

# Illusion as Mislocated Seeing

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## 1 Uddyotakara on Illusion: *The Commentary on Nyāya-sūtra* 4.2.35-37

### 1.1 What is Illusion?

“All experience is inerrant as far as the object is concerned” (*sarvasya jñānasya dharminy avisamvādād*; Thakur 1967, 81.20-21). “All experience is inerrant as far as the nucleus is concerned; error rests with how it looks” (*dharmiṇi sarvam abhrāntaṃ prakāre tu viparyayaḥ*; Phaṇibhuṣaṇa 1967, 65; Matilal 1986, 208n)

[TEXT1] An illusion (*mithyopalabdhi*) perceives (*adhyavasāya*) a person in a tree-stump, an illusion which knowledge undermines, without undermining the object itself, i.e. the thing that has characteristics common to both persons and tree-stumps. We do not conclude that the stump does not exist. It’s the same with experiences of things in dreams, which are undermined by waking experience, again without undermining the object itself, the thing that has characteristics in common. (4.2.35; NyV. 492.3-6).

Illusion has a defining mark (*nimitta*) – but what is it? The defining mark is perception (*darśana*) of what is common, non-perception of what is particular, and imputation of of a feature not present. (NS 4.2.36; NyV. 492.8–9).

The reality (*tattva*) is the stump; the imputed counterpart (*pradhāna*) is the person. Illusion is the “burdening” (“assigning”/“imputing”) (*āropa*) of the real with the imputed. (NS 4.2.37; NyV. 492.12)

Illusion consists in:

[**object selection**] selecting an object in virtue of perceptible properties common to both illusion and genuine perception (*sāmānya-darśana*),

[**imputation**] “burdening” the experienced object with an imputed feature it does not have (*avidyamāna-viśeṣa-adhyāropa*), and

[**masking**] blindness to perceptible properties that would break the illusion (*viśeṣa-adarśana*).

Three theories of illusion:

- Disjunctivism: “The minimal commitment of a view that can be labelled a disjunctivist theory of perception is that veridical perceptions [, illusions] and hallucinations differ mentally in some significant respect—i.e., that there are certain mental features that veridical perceptions have that [illusions and] hallucinations cannot have” (Soteriou 2020, 8).
- Objective Looks Theory: There are, strictly speaking, no such things as perceptual illusions. In any case where an object *o* appears *F* it is objectively the case that *o* looks *F*-ish, where the *F*-ish look worn by the object is as much an objective, albeit situational, property of that object as any of its other properties.
- Mislocation Theory: The Nyāya theory is that looks are mind-independent properties with which the misperceiver is acquainted, but that, contra objective looks theory, they are not properties of the object being misperceived.

“The ‘perceived’ character of the snake in our sensory illusion cannot easily be dismissed or underplayed” (Matilal 1986, 205).

*Contemporary formulations:* “As standardly conceived, an illusion is an experience of an object *o* appearing *F* where *o* is not in fact *F*” (Kalderon 2011, 751); “A *visual illusion* may be characterized as a perceptual experience in which a physical object, *o*, looks *F*, although *o* is not actually *F*.” (Brewer 2011, 102); an illusion is a “perceptual situation in which a physical object is actually perceived, but in which that object appears other than it really is” (Smith 2002, 23).

*Illusion is partial:* “In as much as illusory perceptions are indeed perceptions—perceptual contact is made with some actual object in the environment—they share a good feature with veridical perceptions. In as much as they are illusory, however, they are in some sense “bad” (Smith 2010, 385).

## 1.2 Taxonomies of Illusion

Dharmakīrti’s distinction between illusions like the moving boat illusion (environmental), illusions like floaters caused by *timira* (physiological), and illusions which are reducible to false belief or conceptualisation (cognitive).

“There seem to be at least three kinds of illusions: first, those in which environmental conditions (lighting, the medium of sound or light transmission, the presence of surrounding objects, etc.) are responsible for a perceived object appearing other than it is.

*Environmental illusions* of this sort cover many familiar cases of illusion discussed by philosophers and psychologists, including the appearance of a straight stick partially submerged in water, lighting illusions, and the Müller-Lyer illusion. A second set of cases involve *cognitive illusions*, for example: when one is looking for a friend in a crowd, other people who are superficially similar in appearance can briefly look just like the individual being searched for. Finally, *physiological illusions* involve the improper functioning of a subject’s perceptual system, such as cases of objects appearing distorted or discoloured when under the influence of drugs or sleep deprivation” (Genone 2014, 340).

[TEXT 2] Or, it’s like magic, cities of Gandharvas, or a mirage. (Ny.Sū. 4.2.32)

[TEXT 3] Illusions of magic and the like have a material basis (*upādāna*). Magic is what happens when a magician produces in the observer the illusion of an object similar to the one being used in the trick. Or one has an experience of a far-off city in something [such as a cloud] which looks similar to a city, for there would be no such experience without the cloud. And when the sun’s rays shine on the heat radiating from the earth, one has the illusion of water, because something is seen in common (*sāmānya-grahaṇāt*). There would be no such experience without [the hot earth and sun’s rays]. The defining mark (*nimitta*) of illusion is a specific condition in terms of where, when and for whom.” (Ny.Bh. 275.15-9 under Ny.Sū. 4.2.35)

## 1.3 Cognitive Illusion



Imagery-based Account:

- they involve the augmentation of reality by means of the superimposition of a mental image (Briscoe 2018, 153-4); “a familiar application of this ability is the experience of noticing a constellation in the nighttime sky. Noticing a constellation is a hybrid, visual-imaginative experience: it involves both *seeing* the stars in the constellation and *imagining* the lines that connect them at the same time.”
- “A city of Gandharvas is the Indian equivalent of a castle in the sky, a cloud formation in the distance that looks like a castle or a city” (Dasti and Phillips 2017, 65).
- Matilal calls this category “imaginative illusions” and says that “it seems that the Nyāya explanatory model fits in very well with what we may call *imaginative* error. The standard examples are a 'shell-silver' situation and a 'rope- snake' situation. The role of similarity and imaginative attribution is almost paradigmatic in such cases” (Matilal 1986, 211).

Nyāya mislocation Account:

- Nyāya: the imputed feature (*pradhāna*) in an illusion is not imagined but is itself a mind-independent feature or object, and its imputation is itself a mode of perceptual acquaintance.
- The idea of imputation (*āropya*) is reconceptualised in terms of a concept of mislocation, or, better, misallocation.

## 2 Illusion as Mislocation

2.1 Doxastic Account:

**[No Perceptual Error]** Naïve realism entails that there is no error in perceptual experience as such. Perceptual experience sometimes misleads perceivers into making erroneous judgements on its basis.

In any case where an object *o* appears *F* it is objectively the case that *o* looks *F*-ish, where the *F*-ish look worn by the object is as much an objective, albeit situational, property of that object as any of its other properties.

“What is attributed to the ring is not the quality designated by the adjective “reddish” but, rather, a reddish look.” (Kalderon 2011, 763).

“What then is an illusion? Though the cases differ in kind, they are alike in that they are opportunities for being misled” (Kalderon 2011, 774). “Conditions in the environment can contribute to objects appearing in ways that lead us to believe that they have properties they lack” (Genone 2014, 362).

The perceptual experience is of an object *o* looking *F*-ish, and if that inclines the perceiver to believe that *o* is *F*, when it isn't, the error is in the downstream belief not the perceptual experience.

2.2 Mislocation Theory of Illusion (*anyathā-khyāti-vāda*)

Nyāya: reconcile naïve realism with the claim that illusions are perceptual in character. For “it becomes highly counter-intuitive if in order to account for or explain the phenomenon of perceptual illusion we simply say that there is no perceptual illusion for which explanation may be needed” (Matilal 1986, 218).

**[TEXT 5]** The imputed feature (*pradhāna*) is determinately experienced in a location, as this in that. So the tree-stump, which though not a person is determinately experienced as a person, is the location of the imputed feature. If there isn't a perception (*upalabdhi*) of a person, there would be no determinate experience (*vyavasāya*) of what is not a person as a

person. So too in the determinate experience of dreams, such as “I saw an elephant” or “I saw a mountain”, an imputed feature must be determinately experienced in a location. (Ny.S. 4.2.34; Ny.Bh. 275.1-4)

There is an experiential relation which acquaints perceivers with property-instances of objects that are absent (*jñāna-lakṣaṇa-pratyāsatti*). The error in perceptual error is one of seeing a property-instance, which is a real feature of another, absent, object, in the object before one in one’s environment. The Nyāya analysis of illusion is therefore appropriately called a “mislocation’ or “misallocation” theory of error (*anyathā-khyāti-vāda*).

“Nyāya invokes the service of past experience and memory. The revived memory triggered by the similarity of a shared character brings in its wake the object of the past experience [...] and in this way it appears in perception (or rather misperception) as a characteristic or qualifier” [...] “These features [...] are not odd sorts of entities such as sense-data. They are attributable to the material object we see, or the physical environment etc. They are not sense-impressions private to the percipient but rather in most cases observable features of the external world.” [...] Thus, “... in its simplest form, the ‘mislocation’ theory asserts that error or perceptual illusion is the mislocation of a real F in a real x. The basic assumption in this theory is that nothing appears in our visual perceptual awareness which is not also existent or real.[...] The shiny property is the point of similarity between the shell and a piece of silver, and that which may rightly revive my memory of silver.” (Matilal 1986, 203-209).

So the Nyāya view consists in the following three claims:

- (1) that illusions are always partial or “anchored” [**Anchoring**];
- (2) that we have perceptual access to features of objects not in our present environments [**Anomalous Acquaintance with Absent Features**]; and
- (3) perceptual error is error in “allocation”, now understood in terms of the binding in attention of the feature presented in (2) with the anchor presented in (1) [**Feature-Binding Error**].

### 3. Anomalous Acquaintance and Synaesthetic Effects

#### 3.1 Synaesthetic Perception

“It is contended by Nyāya that even such reports as ‘I see sweet honey’ or ‘I see (visually) fragrant flowers’, or ‘I see cold ice’ would be correct reports of visual perception as long as the particular, the ‘nucleus’ of the object-complex, is visually presented. In these cases the attributive or qualifying element, sweetness or fragrance, may not be the objects of the visual perception in the ordinary manner. But the mind picks it out from the memory-bank and this revived awareness presents it to the visual faculty; the sense and the object get connected here, though not in the normal way. In this way the resulting awareness becomes perceptual. Hence the correct report: “I see the fragrant jasmine.”” (Matilal 1986, 289)

*Synaesthesia is genuinely perceptual:*

- Robertson describes them as perceptual experiences involving “unusual binding” (Robertson 2003)
- “One of the central outstanding puzzles about synesthesia, and one that is at least partly to blame for the recent surge in attention given to the condition by philosophers and psychologists, is that of understanding the relationship between synesthetic perception and normal perception.[...] I’ll argue that, given what we know about both, the most plausible view is that synesthesia is not a fundamentally distinct, pathological outlier relative to normal perception; rather, it is best understood as continuous with capacities present in normal perception.” (Cohen 2017, 59).

Seventy-five types of synesthesia. The left hand column is inducers; the top row is concurrents. White indicates the type has been documented; red indicates no case of this type has yet been recorded; black signifies that

	emotions	flavors	graphemes	kinetics	lexeme	music note	music sound	odors	orgasm	pain	pers.	phon.	prop.	sound	spat. loc.	temp	time	touch	vision/color	
emotions	black	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red
flavors	red	black	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red
graphemes	red	red	black	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red
kinetics	red	red	red	black	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red
lexeme	red	red	red	red	black	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red
music note	red	red	red	red	red	black	red	red	red	red	red	red	red	red	red	red	red	red	red	red
music sound	red	red	red	red	red	red	black	red	red	red	red	red	red	red	red	red	red	red	red	red
odors	red	red	red	red	red	red	red	black	red	red	red	red	red	red	red	red	red	red	red	red
orgasm	red	red	red	red	red	red	red	red	black	red	red	red	red	red	red	red	red	red	red	red
pain	red	red	red	red	red	red	red	red	red	black	red	red	red	red	red	red	red	red	red	red
personality	red	red	red	red	red	red	red	red	red	red	black	red	red	red	red	red	red	red	red	red
phoneme	red	red	red	red	red	red	red	red	red	red	red	black	red	red	red	red	red	red	red	red
prop.	red	red	red	red	red	red	red	red	red	red	red	red	black	red	red	red	red	red	red	red
sound	red	red	red	red	red	red	red	red	red	red	red	red	red	black	red	red	red	red	red	red
spatial loc	red	red	red	red	red	red	red	red	red	red	red	red	red	red	black	red	red	red	red	red
temp	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	black	red	red	red	red
time	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	black	red	red	red
touch	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	black	red	red
vision/color	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	red	black	red

this would not be a type of synesthesia.

“Consider the snow seen on a distant mountain. It looks cool. Do we see the whiteness of the snow, but only *believe in* its coolth. Perhaps this is sometimes so; but surely not always. Sometimes actual coolth is present in the experience, as was the *white* inside the apple and the *red* on the opposite side. Once again, we do not see the coolth of the snow, but we see the snow as cool; and we experience the actual coolth as we experience the actual whiteness of the snow. An actual coolness is bodily present in the experience as is an actual volume of white. Let us combine our results into one example. We see the cool red apple. We see it as red on the facing side, as red on the opposite side, and as containing a volume of cool white apple flesh. We do not see *of* the apple its opposite side, or its inside, or its internal whiteness, or its coolness, or its juiciness. But while these features are not *seen*, they are not *merely* believed in. These features are present in the object of perception as actualities. They are present by virtue of being imagined.” (Sellars 1978)

Anomalous acquaintance: *jñāna-lakṣaṇa-pratyāsatti*, or “cognitively demarcated presentation”:

“Nyāya takes all these as cases of perception (seeing), and veridical cases at that... Thus it is that the model of memory presentation and ‘non-physical’ connection is invoked not simply to explain the problem of sensory illusion. In other words, the model is not devised in desperation, to save realism against the argument from illusion. The model has more explanatory power, for it explains standard cases of illusion as well as some veridical perception.” (Matilal 1986, 206–7)

#### 4. Feature-binding Misfires

##### 4.1 The Binding Problem and Attention

“Consider a humble animal whose consciousness stops at sentience. One imagines its mental life to consist of nothing but a flux of sensory qualities. In a widely repeated and ancient image, its stream of mental processes is filled by variegated qualia, which over time pop up, bob along, combine, recombine, and ultimately sink back down into the muck. A mental life of pure sensation would be nothing but a stream, flux, a flow of such stuff. ... But this picture, ancient and widely repeated as it is, radically underestimates the sophistication needed by even the simplest animal. An animal whose mental life is a pure flux of qualities ... could not distinguish matte red next to glossy green from matte green

next to glossy red... [The ability to do this] marks a significant threshold in the complexity of one's psychological organization. To pass it one needs somehow to focus the **attribution** of qualities, so that one can distinguish a scene containing a red square from one containing something that is red and something else that is square." (Clark 2000, 79)

"Focal attention provides the 'glue' which integrates the initially separable features into unitary objects. Once they have been correctly registered, the compound objects continue to be perceived and stored as such. However with memory decay or interference, the features may disintegrate and 'float free' once more, or perhaps recombine to form 'illusory conjunctions'" (Treisman and Gelade 1980: 98).

"On this view," Treisman says, "attention provides a window for consciousness through which we become aware of a small subset of real bindings among a throng of illusory phantom objects." (Treisman 2003, 102–3).

"The mind takes the wrong signal from the ( physical) sensory reaction and picks out a wrong 'qualifying' element from the memory-bank and this revived awareness generates next the non-veridical perceptual awareness which may be reported as: 'This is a snake' or 'I see a snake'. In such cases we wrongly attribute a 'qualifying' element to a perceived particular - an element that is not present in the external state of affairs. This is still a *perceptual* error according to Nyāya, for part of the sensorily perceived object-complex is picked out by the visual sense-faculty while the other part is supplied by revived memory. In fact the 'nucleus' is sensorily given in the ordinary way while the attributive elements are given in an out-of-the- ordinary way." (Matilal 1986, 289).

## 5. Against Rival Theories

### 5.1 Brewer-style Theories

A visual illusion as "an experience in which a physical object,  $o$ , looks  $F$ , although  $o$  is not actually  $F$ ", and he then claims that "illusions come about in cases in which the direct objects of experience have such similarities with paradigm exemplars of kinds of which they are not in fact instances" (Brewer 2011, 102).

"In a case of visual illusion in which a mind-independent physical object,  $o$ , looks  $F$ , although  $o$  is not actually  $F$ ,  $o$  is the direct object of visual perception from a spatiotemporal point of view and in circumstances of perception relative to which  $o$  has visually relevant similarities with paradigm exemplars of  $F$  although it is not itself actually an instance of  $F$  (Brewer 2011, 105).

*Two points of agreement:*

- (1) both are committed to the naïve realist thesis that even in illusory experiences there is a mind-independent object with which one stands in a non-representational relation of perceptual acquaintance.
- (2) both appeal to the notion of visually relevant similarities with instances of the kind  $F$  which this object looks to be.

*Crucial disagreement:*

- Brewer: The paradigms "are instances of the kinds in question, whose association with the terms for those kinds partially constitutes our understanding of those terms, given our training in the acquisition of the relevant concepts. They are paradigm exemplars of the kinds in question relative to our grasp of the concepts for those kinds." (2011, 104).
- Two distinct roles that instances of a kind can play in perceptual experience. One is to serve as the paradigmatic exemplars of the kind through which we learn a concept of, and a name for, the kind. The other is to serve as the grounding experience for a ascriptional capacity with respect to further instances of the kind in question, a skill that can and sometimes does misfire.

- These two roles can come apart.

## 5.2 Doxastic Theories

“The feature that is actually present in our experience of a straight stick in water is a feature that **infallibly** corresponds to a property the stick actually does possess, namely the objective feature of objective sticks that triggers visual systems like ours to produce the particular kind of percept it produces. (We lack a name for this property, but ... could call it bentishness.) Our experience, therefore, does not have the content “the stick is bent”. It rather presents to us a bentish stick, something it cannot fail to do, given the openness of perception and the manifest bentishness of the stick.” (Antony 2011, 335).

Dignāga: “perception is free from *kalpanā*”, *kalpanā* meaning “imagination” but more broadly any sort of representation or judgment.

[TEXT 6] “Erroneous cognition (*bhrānti-jñāna*) is not a true perception because it arises conceptually constructing, for example, water, etc., out of such things as vapor floating over sand. Cognition of empirical reality (*samvṛti-sat-jñāna*) is not a true perception because it superimposes something extraneous upon things which are only empirically true (*samvṛti-sat*), and thus functions through the conceptualization of forms of these [extraneous things].” (PSV 1, v.7; Hattori 1966, 28).

Dharmakīrti transforms the Infallibilism of Dignāga into an image-based version of Representationalism. What if *svalakṣaṇa* are more like qualia than mind-independent objects?

“Naïve realism is not unique in attempting to restrict perceptual error to judgments. For instance, on the view that perceptual experiences are *raw feels* or *brute sensations* that give rise to judgments about nearby objects, perceptual experiences themselves never contain mistakes. However, on such a view, not only is perceptual error confined to judgment, but so too is perceptual success. Conversely, the naïve realist ascribes perceptual success to perceptual experiences themselves but confines perceptual error to judgment.” (Millar 2015, 608-9).

## Bibliography

**Please note that Hilla Wait has created an ORLO readings list wherein all the readings for this lecture series can be accessed. The link is (<http://readinglists.bodleian.ox.ac.uk> and enter “Seeing in Sanskrit”).**

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