# Thinking With the Cartesians and Speaking with the Vulgar

# Extrinsic Denomination in the Philosophy of Antoine Arnauld\*

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#### Abstract

Arnauld follows Descartes in denying that sensible qualities like color are modes of external objects. Yet, unlike Malebranche, he resists the apparent implication that ordinary statements like 'this marble is white' are false. Arnauld also follows Descartes in saying that we perceive things by having ideas of them. Yet, unlike Malebranche, he denies that this sort of talk implies the existence of intermediaries standing between the mind and its external objects. How can Arnauld avoid these implications? I argue that the answer lies in Arnauld's sophisticated theory of mental and linguistic representation and, in particular, his account of *extrinsic denomination*.

**Keywords:** Antoine Arnauld, Extrinsic denomination, ideas, Cartesianism, direct realism, sensible qualities, color

In General and Rational Grammar (1660) and Logic or the Art of Thinking (1662), Antoine Arnauld and his collaborators at Port-Royal Abbey put forward a theory of mental and linguistic representation. Their central contention is that the grammatical or syntactic structures of language mirror innate structures of human thought. The structure of thought, in turn, mirrors metaphysical structure in the world. Most crucially, the linguistic relation of predication mirrors the mental act of judgment which in turn mirrors the metaphysical relation of modification. For instance, the sentence 'the tomato is round' predicates 'round' of 'the tomato;' this is mirrored by a mental act of judgment where the idea round is mentally affirmed of the idea the tomato; this is in turn mirrored at the metaphysical level where roundness is a mode of an extended substance.

There is, however, a problem. Arnauld adheres to a sparse Cartesian ontology on which there are just two kinds of substances, thinking and extended. Furthermore, these substances are properly characterized only by modifications of their principal attributes. That is, every feature of a thinking substance is a way of thinking, and every feature of an extended substance is a way

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<sup>&</sup>lt;sup>1</sup> In this paper I use quote-names for linguistic items (words, sentences, etc.) and italics for mental items (ideas, judgments, etc.). Where there is no danger of confusion, italics are occasionally also used for emphasis.

of being extended. However, Arnauld is committed to the truth of numerous judgments that, given his Cartesian ontology, cannot fit the pattern outlined above.

The most widely discussed case is the case of sensible qualities. Nicolas Malebranche was willing to draw the hardline conclusion that, since red is not a mode of extension, judgments like *the tomato is red* are simply false (*Search*, 634). Arnauld is unwilling to disturb ordinary language in this way (*On True and False Ideas*, 173–74).

There are also numerous other instances of the same problem. It is often true that *the tomato is seen*, but being seen is not a mode of extension. Further, it is of crucial importance to the Port-Royal theory of language that "words...indicate what takes place in the mind" (Arnauld and Nicole, *Logic*, 74). However, words "by their nature" are only "sounds and characters" and therefore belong to the realm of extension (Arnauld and Lancelot, *Grammar*, 41). The predicate 'indicate what takes place in the mind,' which is applied to these extended objects, does not name a mode of extension.

A rather different case is of central importance to Arnauld. It is a principle of Cartesian philosophy, and a foundational assumption of the Port-Royal *Logic*, that "we can have no knowledge of what is outside us except by means of the ideas in us" (25). According to Malebranche and some others, an idea is neither an act of thinking nor an extended object but rather some kind of special 'representative being.' Arnauld sees this approach as violating Cartesian metaphysical principles and also undermining our ability to perceive extended objects. He must therefore give an alternative analysis of judgments about ideas. It has usually been thought that he does this by identifying ideas with acts of perceiving. However, as I will argue, this approach does not adequately account for the role of ideas in Arnauld's theory of language. Arnauld needs to take talk of ideas as objects seriously while avoiding commitment to Malebranchean 'representative beings.'

It seems, then, that the simplistic view of the mirroring between language, mind, and world outlined above applies only to a quite restricted class of cases.

In this paper, I show that Arnauld's philosophy contains a sophisticated, unified, and powerful response to this family of problems that has hitherto gone unrecognized: the theory of extrinsic denomination. Extrinsic denomination is the naming of an object with "names derived from the actions of something else" (Arnauld and Nicole, *Logic*, 32). That is, in extrinsic denomination, a name is truly predicated of one thing in virtue of a mode possessed by some other thing. The most prominent examples are what Roderick Chisholm<sup>2</sup> called 'converse intentional properties.' For instance, in a well-known example derived from Descartes, when we judge that *the sun is perceived*, we affirm *being perceived* of *the sun*. But our idea of *being perceived* signifies the mode perceiving, which modifies the perceiver and not the sun.

I begin, in section 1, by giving a more detailed exposition of how the Port-Royal theory deals with straightforward cases like 'the tomato is round.' Then, in section 2, I introduce the Port-Royal theory of extrinsic denomination. In the remaining three sections, I argue that Arnauld takes numerous philosophically crucial terms, including 'idea,' 'sign,' 'word,' and 'red'

<sup>&</sup>lt;sup>2</sup> "Converse Intentional Properties."

to denominate objects only extrinsically, and show how this account provides a response to the difficulties outlined above.

## 1. The Port-Royal Theory of Language

The most basic assumption of the Port-Royal theory of language is that "words are distinct and articulated sounds that people have made into signs to indicate what takes place in the mind" (Arnauld and Nicole, *Logic*, 74).<sup>3</sup> 'What takes place in the mind' includes four operations, treated in the four parts of the *Logic*: conceiving, judging, reasoning, and ordering. Our present concern includes the first two. To conceive is simply to have a thought about an object. Such an object of thought is called an 'idea' and is typically signified in language by a noun (74–5). Judging is the operation whereby these ideas are assembled into truth-evaluable propositions. In the *Logic*, this process is explained as follows:

After conceiving things by our ideas, we compare these ideas and, finding that some belong together and others do not, we unite or separate them. This is called *affirming* or *denying*, and in general *judging*.

This judgment is also called a *proposition*, and it is easy to see that it must have two terms. One term, of which one affirms or denies something, is called the *subject*; the other term, which is affirmed or denied, is called the *attribute* or *Praedicatum*.

It is not enough to conceive these two terms, but the mind must connect or separate them...this action of the mind is indicated in discourse by the verb "is," either by itself when we make an affirmation, or with a negative particle in a denial. (82)

According to the Port-Royal view the judgment always has three components: a subject idea, a predicate idea, and the mental act of judging which unites them in a truth-evaluable proposition. Although these are not always expressed in speech, this is merely a matter of abbreviation (79–80). The *Grammar* and *Logic* both deal at length with complex sentences and propositions, but these are always taken to involve the affirmation of some (often quite complex) predicate idea of some (again, often quite complex) subject idea. Although this is occasionally obscured by the surface structure, subject-predicate structure is universal.

The Port-Royalists adopt the traditional view that although "there is a kind of truth in things with respect to God's mind, whether people think of it or not...there can be falsity only relative to the human mind or to some other mind subject to error, that falsely judges that a thing is what it is not" (Arnauld and Nicole, *Logic*, 91–92).<sup>4</sup> In other words, truth and falsity

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<sup>&</sup>lt;sup>3</sup> Compare Nicole, Arnauld, and Renaudot, *Perpétuité*, 2:81: "It is certain that if people could immediately see what passes in the mind and in the heart of others, they would not speak at all, and words would have no use, because they have no [use] other than to make known our thoughts to those who we suppose do not know them." (Translations from the *Perpetuity* are my own.)

<sup>&</sup>lt;sup>4</sup> Compare Aquinas, *On Truth*, question I, article x.

necessarily involve a cognitive *agent* getting things right or wrong, and this is why it takes an agent's act of judging to form a truth-evaluable proposition.<sup>5</sup>

This view implies that judging somehow involves taking the world to be a certain way. In introducing the act of judging, Arnauld and Nicole said that it involved "compar[ing]...ideas and, finding that some belong together and others do not...unit[ing] or separat[ing] them" (82). But what is it for ideas to 'belong together?'

The closest the *Logic* comes to a definition of truth is the remark that "Since every proposition indicates a judgment we make about things, it is true when this judgment conforms to the truth and false when it does not" (84). Though this remark is not particularly helpful, it is also not totally devoid of content: it suggests that the authors have some form of correspondence theory in mind. This is further supported by chapter 17 of part 2, where the authors provide what they describe as a "more thorough" explanation of "the nature of affirmation and negation" (129). Here they say that "it is the nature of affirmation to put the attribute in everything expressed by the subject according to its extension in the proposition" (129).6 The Logic had earlier distinguished between an idea's comprehension and its extension, defining the comprehension as "the attributes that [the idea] contains in itself" and the extension as "the subjects to which this idea applies" (39-40). The authors now argue that, in a proposition, the subject idea is to be interpreted according to its extension while the predicate idea "is always affirmed according to its comprehension" (129). In other words, to use the Port-Royalists' own example, if one affirms "a rectangle is a parallelogram" one is saying, of each subject that falls under one's idea of rectangle, that that item contains in it every attribute included in the idea of parallelogram, i.e., it is a polygon having two pairs of parallel sides.

It is tempting to interpret the comprehension as the collection of attributes *explicitly* included in the idea—those that the thinker actually has in mind when the thinker has that idea. However, as Jean-Claude Pariente<sup>7</sup> has shown, this cannot be correct. The comprehension of *triangle*, according to the *Logic*, does not just contain the attributes of being a polygon and having three sides (or three angles). Rather, it includes "extension, shape, three lines, three angles, and the equality of these three angles to two right angles, etc." (39). As Pariente points out, the Port-Royalists explicitly deny that the last of these attributes can be recognized merely by examining the idea *triangle*; a proof is required (249). In speaking of attributes that are contained in such a way that they "cannot be removed without destroying the idea" (39) the Port-Royalists seem to have in mind something like conceptual or analytical entailment.

<sup>&</sup>lt;sup>5</sup> Marušić, "Propositions and Judgments in Locke and Arnauld."

<sup>&</sup>lt;sup>6</sup> The Port-Royalists also say, on the same page, that "the nature of affirmation is to unite and to identify, so to speak, the subject with the attribute." Some previous accounts of the Port-Royal theory of truth have made central use of this talk of 'identification' (Pariente, *L'Analyse Du Langage*, 65–71, 265–74; Martin, "Existential Commitment," 77–79). For criticism of this approach, see Buroker, "Judgment and Predication". In the text, the 'unite and identify' formulation is qualified with the phrase 'so to speak' ('pour le dire ainsi'), indicating that it is not to be taken too literally. The attribute-in-subject formulation is not qualified in this way, suggesting that the Port-Royalists regard it as a more precise and rigorous formulation of their position.

<sup>&</sup>lt;sup>7</sup> L'Analyse du Langage, 248–50.

It is also tempting to interpret the extension of an idea as the collection of worldly individuals to which the idea applies, thus assimilating the Port-Royal concept of extension to the Fregean concept. However, this too is a mistake. The extension is defined as the collection of *subjects* to which the idea applies. The subject is defined to be one of the two terms in a proposition (82), and a term is either a word or an idea. The extension of a term is therefore *not* the set of worldly individuals to which it applies, but rather the collection of terms of which it may be truly predicated. Thus, contrary to Buroker, the Port-Royalists do not conflate the set membership relation with the subset relation in allowing both individuals and species into the extension of a term. A general idea like *animal* may be truly affirmed of both *horse* and *Bucephalus*, hence both are in its extension. The extension of a term is the extension of the extension of the extension of the extension of a term.

The Port-Royal theory holds that an affirmative proposition places every attribute in the comprehension of the predicate in every term in the extension of the subject. It is thus not surprising that, in a 1687 letter to Leibniz, Arnauld appears to accept Leibniz's view that "in every true affirmative proposition, necessary or contingent, universal or singular, the concept of the attribute is included in some way in that of the subject" (Leibniz and Arnauld, *Correspondence*, 122–23; quoting Leibniz's letter, pp. 110–111). Arnauld here follows Leibniz in speaking of a containment relation among 'concepts' (French: 'notions'). Arnauld must clearly be referring to what he normally calls 'ideas' (French: 'idées'): in a true affirmative proposition, the subject idea (interpreted according to its extension) contains the predicate idea (interpreted according to its comprehension).

Leibniz apparently takes the concept containment condition to be a necessary and sufficient condition for truth.<sup>13</sup> However, there is reason to suppose that Arnauld regards it as a

<sup>8</sup> Pariente, L'Analyse du Langage, 230–36, 244–46; Martin, "Existential Import," 229; Martin, Cartesian Semantics, 41–45, 58–69.

<sup>&</sup>lt;sup>9</sup> "The Port-Royal Semantics of Terms," 468–69; "Judgment and Predication," 6–7. Chomsky, *Cartesian Linguistics*, 35–36 makes a very similar error.

<sup>&</sup>lt;sup>10</sup> My interpretation here is similar to that of Martin, "Existential Commitment," 66–76; "Extension in the Port Royal Logic."

<sup>&</sup>lt;sup>11</sup> I say that Arnauld *appears* to accept this principle because in context it is possible to interpret Arnauld as merely conceding that the principle solves the problems he had raised for Leibniz's theory of complete individual concepts, rather than taking the principle to be true. However, the evidence from the *Logic* suggests that Arnauld does accept this principle, or something very close to it. Whatever reservations Arnauld is expressing here seem to be connected with Leibniz's attempt to apply this principle to God's ideas. Arnauld's reservations on this point are likely connected with his broader views on our epistemic limitations when it comes to theology. On these limitations, see Stencil, "Arnauld's God Reconsidered"; "Arnauld's Silence."

<sup>&</sup>lt;sup>12</sup> In "Meditationes de Cognitione, Vertitate et Ideis," an essay commenting on the Malebranche-Arnauld controversy, Leibniz appears to use the cognate Latin words 'idea' and 'notio' interchangeably.

<sup>&</sup>lt;sup>13</sup> There is an extensive literature on Leibniz's concept of truth, and most interpreters agree that he takes concept containment to be necessary and sufficient. See, e.g., Sleigh, *Leibniz and Arnauld*, 89–94; Parkinson, "Philosophy and Logic," §1; Jolley, *Leibniz*, 46–49. Mates, *The Philosophy of Leibniz*, ch. 5, defends a somewhat more nuanced interpretation of Leibniz, but still agrees that, for a wide range of cases, Leibniz takes the concept containment condition to be necessary and sufficient.

necessary but insufficient condition.<sup>14</sup> This reason has to do primarily with the *Logic*'s account of the origin of error.<sup>15</sup>

Arnauld and Nicole criticize previous logic manuals for holding that the most important part of logic is the study of the structure of valid reasoning. This study, they claim, is not "as useful as is generally supposed." This is because "the majority of people's errors...depend more on reasoning based on false principles than from reasoning incorrectly from their principles" (135). As a result, if we want to learn "the art of conducting reason well in knowing things" (23), "the reflections we can make on our ideas are perhaps the most important part of logic, since they are the foundation of everything else" (25). In other words, although ideas cannot themselves strictly speaking be false, *judging falsely* often begins with *conceiving badly*. The Port-Royalists explain:

if the objects represented by these ideas actually are as they are represented, the ideas are called true. If they are not such, the ideas are false in the way they can be. The latter, which the Schoolmen call beings of reason, ordinarily arise when the mind combines two ideas that are real in themselves but not joined in truth, to form a single idea. For example, the idea we can form of a golden mountain is a being of reason, because it is composed of the two ideas of a mountain and of gold, which it represents as united although they are not so in reality. (32)

The reason this is not strictly speaking a kind of falsity is that simply conceiving a gold mountain is not yet representing the world as being other than it is. Falsity, in the strict sense, arises only if one judges that there is a gold mountain. Nevertheless, the idea exhibits a kind of mismatch with the world, which makes it "false in the way [an idea] can be."

In the judgment *the gold mountain is gold*, the falsity of the idea leads to the falsity of the judgment even though the concept containment condition is satisfied. The subject idea contains the predicate idea, but the judgment nevertheless does not "conform to the truth" (84).

Leibniz denies that the relation of containment between the subject and predicate is anything other than "that which is found on the side of the thing" (Leibniz and Arnauld, Correspondence, 110–11). This is because Leibniz is explicitly talking about relations among God's concepts, not ours. Arnauld does not comment on this aspect of Leibniz's view. The Logic, however, is concerned with our concepts (ideas), and the Logic's project of reflecting on our thinking in order to learn to think well is necessary precisely because we are fallible. The Port-Royalists hold that, although simple conception cannot strictly speaking be false, it is possible to conceive badly and when we do so the connections between our ideas may fail to reflect the connections between things, leading to falsehood even in cases where the concept containment condition is satisfied.

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<sup>&</sup>lt;sup>14</sup> See Sleigh, *Leibniz and Arnauld*, 39–43. Although we are in disagreement on some matters of detail, I agree with Martin's general contention that "the [Port-Royal] theory manages both to adhere to a correspondence theory of truth and at the same time to define truth solely in terms of ideas" ("Existential Commitment," 62).

<sup>&</sup>lt;sup>15</sup> See Martin, "Existential Import," 224–29.

<sup>&</sup>lt;sup>16</sup> In the French original, Leibniz employs the Latin phrase 'a parte rei', a Scholastic technical term.

It seems, then, that just as the speech act of predication reflects a mental act of judgment this mental act of judgment is meant to reflect some relation in the world. Leibniz insists, "there must always be some foundation for the connection of the terms of a proposition, which must be found in their concepts" (Leibniz and Arnauld, Correspondence, 110–11). If, however, Arnauld holds that connection of concepts (ideas) is insufficient for truth, what connection can he find that will do the work here?

Although the *Logic* gives no explicit account of the worldly relation that corresponds to the act of judging, the authors do provide an account of the sorts of objects to which ideas may refer, and this account provides some hints. The account is found in the second chapter of the *Logic*, which begins with the following definitions:

Everything we conceive is represented to the mind either as a thing, a manner of a thing, or a modified thing.

I call whatever is conceived as subsisting by itself and as the subject of everything conceived about it, a thing. It is otherwise called a substance.

I call a manner of a thing, or mode, or attribute, or quality, that which, conceived as in the thing and not able to subsist without it, determines it to be in a certain way and causes it to be so named.

I call a modified thing whatever is considered a substance determined by a certain manner or mode. (30)

The authors go on to make a series of subtle distinctions designed to deal with cases of mismatch between language and mind or between mind and world. Some of these will be discussed below. At present, however, we are concerned with the most straightforward cases, the cases involving true substances and true modes.

#### According to the *Logic*,

it is the nature of a true mode that one can clearly and distinctly conceive the substance of which it is a mode without it, while not being able, conversely, to conceive the mode clearly without conceiving at the same time its relation to the substance...For example...I cannot conceive prudence while denying its relation to some person or other intelligent nature having this virtue. (31–2)

A true substance, then, is an independently existing entity, a true mode is a manner in which such an entity exists, and a modified thing is a substance considered insofar as it possesses a mode. The Port-Royalists further explain this taxonomy by means of its connection to language: ordinary concrete nouns like 'earth,' 'sun,' 'mind,' and 'God' signify substances; abstract nouns like 'hardness,' 'heat,' 'justice,' and 'prudence' signify modes; and adjectives<sup>17</sup> like 'round,' 'hard,' 'just,' and 'prudent' signify modified things (31).

The relation between a substance and its modes is called (fittingly enough) 'modification:' that is, the substance is modified by the modes. This relation is an appropriate candidate for 'existing in.' The simplest case here will be that of a singular affirmative

<sup>&</sup>lt;sup>17</sup> In the Port-Royalists' terminology, an adjective (French 'adjectif') is a species of noun ('nom').

proposition with a simple and metaphysically basic predicate, as for instance *the tomato is round*. In this case, the proposition is true if and only if the body (extended substance) conceived as *the tomato* is modified by the mode conceived as *round*.

There is a rather curious feature of the *Logic*'s account here. Arnauld and Nicole first say that "Everything we conceive is represented to the mind either as a thing, a manner of a thing, or a modified thing" (30). Then, they say that a mode (i.e., a manner of a thing) cannot be "conceive[d]...clearly without conceiving at the same time its *relation* to the substance" (31, emphasis added). This relation (i.e., modification) must therefore be something we conceive, but it does not appear to be a thing, a manner of a thing, or a modified thing.<sup>18</sup>

In fact, the *Logic* gives no account at all of relations or our knowledge of them. In the First Discourse, Arnauld and Nicole defend this omission by claiming, among other things, that this topic "belong[s] more to metaphysics than to logic" (11). As will become clear in the next section, judgments about relations are one of the cases where the simple model we are discussing here breaks down. For now, we return to the simple case.

Returning to the question of truth, recall that the *Logic* analyzed affirmation as "put[ting] the attribute in everything expressed by the subject according to its extension in the proposition" and held that this attribute (predicate) "is always affirmed according to its comprehension" (129). Thus, we may say that an affirmative proposition whose subject term purports to designate a true substance and whose predicate term purports to designate a true mode is true iff every substance named by a term in the extension of the subject is modified by every attribute in the comprehension of the predicate. To return to the Port-Royalists' example, <sup>19</sup> the judgment *all rectangles are parallelograms* is true iff every individual rectangle and every species of rectangle is modified by each of the attributes that make up the content of the idea *parallelogram*.

The Port-Royalists' account of universal affirmative propositions does not allow for vacuous truth (86, 132). It therefore follows from this account of affirmation that, at least in this simple case, there is at least one modified thing that instantiates the relation designated by a true affirmative judgment. Thus, for instance, there is some rectangular parallelogram that is responsible for the truth of the judgment *all rectangles are parallelograms*. I will call this modified thing the *ground* for the judgment.<sup>20</sup> In the simple case the ground is a true substance which is named by some term in the extension of the subject and which is modified by each of the attributes in the comprehension of the predicate.<sup>21</sup> Extrinsic denomination, by definition,

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<sup>&</sup>lt;sup>18</sup> I thank an anonymous referee for drawing this puzzle to my attention.

<sup>&</sup>lt;sup>19</sup> This example is in fact rather problematic in light of the Cartesian understanding of geometrical objects as mere idealizations, rather than substances. (Thanks to John Whipple and Tyler Hanck for pointing this out.) Examining Arnauld's precise view on the ontology of geometric objects is beyond the scope of this paper.

<sup>&</sup>lt;sup>20</sup> I thank an anonymous referee for suggesting this terminological choice. In fact, talk of the grounds (Latin 'fundamenta') of truth is part of the late Scholastic background to the Port-Royal *Logic* (see Embry, "Suárez on Eternal Truths"), although I don't know of any text where the Port-Royalists themselves use this language.

<sup>&</sup>lt;sup>21</sup> Pariente, *L'Analyse du Langage*, 296–300 gives a formalization of the four basic types of propositions in Port-Royal (Arnauld and Nicole, *Logic*, 84), with logical properties matching those ascribed by Port-Royal. Pariente's formalization quantifies only over ideas and uses a two-place primitive predicate, *Syx*, which Pariente defines to

applies a predicate to a subject that is *not* modified by the attributes in the comprehension of that predicate. Yet, according to Port-Royal, such judgments may be true. This is the fundamental puzzle of extrinsic denomination.

## 2. Extrinsic Denomination

The Logic's official definition of 'extrinsic denomination' is as follows:<sup>22</sup>

On this subject of modes, we should note that some may be called internal because they are conceived in the substance, such as "round" and "square." Others may be called external because they are taken from something that is not in the substance, such as "loved," "seen," and "desired," names derived from actions of something else. And this is what in the Schools is called *extrinsic denomination*.<sup>23</sup> When those words are based on the way things are conceived, they are called second intentions. (32)

The authors here begin with a distinction between two kinds of modes. A mode had previously been defined as "that which, conceived as in the thing and not able to subsist without it, determines it to be a certain way and causes it to be so named" (30). This definition involves all three levels of the Port-Royal picture. At the level of metaphysics, the mode determines a thing to be a certain way—that is, modes are real objective features of objects. At the level of mind, the mode is *conceived as* being in the thing to which it is attributed. At the level of language, the mode causes the thing to be so named—that is, the thing is entitled to the name because it is modified by the mode. This aligns with the account developed in the previous section.

However, the distinction between internal and external modes (which was added in 1664) introduces a new wrinkle. Although we have previously been told that every mode is "conceived as in the thing and not able to subsist without it" (30), we are now told that only internal modes are "conceived in the substance," while external modes are "taken from something that is not in the substance" (32). The matter is further confused by the fact that, after giving their examples, the authors say that external modes are "names derived from the actions of something else" (32,

mean 'y is a subject of x'. However, because 'y is a subject of x' means 'x may be truly predicated of y', Pariente's analyses are covertly recursive, and he gives no base case. The introduction of grounds for truths provides a suitable base case and also allows affirmations to be *about* real things in the world and not only ideas.

<sup>&</sup>lt;sup>22</sup> 'Extrinsic denomination' translates French 'dénomination externe' (as at, e.g., Arnauld and Nicole, *Logique*, 49.) or 'dénomination extrinseque' (as at, e.g., Leibniz and Arnauld, *Correspondence*, 216–17.). Buroker's translation of the *Logic* uses 'external denomination'. I use 'extrinsic' for consistency with existing translations of Arnauld's other works

<sup>&</sup>lt;sup>23</sup> Buroker incorrectly translates this sentence "In the Schools these are called *extrinsic denominations*," which makes it appear that the words are extrinsic denominations. This does not match the standard usage of this Scholastic technical term. 'Extrinsic denomination' is a name for a certain *way of denominating* (naming) things. The French original respects this usage by employing the singular rather than the plural: "this [phenomenon, i.e., the naming of a substance based on something that is not in it]...is called *extrinsic denomination*" (see Arnauld and Nicole, *Logique*, 49). I thank an anonymous referee for drawing my attention to this issue.

emphasis added). In introducing the Scholastic terminology of 'extrinsic denomination' and 'second intention' the authors again refer to *words*, not modes.

In order to understand what the Port-Royalists are up to here, we must take account of another distinction they draw in the same chapter: the distinction between real or true modes and apparent modes: "it is the nature of a true mode that one can clearly and distinctly conceive the substance of which it is a mode without it, while not being able, conversely, to conceive the mode without conceiving at the same time its relation to the substance" (31). No definition of an apparent mode is given. Instead, the Port-Royalists give two examples, both of which are unfortunately rather complex. Nevertheless, the general idea of the examples is clear enough: these are instances in which things are conceived as, and spoken of as, modes which are not really modes at all.

The first example concerns the attributes of God: "although everything in God is God himself, this does not prevent us from conceiving him as an infinite being, regarding infinity as an attribute of God and being as the subject of this attribute" (31). The Port-Royalists understand the doctrine of divine simplicity to imply that God has no modes.<sup>24</sup> Yet subject-predicate structure is, according to them, universal in human thought and language. Thus, if we are able to say anything true about God, we must do so by means of 'apparent modes:' that is, we must conceive *as* a mode something (in their example, the divine infinity) that is not really a mode at all. Really, the divine infinity just is God (a substance).<sup>25</sup>

The second example is similar:

a human being is often considered as the subject of humanity *habens humantiatem* [possessing humanity],<sup>26</sup> and consequently as a modified thing.

In these cases the essential attribute, which is the thing itself, is taken for a mode because it is conceived as in a subject. This is properly speaking an abstraction of substance, such as humanity, corporeality, and reason. (31)

This is the Port-Royal version of the Cartesian doctrine that only a "conceptual distinction" can be drawn "between a substance and some attribute of that substance without which the substance is unintelligible" (Descartes, *Principles of Philosophy*, 214). An essential attribute of a substance, according to the Port-Royalists, is just the substance itself conceived as if it were a mode. In this way, we may say 'Socrates is human' (rather than 'Socrates is a human'), treating humanity as if it were a mode of Socrates. But in fact Socrates' humanity just is Socrates and is therefore not a mode but rather a substance. The same applies to such sentences as 'a body is extended' and 'a mind thinks.'

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<sup>&</sup>lt;sup>24</sup> On Arnauld's understanding of divine simplicity, see Stencil, "Arnauld's God Reconsidered," §1.

<sup>&</sup>lt;sup>25</sup> This is a translation into Cartesian jargon of a traditional view of the divine attributes. See, e.g., Aquinas, *Summa Theologiae*, part I, question xiii, article 12. Citations from this work are according to part, question, and article from the Dominican edition.

<sup>&</sup>lt;sup>26</sup> Translator's insertion.

Although, as we have noted, the Port-Royalists do not discuss relations, their theory requires them to class relations among the apparent modes as well. Recall that, according to the Port-Royal theory, every judgment has subject-predicate structure. Thus, a judgment like *John is shorter than Mary* must be understood as predicating the idea *shorter than Mary* of the idea *John*. The idea *shorter than Mary* conceives of being shorter than Mary as a mode. Hence, this is *not* an exception to the Port-Royalists' general rule that everything is *conceived as* either a substance, a mode, or a modified thing: the relation is conceived as a mode.

Here too we can see why the Port-Royalists have relegated relations to the realm of metaphysics rather than logic. Relations are conceived as modes and hence from the perspective of logic may be treated as modes, although the metaphysical reality is much more complex. Metaphysically speaking, the truth of *John is shorter than Mary* clearly depends on the modes of extension possessed by (the bodies of) John and Mary. Logically speaking, on the other hand, *John is shorter than Mary* is just like any other simple judgment: it is true if and only if every attribute in the comprehension of the predicate is in every term in the extension of the subject. However, the way in which John contains these attributes cannot be modification, since being shorter than Mary is not a true mode.

The key point here is that an apparent mode is not really a mode at all. Rather, an apparent mode is merely a way of thinking and speaking.

I suggest that the same, according to the Port-Royalists, is true of an external mode, and that they therefore take the Scholastic phrase 'extrinsic denomination' in its literal, etymological sense: extrinsic denomination *names* (denominates) something from outside itself.<sup>27</sup> An external mode is not a mode at all, but a way of thinking and speaking of a certain substance. It is for this reason that "in the Schools" extrinsic denomination is characterized as a type of *denomination* (naming) and examples of external modes/extrinsic denominations are words.

An extrinsic denomination, as Suárez explains, "posits nothing in the thing denominated; indeed, this is why it is called 'extrinsic'" (*Disputationes Metaphysicae*, LIV.ii.9).<sup>28</sup> Yet extrinsic

<sup>&</sup>lt;sup>27</sup> Doyle, "Extrinsic Denomination," 122. The Port-Royalists here side with Vázquez against Suárez. See Suárez, *Disputationes Metaphysicae*, disputation LIV, section ii, paragraph 10. (Citations from this work are according to disputation, section, and paragraph in volumes 25 and 26 of Carolo Berton's edition of Suárez's *Opera*, published by Ludovicum Vivès. Translations from the Latin are my own.) In this text, Suárez explicitly argues that a denomination is not the imposition of the name but rather the reality which grounds the imposition of the name and hence that both intrinsic and extrinsic denominations have a being independent of mind and language. On this dispute between Vázquez and Suárez, see Embry, "Truth and Truthmakers," 201–4.

<sup>&</sup>lt;sup>28</sup> As Stephanus Chauvin noted (*Lexicon Philosophicum*, s.v. 'extrinsecum'), the Latin 'extrinsecum' (and its cognates in other European languages) was used in a variety of ways in medieval and early modern philosophy. An anonymous referee points out that the most common meaning of 'extrinsic' in the history of logic is 'non-essential'. This corresponds to Chauvin's first definition. However, in their discussions of extrinsic denominations, Suarez and Port-Royal are quite explicit that they use 'extrinsic' to mean 'not in the thing' (at all), and not just 'not in the essence of the thing'. Thus, Suarez says that extrinsic denominations are called 'extrinsic' because they posit *nothing*—whether essential or accidental—in the thing denominated. This corresponds to Chauvin's last definition: "what is not physically united; as vision is extrinsic to a wall that is seen" (my translation). Chauvin goes on to say quite explicitly that this is the sense of 'extrinsecum' at issue when we say that something is denominated extrinsically ("extrinsecè denominatur"). This is also the sense at issue in the exchange between Descartes and Caterus (Descartes, *Meditations on First Philosophy*, 67, 74; see Manning, "Extrinsic Denomination").

denominations must posit *something*: when one denominates an object extrinsically, one makes a judgement about the world that can be true or false. What is required to ground the truth of such a claim?

A standard example of an extrinsic denomination, found for instance in Aquinas (Summa Theologica, I.xii.7) and Suárez (Disputationes Metaphysicae, LIV.2.9), is the application of the terms 'right' and 'left' to a column. These names are applied to a column on the basis of its relation to an animal, and a column may go from being on the right to being on the left without undergoing any intrinsic change.<sup>29</sup> What grounds the truth of this judgement is not the intrinsic state of the column, but rather the spatial arrangement of the column and the animal.

The examples given by Port-Royal are more complicated but for that reason more interesting. They tell us that "loved,' 'seen,' and 'desired,' [are] names derived from actions of something else" (32). These are examples of what Chisholm<sup>30</sup> called 'converse intentional properties,' or what (as the Port-Royalists note) the Scholastics called 'second intentions:' "words…based on the way things are conceived" (32). When the sun is said to be 'seen,' the applicability of this predicate is not grounded in the sun itself, but rather in the mind that sees it. It is in this sense a name "derived from the actions of something else."

There is a further complexity to be noted here. Some 17th century Scholastic writers recognize a category of *semi*-extrinsic denominations in which "the grounds are [only] partly intrinsic to the subject" (Izquierdo, *Pharus Scientiarum*, 298).<sup>31</sup> Many relational terms are predicated semi-extrinsically, like the phrase 'shorter than Mary.' However, extrinsic denomination properly so-called "posits *nothing* in the thing denominated" (Suarez, *Disputationes Metaphysicae*, LIV.ii.9, emphasis added) whereas being shorter than Mary necessarily involves having a certain (intrinsic) height.

According to Arnauld, 'seen,' 'loved,' and so on are cases of genuine extrinsic denomination, and not only semi-extrinsic denomination. The 'relation' (so-called) of intentionality is grounded wholly in the substance modified (i.e., the mind), requiring no cooperation from the substance represented (e.g., the sun). The sun is entitled to be called 'seen' wholly in virtue of the state of some mind. This state is entirely extrinsic to the sun.

# 3. Ideas, Direct Realism, and Cartesian Epistemology

By the Third Meditation, Descartes's meditator has found that it is certain that a variety of "ideas...appeared before [his] mind." However, it remains doubtful whether there exist "things outside [him] which were the sources of [these] ideas and which resembled them in all respects" (24). Ideas "are as it were the images of things" (25). The (purported) things of which they are images may or may not really exist and may or may not have the features represented in the ideas.

<sup>&</sup>lt;sup>29</sup> See Doyle, "Extrinsic Denomination," 147.

<sup>&</sup>lt;sup>30</sup> "Converse Intentional Properties."

<sup>&</sup>lt;sup>31</sup> My translation. For discussion see Embry, "Truth and Truthmakers."

In his response to Hobbes, Descartes clarifies that he is "taking the word 'idea' to refer to whatever is immediately perceived by the mind" (127) and in the Second Replies, Descartes defines an idea as "the form of any given thought, immediate perception of which makes me aware of the thought" (113).

It is thus Descartes's view that when we think of an object what we immediately perceive is the idea of that object, and this idea may represent that object to us with greater or lesser degrees of accuracy. It is crucial to Descartes's epistemological project that the features represented in an idea may not be possessed by its object and, indeed, that its object may not even exist. It is this possibility that makes hyperbolic doubt possible: although I cannot doubt that I have an idea with a certain content, I can doubt that this idea accurately represents an object.<sup>32</sup>

This Cartesian conception of ideas plays a central role in the Port-Royal *Logic*. The first action of the mind, which is the topic of the first part of the *Logic*, "is called *conceiving*, as when we represent to ourselves a sun, an earth, a tree, a circle, a square, thought, and being without forming any explicit judgment about them. The form by which we represent these things is called an *idea*" (23). The *Logic* opens with a chapter on "ideas according to their nature and origin." However, far from giving any analysis of the nature of ideas, the chapter in question begins by declaring that "the word 'idea' is one of those that are so clear that they cannot be explained by others, because none is more clear and simple" (25). Instead of giving a definition or analysis, the authors aim to provide instructions on how to discover ideas in introspection and distinguish them from other introspected items.<sup>33</sup> Three key characteristics of ideas are identified in this way: when one thinks about something one has an idea of that thing; ideas are not (literally) images;<sup>34</sup> and when one understands a noun or adjective one has an idea of what that word names.<sup>35</sup>

According to Arnauld and Nicole, "the reflections we can make on our ideas are perhaps the most important part of logic, since they are the foundation of everything else." This is because "we can have no knowledge of what is outside us except by means of the ideas in us" (25). This picture, like Descartes's picture outlined above, appears to amount to a representationalist or indirect realist theory. According to such a theory, there are certain items in the mind (ideas) that are in some sense *copies* of external objects. We (mediately) perceive external objects by (immediately) perceiving these mental items. Similarly, the mental items are the immediate significations of our words, which thereby mediately signify the external objects from which the mental items are copied. This is why "we can express nothing by our words when we understand what we are saying unless, by the same token, it were certain that we had in us the idea of the thing we were signifying by our words" (26). Furthermore, this is why "the

<sup>&</sup>lt;sup>32</sup> Cf. Arnauld, On True and False Ideas, 69.

<sup>&</sup>lt;sup>33</sup> On the methodology the Port-Royalists employ here, see Pearce, "Ideas and Explanation."

<sup>&</sup>lt;sup>34</sup> Although in the Third Meditation Descartes says that ideas are *as it were* (Latin 'tanquam') images of things (*Meditationes de Prima Philosophia*, 37), in many other places he insists that ideas are not *literally* (sense) images. See, e.g., Descartes, *Meditations on First Philosophy*, 50–51, 113, 127.

<sup>&</sup>lt;sup>35</sup> Cf. Descartes, Meditations on First Philosophy, 113.

reflections we can make on our ideas" are so crucial to "the art of conducting reason well in knowing things" (23): our knowledge of the world is mediated by ideas.

In defending his famous doctrine of vision in God, Malebranche self-consciously departs from Descartes regarding the *location* of ideas: whereas Descartes had held that an idea "taken materially, [is] an operation of the [human] intellect" (*Meditations on First Philosophy*, 7), Malebranche argues that nothing in the human intellect could possibly be an idea (*Search*, 222–35). However, Malebranche bases his argument on a particular interpretation of the role ideas play in perception and knowledge, and here he takes himself to be following the standard Cartesian picture. According to Malebranche, the mind "does not see [external objects] by themselves, and our mind's immediate object when it sees the sun, for example, is not the sun, but something that is intimately joined to our soul, and this is what I call an *idea*" (217). Malebranche draws from this the radical conclusion that "The world in which our bodies live and which we look at is very different from the one we see" (*Dialogues on Metaphysics*, 3). That is, the physical objects toward which our physical eyes are turned are properly speaking not seen at all. Instead, we come to know external objects by "see[ing] what in God represents created beings" (*Search*, 230). For Malebranche (at least as Arnauld interprets him), to say that ideas are the things that we see immediately is just to say that, strictly speaking, we *only* see ideas.<sup>37</sup>

Despite the representationalist modes of speech adopted by the Port-Royal Logic, Arnauld vociferously opposes Malebranche's claim that, strictly speaking, we see only ideas and not external objects. Further, he denies that this is any consequence of Cartesian philosophy (On True and False Ideas, ch. 6). According to Arnauld, if an idea is understood as a "representation...actually distinct from our mind as well as from the [external] object" then ideas "are only chimeras" (63-64). Instead of introducing such 'representations' (literally, 'representative beings'), Arnauld "take[s] the idea of an object and the perception of that object to be the same thing" (65). These idea-perceptions are "modifications of our mind" (65)—that is, unlike Malebranche's 'representative beings,' they are modes of the thinking substance (ways of thinking), fitting cleanly into the Cartesian picture (53-54).<sup>38</sup> Furthermore, by rejecting representative beings, Arnauld believes he can insist "that he knows bodies, that he knows a cube, a cone, a pyramid and that, turning towards the sun, he knows the sun" (79). The identification of ideas with perceptions makes it possible for the mind genuinely to see what the eyes look at. More generally, by identifying ideas with perceptions Arnauld believes that he can simultaneously preserve: 1) the Cartesian view of the role of ideas in perception and knowledge; 2) the sparse Cartesian substance-mode ontology; and 3) the ordinary belief that the things we (immediately) perceive are real external objects.

But in what sense does Arnauld mean to identify ideas with perceptions, and how exactly is this identification meant to yield all these benefits?

<sup>&</sup>lt;sup>36</sup> Cf. Malebranche, *Search*, 573.

<sup>&</sup>lt;sup>37</sup> See Arnauld, *On True and False Ideas* ch. 11.

<sup>&</sup>lt;sup>38</sup> See Hight, *Idea and Ontology*, ch. 3.

The standard answer to this question in the existing literature is that, according to Arnauld, an idea just is an act of perceiving.<sup>39</sup> However, this interpretation faces serious difficulties. According to the Logic, an idea is "anything in the mind when we can truthfully say that we are conceiving something" (26). But according to On True and False Ideas, "a thing is objectively in my mind when I conceive it. When I conceive of the sun, a square or a sound, then the sun, the square or the sound are objectively in my mind, whether or not they are external to my mind" (66). The idea is the thing that is in the mind when we conceive, but the thing that is (objectively) in the mind when we conceive just is the object conceived.<sup>40</sup> This very object (e.g., the sun) may or may not also exist outside the mind. This appears to be inconsistent with the act interpretation.

The notion of ideas as objects also plays an important role in the Port-Royal theory of language. According to Arnauld and Lancelot, "the greatest distinction to be made about what occurs in our minds is to say that one can consider the object of our thought on the one hand, and the form or manner of our thought, the main form being judgment, on the other hand" (Grammar, 67). This distinction among things that occur in the mind corresponds to "a most general distinction among words into those that signify the objects of thoughts and those that signify the form and the manner or mode of our thoughts" (67–68). All words signify what takes place in the mind of the speaker. Hence, what takes place in the mind of the speaker includes certain objects of thought. Words that signify objects of thought include nouns (Arnauld and Lancelot, Grammar, 69; Arnauld and Nicole, Logic, 74-75). But elsewhere the Port-Royalists are quite explicit that nouns signify ideas (Logic, 39). Hence, again, the idea is the object of thought.

Arnauld clearly denies that there is anything involved in perception other than the mind's act of perceiving and the (external) object of this act. He does sometimes appear straightforwardly to identify the idea with the act of perceiving, as when he says "I...take the idea of an object and the perception of that object to be the same thing" (On True and False Ideas, 65). But on the very next page, Arnauld appears to identify the idea with the object conceived.

This puzzle can be resolved by taking seriously Arnauld's view that "being conceived, in regard to the sun that is in the sky, is only an extrinsic denomination" (67).<sup>41</sup>

Arnauld clarifies his identification of ideas with perceptions as follows:

Philosophical Notion of an Idea"; Hight, Idea and Ontology, §3.5.

<sup>&</sup>lt;sup>39</sup> See, e.g., Cook, "Arnauld's Alleged Representationalism"; Radner, "Representationalism in Arnauld's Act Theory of Perception"; Nadler, Arnauld; Watson, "Malebranche and Arnauld on Ideas"; Kremer, "Arnauld's

<sup>&</sup>lt;sup>40</sup> Hight (*Idea and Ontology*, 73) apparently dismisses these passages as 'unserious' when he writes, "Arnauld does not treat ideas as objects in any serious sense." However, passages that treat ideas as objects of thought are common in Arnauld's corpus and this conception plays an important role in the Port-Royal Logic.

<sup>&</sup>lt;sup>41</sup> I have previously defended the view that, for Arnauld, 'idea' denominates the external object extrinsically (Pearce, "Arnauld's Verbal Distinction"). The account of extrinsic denomination developed in the present paper allows for a shorter and clearer route to this conclusion.

I have said that I take *perception* and *idea* to be the same thing. It must nevertheless be noted that, while this thing is single, it stands in a twofold relation, to the soul that it modifies, and to the thing perceived in so far as this latter is objectively in the soul, and the word 'perception' more directly refers to the former relation, the word 'idea' to the latter. Thus the *perception* of a square has as its most direct meaning my soul perceiving the square, whereas the *idea* of a square has as its most direct meaning the square in so far as it is *objectively* in my mind. This distinction is of great use in resolving many difficulties which are based on insufficiently understanding that it is not a question of two different entities, but rather a single modification of our soul which necessarily contains both these relations. (66)

The most direct meaning of 'idea of a square' is the square insofar as it is objectively in my mind. This square in my mind is not my act of thinking but rather the object toward which that thought is directed. However, since Arnauld denies the existence of representative beings, this object can be nothing other than the square itself—the external object. But the square is an idea only insofar as it is an object of perception. This is why it is important to understand that the words 'perception' and 'idea' emphasize two different relations in which a single act stands: to the mind that perceives and to the object that is perceived. The idea of *idea* is an idea of a modified thing: that is, it is an idea of a thing "determined by a certain manner or mode" (Arnauld and Nicole, *Logic*, 30). That mode is perception. But perception is not a true mode of the idea (i.e., the thing perceived). Perception is a mode of thinking and therefore can only modify a mind. It follows that to apply the name 'idea' to an object is to denominate it extrinsically. 'Idea' is, indeed, among the second intentions: the word is applied to things "based on the way things are conceived" (32).

This interpretation is strongly confirmed by placing Arnauld's remark that "the *idea* of a square has as its most direct meaning the square in so far as it is *objectively* in my mind" alongside his official definition of objective presence: "a thing is *objectively* in my mind when I conceive it" (*On True and False Ideas*, 66). To be objectively present just is to be conceived.

There is, however, a difficulty for the identification of the idea with its object. It appears that some things may be truly predicated of the idea which are not truly predicated of the object, and vice versa. Indeed, as we have seen, this is crucial to Cartesian epistemology. There is, therefore, some kind of distinction to be drawn between idea and object. Arnauld explains:

There is yet another equivocation that needs disentangling. We must not confuse the idea of an object with that object conceived, at least not as long as one does not add 'insofar as it is objectively in the mind'. For being conceived, in regard to the sun that is in the sky, is only an extrinsic denomination, i.e. only a relation to the perception which I have of it. This is not what should be understood when one says that the idea of the sun is the sun itself, in so far as it is in my mind. To say that something is objectively in the mind does not just mean that my thought is directed toward it, 42 but that it is in my mind intelligibly, as is customary for objects which are

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<sup>&</sup>lt;sup>42</sup> Gaukroger translates this phrase as "the object which my thought is about." The French reads "l'objet, qui est le terme de ma pensée" (*Des vraies et des fausses idées*, 69). Arnauld appears to exploit an ambiguity of the French word 'terme' which means the end or goal toward which something is directed, but also a term in the logician's or grammarian's sense, i.e., a subject or predicate.

in my mind. And the idea of the sun is the sun, in so far as it is in my mind, not formally as it is in the sky, but objectively, i.e. in the way in which objects are in our thought. (67)

To be objectively in the mind, Arnauld has said, is just to be conceived. Now Arnauld says that, to avoid being misled by equivocation, we must distinguish this kind of objective being from formal being. For instance, we must distinguish the sun insofar as it is in the mind from the sun insofar as it is in the sky. The reason Arnauld gives for this is that "being conceived, in regard to the sun that is in the sky, is only an extrinsic denomination, i.e. only a relation to the perception which I have of it" (67). In other words, when we use such phrases as 'the idea of the sun,' 'the objective being of the sun,' or 'the sun insofar as it is in the mind,' we are not talking about what the sun is like intrinsically (its formal being). Instead, we are talking about how the sun is conceived (its objective being). This is an instance of extrinsic denomination.

One might worry, however, that Arnauld is contradicting his earlier deflationary interpretation of objective being, since he here says that for the sun to be objectively in my mind is something more than just being the object toward which my thought is directed. Furthermore, he goes on to say that objective being "is a way of being much more imperfect than that by which the sun actually exists, but which nevertheless is not such that it derives from nothing or needs no cause" (67).

These pronouncements can be reconciled as follows. Arnauld insists that perceptual acts themselves "are essentially *representative* modalities" (66). These acts represent by their very nature (53–54). There is no need for any representative being to stand between the act and its external object. Such a perceptual act will attribute to the object certain features. These are the attributes which are then said to be contained in the comprehension of the idea (Arnauld and Nicole, *Logic*, 39). Crucially, the idea is said to 'contain' these attributes regardless of whether they are really in the object and, indeed, regardless of whether the object really exists. Thus, objective being can be described as a way of being because it is indeed a way of possessing various attributes. Further, this way of being cannot be derived from nothing and does require an efficient cause since there must be some efficient cause of the mind's performing this particular act of representing at this particular time. Finally, this kind of objective being involves more than just being an object toward which my thought is directed: it involves being represented *as* possessing various attributes, namely, the attributes that are said to belong to the comprehension of the idea.

The idea of the sun just is the sun, but it does not follow from this that the idea *idea of the sun* is the same idea as *sun*, or that the same predicates may be affirmed of these two subjects. In having the idea *sun*, one considers what attributes are possessed by the sun (as it is in the sky). In having the idea *idea of the sun*, one does not ask what attributes the sun actually possesses, but rather what attributes are attributed to the sun by one's act of conceiving.<sup>44</sup> This higher order

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<sup>&</sup>lt;sup>43</sup> See Arnauld, *On True and False Ideas*, 54.

<sup>&</sup>lt;sup>44</sup> This is an instance of what Arnauld calls 'explicit reflection' (*On True and False Ideas*, 71–76). On Arnauld's distinction between implicit and explicit reflection, and its importance to his theory of abstraction and scientific knowledge, see Pearce, "Locke, Arnauld, and Abstract Ideas," 80–82.

idea still has the sun as its object. Nevertheless, it differs from the first order idea in its content and therefore can be correctly combined into different judgments.

This account allows Arnauld to maintain all three of the points enumerated above. In the first place, what is fundamental to Arnauld's account are *acts of representing* which contain content that may or may not match an object in the world. We know the acts themselves with absolute, Cartesian certainty, but because acts of misrepresentation are possible we do not automatically know the objects of these acts with certainty. This preserves Arnauld's Cartesian epistemology and justifies the *Logic*'s claim about the crucial importance of reflections on our ideas. In the second place, the acts themselves are modes or manners of thinking, fitting neatly into Arnauld's Cartesian ontology. Third and finally, the ideas—the objects made present to the mind by these acts of representing—just are the external objects themselves, preserving Arnauld's direct realism.

## 4. Words and Other Signs

The distinction between the idea of *sun* and the idea of *idea of the sun* is a distinction between two ways of conceiving the same object. The first considers the sun insofar as it is in the sky, the second considers the same sun insofar as it is (objectively) in my mind, that is, insofar as it is perceived. The Port-Royalists discuss at some length another distinction of the same kind: the distinction between ideas of thing and ideas of signs. In addition to being another important application of the theory of extrinsic denomination for avoiding bad metaphysics, the account of signs can shed further light on the account of ideas.

The text of the Port-Royal *Grammar* (first published in 1660) is organized around two ways signs may be considered: "what they are by their nature" and "the manner in which men utilize them for signifying thoughts" (Arnauld and Lancelot, *Grammar*, 41).<sup>45</sup> The account of these two 'considerations' appears again in *The Perpetuity of the Faith*, originally published in three volumes between 1669 and 1674,<sup>46</sup> where a more careful account is given of how the signification of words comes about and what sort of common knowledge must be presupposed for successful linguistic communication (Nicole, Arnauld, and Renaudot, *Perpétuité*, 2:81–82). Finally, in the fifth (1683) edition of the *Logic* two new chapters are added, drawing a distinction between "ideas of things and ideas of signs" on the basis of this theory (part 1, ch. 4) and analyzing the truth conditions for judgments containing ideas of signs (part 2, ch. 14). According to the Port-Royal theory of signs, to have an idea of a sign (or, equivalently, to consider an object insofar as it signifies) just is to denominate an object extrinsically.<sup>47</sup>

<sup>&</sup>lt;sup>45</sup> As Buroker indicates in her footnote to Arnauld and Nicole, *Logic*, 35, this distinction, and much else in the Port-Royal theory of signs, appears to be based on Augustine, *On Christian Doctrine*, book II, chapter i, sections 1–5.

<sup>&</sup>lt;sup>46</sup> This is the 'big' *Perpetuity*, not to be confused with the 'little' *Perpetuity*, a much shorter book with the same title Arnauld first published in 1664.

<sup>&</sup>lt;sup>47</sup> The account I give in this section is consistent with, and much influenced by, the detailed analysis of Arnauld's theory of signs given by Martine Pécharman ("La Signification"). My primary aim here is to connect this account with broader issues in the theory of extrinsic denomination.

In order to understand Arnauld's view of the nature of signs in general and of words as a particular species of conventional signs, it is best to begin from the *Logic*, which provides the most general account. According to the *Logic*, "when we view a certain object merely as representing another, our idea of it is an idea of a sign, and the first object is called a sign" (35). This definition sounds like an account of what the Port-Royalists had, two chapters earlier, called an idea of "a modified thing," that is, "a substance determined by a certain manner or mode" (30): the sign is the object considered—e.g., a sound, a written word, a painting, etc.—but it is considered just insofar as it has a certain feature, namely, some representational content. However, this is yet another place where the straightforward account is blocked by Arnauld's sparse Cartesian metaphysics: representing is not a mode of extension and therefore cannot modify an extended object such as a sound, a written word, or a painting.<sup>48</sup>

The *Logic* explains the nature of signs as follows: "the sign includes two ideas, one of the thing which represents, the other of the thing represented. Its nature consists in prompting the second by the first" (35).<sup>49</sup> At the end of chapter 1, the authors had argued that a sensory image of a sound (or, presumably, any other sign) "can make us conceive [something signified] only inasmuch as the soul, being accustomed when it conceives the sound to conceive the thought too, forms at the same time a completely mental idea of the thought...This idea...is connected to it only by habit" (30). This habit, however, is in the mind and not in the object. Further, "since the nature of the sign consists in prompting in the senses the idea of the thing symbolized by means of the idea of the symbol, we can conclude that the sign lasts as long as this effect lasts" (36). Thus, a sign exists (as a sign) for just as long as some mind has the habit of conceiving of a certain object whenever it perceives the symbol. This, however, is not a state of the symbol itself. It is a state of some mind. Thus, the object is entitled to the name 'sign' on account of the state of some mind or minds. In other words, 'sign' is applied to the object by extrinsic denomination.<sup>50</sup>

According to the *Grammar*, "speaking is explaining one's thoughts by signs which men have invented for this purpose" (41). These signs are, of course, words, and they were "invented" to solve a problem: our inability to "see immediately what passes in the mind and the heart" of other people (Nicole, Arnauld, and Renaudot, *Perpétuité*, 81).<sup>51</sup> Thus, a word is a certain kind of sign, one which "people have made...to indicate what takes place in the mind" (Arnauld and Nicole, *Logic*, 74).

This capacity for indication is again extrinsic to the word. When we consider "what [words] are by their nature" we can see that they are only "sounds and characters." To consider them according to their signification is to consider "the manner in which *men utilize them* for signifying their thoughts" (Arnauld and Lancelot, *Grammar*, 41, emphasis added). What makes a

<sup>&</sup>lt;sup>48</sup> See Pécharman, "La Signification," 69–70.

<sup>&</sup>lt;sup>49</sup> Cf. Arnauld, *Défense*, 243–44.

<sup>&</sup>lt;sup>50</sup> Pécharman, "La Signification," 70.

<sup>&</sup>lt;sup>51</sup> Cf. Arnauld and Lancelot, *Grammar*, 66. Pécharman, "La Signification," 72–80 argues that this 'anthropological hypothesis' forms the foundation of the Port-Royal theory of language. This interpretation is strongly supported by the brief summary of the theory found in the *Perpetuity*. On some Scholastic antecedents of this view, which was also endorsed by Locke, see Ashworth, "Do Words Signify Ideas or Things?," 312–13.

sound a word is the habit whereby the sound makes the hearer conceive of something quite different from the sound itself. This habit resides in human minds, and not in the sound. The application of 'word' to the sound is thus an instance of extrinsic denomination.

This account of the nature of words and other signs is supposed to explain certain otherwise puzzling features of the truth conditions for judgments containing ideas of signs. The Port-Royalists have a particular concern with a specific theological issue here, and this is the reason that the nature of words and other signs is a topic of discussion in *The Perpetuity of the Faith*, a long polemical work on the theology of the Eucharist. The Port-Royalists admit that "one may say, for example, that a painting is Alexander, [or] that a map is Italy" (Nicole, Arnauld, and Renaudot, *Perpétuité*, 2:81) although the painting merely represents Alexander and the map merely represents Italy. However, they hold, against certain Protestants, that Jesus could not (while ostending what appears to be bread) truly say "this is my body" if the (apparent) bread was merely a sign or symbol of his body (Nicole, Arnauld, and Renaudot, *Perpétuité*, 2:79–85; Arnauld and Nicole, *Logic*, 122–23).

In the version of this argument that occurs in the *Logic*, the authors begin by arguing that we cannot always take a sentence metaphorically whenever there is "an obvious incompatibility between terms" (i.e., whenever the literal interpretation is obviously false). If we were to follow this interpretive rule, "there would be no preposterous propositions." In ordinary contexts, to assert "the sea is the sky, the earth is the moon, or a tree is a king" is insanity, not poetry. They conclude that "we must...prepare our hearers in some way before we have the right to use these sorts of propositions" (120).

The Perpetuity gives an admirably clear and concise analysis of the reason this preparation is necessary, deriving it from some basic principles of the Port-Royal theory of language. As we have observed, our incapacity for mind-reading is the reason language is necessary. However, this incapacity is only partial: because of the similarity of human minds, and because of cultural conventions, we do have some insight into the minds of others, even when their mental contents are not conveyed by speech. Thus, "human language...is entirely founded on this *imperfect penetration* into the minds of others" (2:81, emphasis added). Because language is not built on a total lack of penetration, but rather on imperfect penetration, it is not always necessary to convey the full contents of our mind in speech: "because we suppose that [our hearers] already know what we intend, we mark [in words] only half [of what we intend], because we have confidence that they will supply what we do not express" (Perpétuité, 2:81). Thus, I might recognize that another person is looking at a map, knowing it is a map, and wondering what country it represents. In this context I can say 'that is Italy' and thereby convey this map signifies Italy. This, however, presupposes a great deal of prior common knowledge: that the thing in question is a map, that maps are representations of countries, that Italy is a country, and so forth. It is because of this prior common knowledge that the sentence can be so interpreted.

What this ultimately amounts to is that, for both speaker and hearer, the subject idea must already be an idea of a sign. Furthermore, as is emphasized in the *Logic*, it must be the *right* idea of a sign:

We know, for example that the laurel tree is a sign of victory and the olive branch a sign of peace. But this knowledge in no way prepares the mind to accept it when

someone who wants to make the laurel tree a sign of the king of China and the olive branch a sign of the Great Lord, says abruptly, while walking in the garden: see this laurel tree, it is the king of China, and this olive branch is the Great Turk. (120–21)

On the other hand, "it is certainly a sufficient introduction for giving signs the names of things, when we see that our listeners already view certain things as signs, and only need to know what they signify" (121).<sup>52</sup> When one knows perfectly well what the thing is in its own nature (e.g., a piece of paper painted in a blue and green pattern), but one also knows that the thing in question is a sign, and wants to know what it represents, then to predicate of the object that which it represents (e.g., 'this is Italy') produces no confusion. Thus, according to the *Logic*, "we can derive this maxim of common sense: to give signs the names of things only when we have the right to assume that they are already viewed as signs, and when it is clear that others need to know not what they are, but only what they signify" (121).

The Port-Royalists' central point here is this: a colored piece of paper cannot be Italy, but a map can. Yet a map is only a colored piece of paper denominated extrinsically. The truth of the statement 'this is Italy' (ostending the piece of paper) thus depends on whether the idea signified by 'this' is an idea of a sign or an idea of a thing. A judgment that predicates of an idea of a sign the features of the thing signified is true.

These sorts of propositions easily satisfy the concept containment condition described above. Recall that the requirement is that the predicate, interpreted according to its comprehension, is in the subject, interpreted according to its extension. In 'this is Italy', the extension of the subject is the collection of names that signify the particular individual idea the speaker has in mind (in this case the idea of this particular map of Italy). The comprehension of 'Italy' is the collection of names of attributes included in the idea Italy. Different speakers may associate different ideas with the word 'Italy', including different features of that country, but this is not a problem because just anything that is true of Italy can be predicated of the map, given the appropriate context. For instance, if there are many maps in view, one may point to the map of Italy and say "this is where Augustine met Ambrose," although neither Augustine nor Ambrose is represented on the map.

The map (as a map, a type of sign) includes everything included in the idea *Italy*. It includes these attributes, not by being modified by them, but rather by representing them. However, this representation is, as we have seen, not intrinsic to the map (qua colored piece of paper). A sign taken materially—that is, a body—cannot ground these claims about its signification. Rather, what is required to ground the truth of these claims is some mind which is disposed, on seeing such an object, to think of Italy.

The discussion of this scenario shows that Pécharman ("La Signification," 87) is incorrect in attributing to Arnauld the view that "it is impossible that the mind has the idea of a thing as a sign...without knowing at the same time what it represents" (my translation). To consider something as a sign is to consider it as representing something, but one need not know what that something is. The account given above does entail that the object is not a sign at all unless it has the capacity to excite the idea of the thing it signifies in some mind. Nevertheless, it is possible for me to recognize something as a sign even if it doesn't signify anything to me, and it is even possible to regard something as a sign incorrectly, when in fact it signifies nothing to anyone.

According to Arnauld, "To say that our ideas and our perceptions (taking these to be the same thing) represent to us the things that we conceive and that they are their images...is to say something completely different from saying that pictures represent their originals...or that spoken or written words are the images of our thoughts" (*On True and False Ideas*, 66).<sup>53</sup> Properly speaking, representing is something done by a mind. Ideas, however, are said to represent those features that the mind represents the object as having. Thus, one idea of the sun may be truly said to represent it as small, another as large (Descartes, *Meditations on First Philosophy*, 27).<sup>54</sup> Signs are said to represent those features that minds are disposed to represent upon perceiving the sign. Representation is what makes an idea an idea, and what makes a sign a sign. What is represented determines what can be truly predicated of a name of an idea or a name of a sign. Yet this representation is in both cases merely extrinsic. An idea is an object insofar as it is perceived, and a sign is an object insofar as it signifies. The representing is strictly speaking not done by objects of either type, but rather by minds.

## 5. Mind-Dependent Color in a Mind-Independent World

We have now seen that the theory of extrinsic denomination allows Arnauld to speak of ideas without introducing representative beings and without denying that we see external objects. We have further seen that this theory allows Arnauld to explain how representational properties, which strictly speaking belong only to minds, can be truly attributed to material objects like maps. In these cases, the theory of extrinsic denomination serves to preserve the truth of various plain language statements that appear to conflict with Cartesian philosophy.

The real test case, however, for this kind of Cartesian attempt to "think with the learned and speak with the vulgar" (Berkeley, *Principles*, §51; quoting Bacon, *Twoo Bookes*, 57) must certainly be the case of sensible qualities. For Descartes, the judgment "that when a body is white or green, the selfsame whiteness or greenness which I perceive through my senses is present in the body" (*Meditations on First Philosophy*, 56) is the paradigm example of a vulgar error drawn from childhood prejudices. Despite Arnauld's reservations, in the Fourth Objections

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<sup>&</sup>lt;sup>53</sup> See Pécharman, "La Signification," 96–98. Although Arnauld here says that these two uses of 'represent' "say something completely different," in one of his replies to Malebranche he affirms that this is an instance of analogy rather than pure equivocation (Arnauld, *Défense*).

<sup>&</sup>lt;sup>54</sup> In Arnauld's earliest and most widely read philosophical work, the Fourth Objections to Descartes's *Meditations*, he appears to question whether any idea could misrepresent its object. If the content of the idea did not match the features of the object, wouldn't it just be an idea of *something else*? (145–46) However, the examples of obscure and confused ideas in the *Logic* include ideas that misrepresent their objects. For instance, ordinary folks have obscure and confused ideas of sensible qualities which represent sensations as being true modes of bodies (Arnauld and Nicole, *Logic*, 49–50). In fact, it seems to me that the discussion in the Fourth Objections only rules out a certain kind of misrepresentation: representing an absence as a positive being. Applying the *Logic*'s account of our errors about sensible qualities to the example of cold discussed in the Fourth Objections, we would say that the *sensation* of cold is a positive being. Ordinary people take this sensation to be a true mode of bodies and attribute it to bodies whenever those bodies are sensed coldly. However, in reality the sensation of cold is only in the mind and bodies sensed coldly do not have any positive mode at all but only a privation of motion. This approach is similar, but not identical, to the one Descartes suggests in his reply, on which "an idea is referred to something other than that of which it is in fact the idea" (163). (I thank an anonymous referee for pressing me to clarify the relation of Arnauld's mature view to the account in the Fourth Objections).

(Descartes, *Meditations on First Philosophy*, 145–146), about Descartes's account of the idea of *cold*, <sup>55</sup> the *Logic* follows Descartes in treating our sensible quality ideas as paradigm examples of obscure and confused ideas and causes of error (48–51). Sensible qualities are vulgarly believed to be modes of bodies, but this is impossible since they are not modes of extension.

Malebranche was willing to draw from this the hardline conclusion that it is incorrect to attribute these qualities to bodies and that instead "the soul actually becomes red, blue, or yellow, [and] when one smells a carcass the soul becomes formally putrid" (*Search*, 634). Arnauld is unwilling to accept this conclusion. He writes:

As for those Cartesians who do not wish to acknowledge that 'our soul is green or yellow or putrid', I do not know what Malebranche means by this. For if those of whom he speaks claim that sensible qualities are modifications of extension and not of our soul, then to this extent they are not Cartesians. But if, acknowledging that they are modifications of our soul and not of extension, they maintain only that this does not mean that our soul should be called either 'green', or 'yellow', or 'putrid', this will only be a question about nomenclature, in which, I believe, they are not as wrong as the author imagines...There are infinitely many *names* which suppose no modification in the thing to which they are given. (*On True and False Ideas*, 173–74)

The application of a name in a way that "suppose[s] no modification in the thing to which [it is] given" is extrinsic denomination.

Colors are, strictly speaking, sensations, and sensations are modifications of the mind.<sup>56</sup> Nevertheless, "in saying...that colours are only strictly speaking in my mind and not in the [bodies], it must not be imagined that there is nothing in any of them which causes it to appear to me to be of one colour rather than another" (131). Rather, color sensations are marks God has given us to indicate differences in the microphysical constitutions of the surfaces of bodies.<sup>57</sup> If this correlation between color sensation and microphysical constitution were not maintained, "God's plan would be overturned." As a result, "I cannot prevent myself from attaching and applying, so to speak, white to the marble which strikes the organs of sight in a way which, according to the law that God has laid down for Himself, must be the cause of my soul having the sensation of whiteness" (132).

Arnauld's Cartesian account of color here should not be confused with the well-known theory of Boyle and Locke. According to Boyle and Locke, colors are the powers of bodies to cause color sensations (Boyle, *Origin of Forms and Qualities*, 30–37; Locke, *Essay*, II.vii.10, II.vii.14). Arnauld and (at least some) other Cartesians hold, on the contrary, that colors *just are* 

<sup>&</sup>lt;sup>55</sup> See previous note.

<sup>&</sup>lt;sup>56</sup> There is some evidence in *On True and False Ideas*, that Arnauld holds that all modes of the mind are acts of representing (perceiving) and that they are individuated solely by their representational content (see Arnauld, *On True and False Ideas*, 53–54; Nadler, *Arnauld*, 165–71; Pearce, "Ideas and Explanation," §3). If this is right, then it is hard to see what sensations could be, on Arnauld's view. What is their representational content? There is not space here to address this question.

<sup>&</sup>lt;sup>57</sup> For a detailed analysis of Arnauld's understanding of color as a 'rough pattern' (*On True and False Ideas*, 132) provided by God to alert us to subtle differences in the modes of extension, see Beyssade, "Sensation et Ideé."

color sensations.<sup>58</sup> Nevertheless, we conceive color as a mode of bodies. According to Arnauld, this, in itself, need not be an error, and is in fact part of "God's plan."

Whiteness, according to Arnauld, is the idea of a particular mode (Arnauld and Lancelot, Grammar, 69–70) and this mode is a sensation that modifies a mind. White, on the other hand, is applied not to the mind, but to the marble: white is affirmed of the marble because of how the marble is sensed by me. The marble is entitled to this denomination in light of how minds respond to it: when perceiving the marble, the mind is modified by the sensation of whiteness.<sup>59</sup> This is, of course, extrinsic to the marble.

The account of sensible qualities is, in this respect, similar to the account of signs: in both cases, terms are applied to objects in virtue of the way minds are disposed to respond to those objects. Further, because *white* denominates the object extrinsically, it is incorrect to affirm it of the soul, as Malebranche wants to do: to say 'the soul is white' would be to affirm that the soul is sensed in a certain way (Arnauld, *On True and False Ideas*, 174–75). Nevertheless, Arnauld agrees that our habit of "transporting the sensations of heat, color, and so on, to the things themselves outside the soul" (Arnauld and Nicole, *Logic*, 49) is a vulgar error rooted in childhood prejudice.

This error does not consist in the supposition that the marble is white. The error consists, rather, in supposing that *white* denominates the marble intrinsically, i.e., that whiteness is a true mode of the marble. In fact, whiteness is correlated, according to God's plan, with some true mode of the marble, namely, a particular "arrangement of the small parts of [its] surface" (Arnauld, *On True and False Ideas*, 131). However, whiteness itself is not a true mode of the marble but rather part of the mind's way of perceiving the marble. This way of perceiving is employed to denominate the marble extrinsically. Thus, the judgment *this marble is white* is true. However, the truth of this judgment is not grounded in the marble but rather in the perceiving mind. In this way, according to Arnauld, true Cartesians (unlike Malebranche) preserve the truth of plain language claims about color: "the Cartesians...are against introducing another language and claiming to find useful bizarre ways of speaking which can only serve to discredit the truth and make it ridiculous" (*On True and False Ideas*, 175). Arnauld is not among those who, as Berkeley complained, "Say the Wall is not white, the fire is not hot &c." (*Philosophical Commentaries*, entry 392). Rather, Arnauld is among those who, like Berkeley (*Principles*, §51), follow Bacon's advice to think with the learned and speak with the vulgar.

## 6. Conclusion

Cartesian metaphysics is relatively sparse. Fundamentally, it allows only for thinking things and extended things, and holds that every true mode of a thinking thing must be a way of thinking and every true mode of an extended thing must be a way of being extended. This threatens to

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<sup>&</sup>lt;sup>58</sup> Descartes's own position on this issue is complex and disputed (and perhaps inconsistent). See, e.g, Cottingham, "Descartes on Colour"; Downing, "Sensible Qualities"; Nolan, "Descartes on 'What We Call Color'." However, in the passages cited above both Arnauld and Malebranche are quite explicit about identifying sensible qualities with modifications of the soul, and those modifications are clearly sensations.

<sup>&</sup>lt;sup>59</sup> I thank David Hilbert for pressing me to clarify the distinction between *whiteness* and *white* in this context.

make nonsense of our talk, not only of sensible qualities like red, but also of signs, words, and ideas.

Arnauld wants to defend the truth of a wide variety of assertions that don't fit neatly into the Cartesian metaphysical picture. The theory of extrinsic denomination is among Arnauld's most important tools in this effort. With this tool, Arnauld the Cartesian can speak the ordinary language of color, and Arnauld the direct realist can speak the Cartesian language of ideas.<sup>60</sup>

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