, this thing must always be conceived.

But does that proposition imply that some Q is altogether impossible or possible? If P exists as P, then 1) it is not possible that Q exists or 2) it is possible that Q exists. I affirm the second proposition because although a thing P is nothing but a thing P, there can be some other thing Q in the world that seems to be in connection with a thing P. This includes less general inferences as follows: The statement "There are round circles" implies the statement "It is not possible that there are round circles".

We can ask that one choose one of the below: 1) the statement "A round circle is a round circle" implies the statement "It is not possible that there are squares" or 2) the statement "A round circle is a round circle" implies the statement "It is possible that there are squares".

In my mind, the second proposition is true. When considering Berkeley's Master Argument, necessarily, the conceived is the conceived, but this does not deny the possibly that the unconceived also exist. That is, a tautology implies the possibility of some other entity which has nothing to do with the entity expressed in the tautology. Thus I propose as fol-

lows: the statement "A conceiving tree is a conceiving tree" implies the statement "It is possible that there is an unconceiving tree that is not conceived".

Of course, when I *now* conceive a tree, this tree is conceiving. It would be contradictory to say that this tree is unconceived if I conceive it. However, this means that it is not possible that trees exist as unconceiving *in another time*, and I do not conceive any trees in that time. Therefore,

- (1) Necessarily, the conceived is the conceived.
- (2) Therefore, possibly, there is the unconceived.

The mind is one possible example of the unconceived entity, and Berkeley really accepts the existence of the mind. He even knows other minds, although he never perceives them. It is therefore possible to conceive at least one thing without perception. Without perception, matter can be conceived to be distinct from mind. Berkeley's Master Argument cannot generally be valid.

In *Problems of Philosophy*, Bertrand Russell interprets Berkeley's use of the term "in mind" to mean "before mind". If this interpretation is true, Berkeley would utter a mere tautology, says Russell (1912: 42–3). I do not think that "in mind" and "before mind" refer to the same thing. Berkeley just asks one to consider whether it is possible to conceive a contradictory entity¹⁹. According to Russell, Berkeley fails to distinguish the actualization of perception from the content of perception.

Some philosophers, such as Bertrand Russell and George Pitcher, have claimed that Berkeley confuses act and object in his argument. In philosophy, the act/object analysis means that whenever there is a mental event, this is also an object. For example, if I am thinking, there is always something that I am thinking. Thus, Russell's and Pitcher's claim is such that Berkeley considers a sensible object as sensing or a conceiving object as conceiving and the like. Sensation and object of sensation are different. I would not claim that this is so because a mind thinks, perceives, senses and remembers, and in Berkeley's theo-

¹⁹I am thankful to Professor Olli Koistinen for this possible thought whose examples about Berkeley's Master Argument helped me to think it over twice.

ry, ideas are sensible particulars that are thought, perceived, sensed and remembered by a mind. He does not confuse when describing an object as a sensation or an experience. In addition, an actualized mental event does not show or tell what kind of an object a mental event is directed at. Those who claim Berkeley's confusion should show where exactly such confusion appears in Berkeley's theory. After the introduction in *Principles*, he carefully separates acts of mind, perceiving, thinking, and knowing from mind-dependent ideas or sensible objects, colours, shapes, sounds and the like: "But besides all that endless variety of ideas or objects of knowledge, there is likewise something which knows and perceives them, and exercises diverse operations, as willing, imagining, and remembering about them." (Berkeley, 1734a/1996: 24)

6. THE SIMILARITY OF THE VISUAL PERCEPTUAL OBJECT AND THE IMAGE

a) A Perceptual Object and an Image

Many medieval and modern philosophers distinguished a mental thing from an external object, as I presented earlier. For example, when an architect has an image of a house in his or her mind, a house exists as 'potentially', whereas a real house exists as an actualized entity. An entity situated in mind has been called both form and object, as René Descartes did. On the other hand, an entity located in the external world has also been referred to as an object and a form, and this can cause confusion. Nevertheless, the distinction between a mental picture of silver coins and the real silver coins in hand should be easily understood.

A perceptual appearance has been related to an imaginary entity not only in the philosophies of John Locke, David Hume and George Berkeley, but also in the cognitive sciences. The studies of Stephen Kosslyn (2003, 2005) and Zenon Pylyshyn (2002, 2003) have been especially remarkable. However, these studies have not focused on the ontology of these two phenomena being in relation to a human person and the substance of the external world. A human person is an embodied scene to these mental events. In fact, there are very good reasons to claim that a mental image and the object of perception are similar entities, although they would not be identical. From this claim logically follows a hypoth-

esis that they are distinguished in their nature from the supposed mind-independent entities, and these entities are causal factors in perceiving them but not in visualizing them.

I argue that the hypothesis is true by presenting three arguments against the claim that a perceptual object is a mind-independent entity. It seems to me that such arguments have not been presented in this way in earlier studies of philosophy of perception. They have nothing to do with arguments concerning illusion and hallucination. In addition, I do not infer from the results the non-existence of the external world and the mind-independent objects, as George Berkeley does.

b) The Object of Perception and the Image are Mind-dependent

The first argument is based on the general thought about the different spatial location of things. A starting point is an assumption that the material object hypothesis is untrue because perceptual appearance arises within a human person (or in another animal). That is, what is in one substance is not in another substance.

- 1. B is in A and C is in D.
- 2. B and C are entities external to one another, as are A and D.
- 3. B is not simultaneously in A and D, and C is not simultaneously in D and A (from 1 and 2).
- 4. Some B is only in A (from 1 and 3).
- 5. Therefore, some B is not in D (from 3 and 4).

When A is a human subject in which a perceptual appearance B arises, it is logically and really impossible that B would also be in the external substance D at the same time in which a surface C exists. Therefore, the conclusion cannot be that a perceptual appearance B is the external material substance D. In sum, the material object hypothesis is untrue.

The second argument is directed against direct realism. There is an assumption that an image and an object of perception are, in essence, the same kinds of entities. The conclusion states that an object of perception is not always a material body of the external world.

1. An image of x is a mind-dependent entity not possessing space.

- 2. An image of x shares similar qualities with an object x of perception.
- 3. They are subjective, sensory, conscious and within a person.
- 4. Therefore, an object x is of perception and is a mind-dependent entity not possessing space (from 1, 2 and 3).

When having an image of an elliptical shape, and when sensing an elliptical shape in mind, it is very hard to understand why one infers from these two phenomena that one of them is the real external thing that is not even elliptical. Logically considering, a real external thing has many more properties than a mental picture about that thing in mind. However, this does not mean that these properties would not refer to the entity of the external world. In particular, an argument against direct realism would be a common picture argument:

- 1) An image of a small elliptical shape is mind-dependent.
- 2) Images share a common picture with visual objects of experiences.
- 3) Therefore, a small elliptical shape of experience is mind-dependent.

It is clear that the content of mental images and visual experiences can be similar. A face-appearance is similar in an image of a face and in a face of experience. Whatever mental images and objects of experiences are, they are not *material bodies* of the external world. They are located in different places than the external world.

The third argument presents the idea that the existence of the external object (if any) is not a sufficient reason to perceive an object.

- 1) A human person and her or his own qualities are necessary for perceiving an object.
- 2) Perceiving an object is dependent upon a human person, such as upon his or her visual angle.
- 3) Therefore, the existence of an external object is not sufficient reason to perceive an object.

It is possible that if the brain and its specialized neural cells cause sense perception, then a direct perception of things located in the external world is impossible. For example, a perception of a noise, a perception of a colour red or perception of a face-appearance is caused by human nature, the neural cells of the brains, etc. Finally, it is certain that word analysis and thinking cannot show what a round shape of experience is and how it arises from human nature.

In the next chapter, I will go through the premises of these arguments and seek to determine if there is something which easily disproves them.

c) Critical Evaluation of the Premises

The first and second premises of the first argument are absolutely self-evident. In general, when B is in A and C in D and B is not C and A is not D, then their truths cannot be doubted as such. A particular case can be two houses – A and D – where Carl is in house A and a lamp is in house D. Let there be B, Carl, and C, a lamp, from which it easily follows that B is not C. Of course, houses A and D are two different buildings. Thus, it is impossible to understand how Carl and a lamp would be in both houses at the same time. The analogue is a perception time in which A is a perceiving subject, D is the external world and C is the object in the external world, from which it follows that when a perceptual appearance B is realizing in A, then B is not C. The location of C is in D regardless of what an entity C that is dependent on the existence of D is. Therefore, the first two premises of the first argument can be acknowledged to be true.

The third general premise is also true because there are no means to find reasons which refute it. B is not in both A and D at the same time. C is not in both D and A. When Carl is in house A, he is not in house D because A and D are distinct houses. When a lamp is located in house D, it is therefore not located in house A, where Carl is staying. Some objections may be the concept of possible worlds and quantum physics, both of which try to prove that one and the same entity can be located in two different places at the same time. However, the example does not negate a perception time: Jack's perceptual appearance is not within Jack and Jill at the same time, because a mental state does not move from one person to another. It is not possible that Jill's circulation would be located in

both Jill and Jack. Nevertheless, our aim is not to try to prove imagined worlds as true or perform experiments with quantum physics. Therefore, the third premise is acknowledged to be true.

The fourth premise is problem-free. If something is in some other substance, then a statement that something is in some other substance is true. Carl is in house A. The conclusion is only that Carl is not in any other houses other than house A. On the other hand, it is hard to understand why Carl's image of New York would be in some other person in addition to Carl. It is also certain that Carl's image of New York is not located in New York, even though the image would refer to that metropolis. It is impossible to find reasons why a visual perceptual idea would not be in a subject, because it cannot occur in front of a person in the streets of New York. The examples show that the fourth premise is true, and thus the argument is valid.

The most complicated instance is that of a perceptual appearance. Is it an appearance x within a person or within the external world? However, if it is like an image, then a logical inference is that a perceptual appearance of New York and an appearance of Marilyn Monroe's face are in a subject who is conscious of them. The second argument shows that this is the case.

The first premise of the second argument presents the visualizing of x as a mental being. We cannot know how a mental image of x would *not* be mind-dependent or in mind. Maybe this can be criticized by stating that an image of x and visualizing this x are dependent on a body, especially on the brain. However, the criticism does not change the fact that an image of x is within a subject, and that image is not an entity of the external world like a book containing a picture of Marilyn Monroe. An artist's idea is always a different thing than a physical piece of art. From the ontological point of view, it is not essential which mechanism causes mental images, but how these images exists and what the nature of a mental image is. In brief, the first premise must be true.

The second premise is a real philosophical problem and a test of these three arguments. Why would a perceptual appearance be the same kind of entity as an image, and not a material object? Most people say that they perceive a material object because there is some matter in front of them. A material tree is what they perceive. They do not say that they are perceiving a mental idea of a material tree. Human nature may be a quality that leads us to infer that the world is as the senses present it to us. As George Berkeley states, the appearances to the senses are so strong that they make us regard them as the objects of the external material world even if the matter did not exist. Introspection demonstrates that the image of a tree and the perceptual object of a tree share similar content and qualities, from which it logically follows that both are subjective entities which are not outside of a perceiving person. For example, an image of Marilyn Monroe is clearly similar in content to a Marilyn Monroe of sense experience, although a mind-dependent image can come into existence without an external thing. It seems that there are no good reasons to reject the second premise.

The premise of the third argument is true. It must be true that one's own qualities are necessary for perception. Damage in an observer would explain and predict why she will not perceive in a future situation. However, of course, this argument alone does not prove that one would not directly perceive mind-independent objects. For example, we can easily say that we see rivers, houses and roses, and that they are causes of our perception about them. The first and the second argument contend that that is not the case. Visual perception means eyeing or measuring an object. The problem is: Is an object of perception identical with a mind-independent thing? In his paper *The Transparency of Experience*, M. G. F. Martin (2002) claims that they are identical on the grounds of introspection. I do not think that introspection proves that they are indeed identical.

A conscious perceptual entity *is not like* the material entity of the external world. It is impossible to define and understand a perceptual appearance as a three-dimensional body possessing a certain place in space in which we will meet it in a future situation. However, from this impossibility we do not continue to infer that there is no material world. If a material entity partly causes our appearances within us, then *we know* that entity through an appearance.

d) An Objection and a Reply

One may object by claiming that I have misunderstood the arguments of Berkeley and anti-sceptics. There is one central difficulty that could be raised. Why would we think that there really is a sense-datum between an observer and the mind-independent objects? That is, we see books, not visual book sense-data, they criticize. The following is how they may argue in favour of a thesis that there is no an extra entity or veil of perception:

- 1) A mind-independent object is what we sense, although someone may wrongly think of it as a mental item.
- 2) Therefore, there is no extra entity between a mind-independent object and an observer.

A real thing and a thing of experience are the same. One does not see a replica or a tiny picture about a material thing, but a thing as such, like the contour of a house.

It is possible that the objection suffers the same implausible belief as the claim "Perceived objects are like unperceived objects". Can we show unperceived objects? No, because we always say what we see, hear, touch, smell and taste. We talk about sensible objects. We say that we know these things through the senses, not without the senses.

Do the terms 'via the senses' and 'through the senses' mean that perceiving an object does not directly occur, but is always mediated? The correct interpretation seems to be that perceiving an object is not direct. **One can never verify that the external world is like their senses present it to be.** Like I said in the beginning of this study (pp. 7, 14, 15), Richard Fumerton rightly argues that in order to establish that sensations are signs of physical objects one would have to *observe* a correlation between sensations and the existence of certain physical objects. He continues that to observe such a correlation in order to establish a connection, one would need independent access to physical objects. This one cannot have if all one knows directly is that certain sensations occur. (Fumerton: 1992: 339) I think that all I directly know in perceiving an object is certain sensations. On the other hand, these terms do not necessarily mean that we see object-pictures or hear

sound-experiences. We would not perceive appearances of a tree but the tree via appearances.

Let me give an example to elucidate a notion of 'via appearances'. When an astronomer observes the night sky using a telescope, she does not think that she sees images of the telescope, but rather images of the planet Mars. However, the images are necessary in order to see the planet Mars with the telescope. These images arise from the lens system of the telescope. In the same way, the tiny images in the retina of eyes are necessary in order to see houses, books and friends external to us. However, we would not see the images, but the things via images, such as Thomas Aquinas claims.

This example clearly shows that mind-independent objects do not correspond with appearances of objects or telescope images. Such correspondence may yield consequences that anti-sceptical realists and Berkeley would not want to hold by.

- 1) Mind-independent objects are mind-dependent appearances of objects.
- 2) Mind-dependent appearances of objects are the products of the brain's neural cellular events.
- 3) Therefore, mind-independent objects are the products of the brain's neural cellular events.

For example, it seems clear that there are sound-phenomena and colour-phenomena. It is possible that the causes of these phenomena are within a human person. Eliminative materialism sees mental phenomena as non-existent. Only the events of the physical brain exist. Therefore, it is very hard to understand why one creates correspondences between mind-independent objects and visual images of objects. The following may be a matter of fact:

- 1) It is possible that perception that is dependent on human nature and the brain and the human body prevents direct perception about the external world.
- 2) Therefore, it is possible that the claim 'One directly perceives sounds and colours of the external world' is untrue.

Anti-sceptical realists and Berkeley must explain what the meaning of 'perception' is in order to prove that perceiving an object p is about the object of the external world.

Finally, because there are many different claims about what the object p of perception is, perception only cannot show what one perceives. The implication 'One perceives p implies one knows p' is untrue because 'One perceives p' is true. However, 'One knows p' is untrue. One thing is certain. By analysing words, it is not known what appears to us when perceiving an object or what kind of thing that which appears to us is.

7. THE RESULTS

a) The Base of Empirical Knowledge is Subjective

The results of this research have been obtained by two means: first, by reasoning and spatial inference from perception, and second, by empirical introspective comparison between the object of perception and the image. The background theory of perception is a causal one, of which one application is the process-based theory of perception, i.e. *empirical data processing*.

It is too hasty a conclusion to state that a causal theory of perception involves scepticism: this means that we know mind-dependent appearances that hide the real nature of external things and prevent us from knowing the external world as it is. The claim that there is causality in perception, i.e. a conscious perceptual appearance within a subject is the final causal process produced by the external cause, does not necessarily yield scepticism. The causal theory of perception also eliminates solipsism (a view that only I and my mental states exist), because something external to me affects me causally and changes my states with its energy. It is too reckless to draw this conclusion because through sense experience we know that which we would not know. The judgement of direct realists and phenomenologists that "material bodies are perceived without causality" is untrue because of the necessity of causality in perceiving an object. Before the nature of perception is know, perception cannot show what the nature of the perceived object is. The theories of realists and phenomenologists have not clearly demonstrated what perception is. Perceiving is the

measuring and processing of a sensible thing or an object of perception after the external stimulation of the senses.

A central result of the work is: Perception in itself is not sufficient reason to claim to know what the nature of the object of perception is. Neither realists nor idealists have a true judgement which would prove what it is that they perceive and how they will start to perceive. Although we do not exactly know the nature of a visual image and a perceptual object, we do know *by introspection* that a visual object *is like* an image, such as, firstly, seeing an elliptical shape, and secondly, visualizing that shape after we close our eyes. The object of perception is sometimes a mental item because the elliptical shape depends on my perception and the perceptual circumstances.

This result means that

- 1. Causal forces (and possibly, specialised neural cells) are necessary for perception in a future situation.
- 2. There is no direct access to the world outside of the mind.
- 3. Knowledge about the external world is based on something subjective.
- 4. Perception is a more reliable source of knowledge about the external world than intuition, tradition or belief in authority.

The first item indicates the presence of something external to the observer is not the sole prerequisite for the occurrence of perception. For example, somebody walks into our field of vision, and thus perception of him or her occurs because his or her being is present. Being present and perception do not exist in one. Being present does not cause perception. The theory of perception of philosophers, in which one thing is present, another thing meets it, and then another thing immediately perceives the thing, proves nothing about the occurrences of colour-shape, sound, touch, taste, smell, depth, face or event perception, to name but a few.

The second item means that without sensing, the connection with external things is not possible. However, subjects do not sense sensations or perceive perceptions, but rather

particulars that they name colours of redness and greens, shapes of roundness and squareness, sounds of speech and purring, tastes of bitterness and sweetness, smell of smokiness and roses, touches of hardness and solidness, and the like. They make us direct our attention to something external when they first come into being in the senses. A rhetorical question is whether colours and shapes make a blind person measure them up with her or his eye. In his introduction to the philosophy of George Berkeley, Howard Robinson writes that 'Berkeley is generally regarded as the inventor of subjective idealism; that is, of the theory that the physical world exists only in the experiences minds have of it' (Robinson, 1996: ix). That is not Berkeley's view. Things, which we perceive or experience, are not *in perceptions* or *in the experiences*, but *our perceptions* and *experiences* are *of these things*, whatever their nature is. They may be non-physical, physical or an unknown something which is neither non-physical nor physical. The object of perception is not always an external thing. "An appearance of an object" means that there are two things external to one another.

The third item states that if empirical knowledge is based on sense perception, and sense perception is subjective, then the foundation of empirical knowledge is subjective. It is subjective because it is not directly based on the object that is examined, but on a mental event. If knowledge of the world and its entities is based on subjective phenomena or experience, then these phenomena must exist. The external perception is a subjective event, and knowledge about the external world is based on it. Claims about the external world are based on sense perception. Therefore, the conclusion is that perception must exist. It is an absurd inconsistency to accept that knowledge requires perception and then deny that there is such a thing called perception. In the beginning of this work, I said that a view, thesis or statement is objective if it is based on the object that is examined, not on imagination, some way of thinking, or some world-view. However, our knowledge of the external thing seems to be based on sense perception, not the thing in-itself.

The fourth item means that sense perception forces us to rely upon it. The intellect without the senses tells nothing about the empirical world. Perception guides our action, not intui-

tion or adherence to authorities. Sense perception awakens our curiosity to ask and investigate what something is.

Promising possibilities to develop understanding of perception and its role in knowing the external world are found in classic philosophy and cognitive science. Critical thinking and concept analysis are not efficient methods to know what is going on outside of one's mind.

8. CONCLUSION

Perception is not sufficient reason to claim to know the nature of the object of perception and whether it is a mental or material entity, or some other kind of entity. This study has presented two reasons for this: (1) the object itself is not sufficient for causing perceptual experience and (2) the observer's own qualities, like mind and consciousness, are necessary for causing such an experience. The key argument is that the appearance entity is required between the observer and the external world in order to perceive a mind-independent object. In addition, the impossibility of matter does not follow from Berkeley's theory of perception. On the other hand, his works seem to falsify the interpretation that he confuses the mental act of perception with the object of perception. In fact, Berkeley's Master Argument refutes direct realism's view that perception is dependent on the object.

A perceptual appearance is then required for claiming something about the extra-mental world in order to have knowledge of the world external to the observer. Claims about such a world are mediated by perceptual experience. However, perception does not occur without causes other than the external object (if there is any). It is a whole mystery why the analytic philosophy of today tries to deny the cause-effect nature of perceptual experience. It does not predict how perception will occur in a future situation.

The findings of this research are not consistent with the contemporary analytic philosophy of perception and phenomenology, although, of course, there are philosophers who do not accept the naïve picture of direct realism. This study shares the causal theory of perception with cognitive science. Contemporary philosophy of perception may exclude a per-

ceiving subject because it strives to secure the objectivity of empirical knowledge, although such knowledge is never infallible. Nevertheless, it is faulty to hold the view that perception takes place without complex processes. The findings do not adhere to those of some classic philosophers, such as Descartes and Russell, because they associate a perceptual appearance with an external substance. One perceives sensible properties. No property is a substance, because the category of substance is not the category of property. The association of substance with property is flawed. This study also questions Berkeley's claim that *perception* is the only gateway to knowledge about the nature of perceiving objects.

What we now understand better than we did before is that past philosophers and previous studies did not do much to describe and explain perception itself. Perception, that is, is not a sufficient basis for knowing what the object of perception is. There is no direct access to the external world without some sort of sensory information that is the basis of perceiving an object. Such data of sense-experience is located inside a perceiving person. In addition, modal logic does not prove the statement "There is matter" untrue; the existence of the material substratum cannot be impossible or contradictory. I think that the existence of matter is possible. If the contingent physical world is not necessary, then the impossibility of matter does not follow from Berkeley's theory.

Future research may consider the following four subjects more closely:

- 1. It is possible that different people have different perceptual experiences in the same situation.
- 2. If it is true that knowledge about the external world is based on subjective phenomena, psychological concepts will be needed to describe these existing entities in the future as well.
- 3. It is a puzzle to determine whether (a) particulars are in the relation that can be perceived, (b) particulars are thought in the relations after comparing one particular with another and forming a relation statement, or (c) relations are perceived, but they are not in particulars.

4. Finally, analysis of perception may show that there are psychological phenomena, contrary to eliminative materialism's claims that that there are no experiences which occur as mental entities and psychological concepts have no meaning. For eliminative materialists, sensation, perception, belief, thought and desire are just words.

This research has also left unanswered a question about *the theory-free perception*. This question is whether the conceptual framework of a person influences his perception, or if perception actually occurs in the conceptual framework. For example, eliminative materialism of Paul M. Churchland claims that this conceptual framework does indeed influence perceptual statements. Nevertheless, I have learned that claims regarding the physical world are presented by means of sense experience.

Perception should be investigated through the use of the concepts of *causality*, *spatiality* and *identity*. I hold that *the observer* is directed to the sensible target by perception. Perception is not then directed at the target object, but at a person or an animal. Following Berkeley, we know by means of perception that sensible objects are properties, not substances. This work advances the understanding that the identification of perceptual appearance with a mind-independent substance is false.

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