

## BURIDAN'S THEORY OF INDIVIDUATION\*

### 1. Introduction



BURIDAN holds that no principle or cause accounts for the individuality of the individual, or at least no principle or cause other than the very individual itself, and thus there is no ‘metaphysical’ problem of individuation at all—individuality, unlike generality, is primitive and needs no explanation. He supports this view in two ways. First, he argues that there are no nonindividual entities, whether existing in their own right or as metaphysical constituents either of things or in things, and hence that no real principle or cause of individuality (other than the individual itself) is required. Second, he offers a ‘semantic’ interpretation of what appear to be metaphysical difficulties about individuality by recasting the issues in the formal mode, as issues within semantics, such as how a referring expression can pick out a single individual. Yet although there is no ‘metaphysical’ problem of individuation, Buridan discusses two associated problems at some length: the identity of individuals over time and the discernibility of individuals.

The discussion will proceed as follows. In §2, Buridan’s semantic framework, the idiom in which he couches his philosophical analyses, will be

\* References to Buridan are taken from a variety of his works (with abbreviations listed): *Questions on Aristotle’s “Categories”* (QC); *Questions on Aristotle’s “Physics”* (QSP); *Questions on Aristotle’s “De caelo et mundo”* (QCM); *Questions on Aristotle’s “De anima”* (QA); *Questions on Aristotle’s “Metaphysics”* (QM); *Treatise on Supposition* (TS); *Sophismata*; *Treatise on Consequences* (TC). Details about each of these may be found in the Bibliography. References to the quaestiones are in the standard book/treatise and question number format; references to TS and TC follow the numbering scheme in King’s translation; references to *Sophismata* VIII follow the numbering scheme in Hughes’s translation. Translations are mine unless specifically noted otherwise. I would like to thank J. A. Zupko for making his work on Buridan’s *Questions on Aristotle’s “De anima”* available to me. It should be noted that while these include most of Buridan’s works which are available in published form, from incunabula to modern critical editions, there are many other works which remain in manuscript: line-by-line commentaries on Aristotle; independent treatises such as the full *Summulae de dialectica*; other *quaestiones*. All claims made about Buridan can only be tentative until his corpus is fully available. The classic discussion of Buridan’s works is given by Edmond Faral, “Jean Buridan: Maître dès arts de l’Université de Paris,” in the *Histoire littéraire de France* 28 (deuxième partie), Imprimerie Nationale: Paris 1949, 462–605.

described.<sup>2</sup> In §3, the sense Buridan assigns to ‘singular’ and ‘individual,’ as well as associated notions such as ‘one’ and ‘numerically one,’ will be examined. In §4, Buridan’s negative arguments in support of his claim that everything which exists is individual will be examined. In §5, Buridan’s ‘semantic’ interpretation of individuation will be discussed, in particular what it is to be a discrete term. In §6, general issues regarding Buridan’s ontology will be explored. In §7, identity over time and the discernibility of individuals will be explored.

## 2. Buridan’s Semantic Framework

For Buridan, as for other philosophers of the fourteenth century, there are three distinct levels of language: written language, spoken language, and mental language, associated respectively with the activities of writing, speaking, and thinking.<sup>3</sup> Each is a fully-developed language in its own right, with vocabulary, syntax, formation-rules, and the like. They are hierarchically ordered, and the ordering is piecemeal rather than holistic: particular inscriptions are said to ‘immediately’ signify particular utterances, and particular utterances immediately signify concepts which are mental particulars, “acts of the soul” (QM V q. 9). A concept is a natural likeness of that of which it is a concept, and signifies what is conceived by the concept. Written and spoken terms are said to ‘ultimately’ signify what is conceived by the concept (TS 3.2.8).

Mental language is a natural language, unlike spoken or written languages which are conventional, and it is perspicuous in rigor. Mental language functions as a canonical or ideal language: it is universal to all thinking beings (other than God), unlike the diversity of merely conventional ‘natural’

<sup>2</sup> For further discussion of the points raised in the summary of Buridan’s semantic framework, see the introduction to Peter King, *Jean Buridan’s Logic*, Synthese Historical Library 27, Dordrecht: D. Reidel 1985. See also Calvin Normore, “Buridan’s Ontology,” in Bogen and McGuire (eds.) *How Things Are: Studies in Predication and the History and Philosophy of Science*, Dordrecht: D. Reidel 1984, 187–200, and the introduction to G.E. Hughes, *John Buridan on Self-Reference*, Cambridge University Press 1982. The description will be specific to Buridan; for example, Buridan, unlike *e. g.* William of Ockham, does not admit a category of ‘simple supposition’ (TS 3.2.5), and so it is not described in the following.

<sup>3</sup> The theory of the three levels of language is given a textual foundation through Aristotle’s opening remarks in the *De interpretatione* 1 16<sup>a</sup>3–8, as understood in Boethius’s translation (see Norman Kretzmann, “Aristotle on Spoken Sound Significant by Convention” in John Corcoran (ed.) *Ancient Logic and its Modern Interpretations*, Synthese Historical Library 9, Dordrecht: D. Reidel 1979, 3–21, for the importance of this proviso).

languages such as French or Italian, and indeed explains the possibility of translation among such 'natural' languages; it is expressively adequate, in that it has the resources to express whatever may be expressed; it is unambiguous and nonredundant, in that, respectively, an ambiguous spoken or written term will be correlated with several mental terms each of which has a single signification, while synonymous inscriptions or utterances are correlated with the same mental term. Buridan's distinction between syncategorematic and categorematic terms serves to distinguish logical and nonlogical particles. Categorematic terms have an ultimate signification, while syncategorematic terms have an immediate signification and only have ultimate signification in combination with categorematic terms (TS 2.3.6–7). Syncategorematic terms such as 'and' or 'is' immediately signify simple concepts which combine other concepts, which Buridan calls 'complexive concepts'; they are semantic term-forming or sentence-forming functors (TS 2.3.11–143). Sentences of mental language display their logical form in a perspicuous manner. In short, mental language behaves like the semantics for written and spoken language: it is the vehicle through which written and spoken languages are 'given meaning' or have an ultimate signification, in the last analysis due to the ways in which a concept may signify that of which it is a concept.

It is one matter to correlate terms with their significates so that a language may be established in the first place; that is accomplished by signification. It is another matter to actually use the terms to talk about their significates, which is a distinct semantic relation between terms and their significates. This latter semantic relation is called 'supposition,' and accounts for the referential use of categorematic terms. Hence there are two major differences between signification and supposition. First, terms retain their signification at all times, but only in a sentence are terms used referentially, that is, to talk about things and say something about them. Hence a term has supposition only in a sentential context. Second, we do not always use terms to talk about everything those terms ultimately signify; we mention, as well as use, terms, and sometimes we speak only of a subclass of all the significates of a term. Hence a term may have different kinds of supposition depending upon its sentential context. There are two main kinds: personal supposition, which occurs when a term stands for what it ultimately signifies, and material supposition, which occurs when a term does not stand for what it ultimately signifies.<sup>4</sup> Hence in the sentence "Socrates is human" the term 'Socrates' has personal supposition, referring

<sup>4</sup> More exactly: a term  $t$  has personal supposition in a sentence if and only if either (i) some sentence of the form "This is  $t$ " is true, or (ii) some clause of the form 'and

to Socrates the individual; and in the sentence “Socrates is a three-syllable word” the term ‘Socrates’ has material supposition, referring to the utterance ‘Socrates.’ Note, however, that the term ‘Socrates’ is one and the same term in each sentence. Much as signification is the mediæval correlate to a theory of meaning, supposition is the mediæval correlate to a theory of reference—and, like any theory of reference, is the guide to ontology.

Categorematic terms that correspond to simple or incomplex concepts are called ‘absolute’ terms; Buridan argues in QSP I q.4 that there must be such incomplex concepts to avoid the possibility of infinite regress. Categorematic terms that signify something for which they do not personally supposit are called ‘appellative’ or ‘connotative’ terms.<sup>5</sup> Since terms retain their signification at all times, the signification of any string of terms will be the union of the signification of each term: ‘white bird’ signifies all white things and all birds. The supposition of any string of terms, on the other hand, will be the intersection of the supposition of each term: ‘white bird’ will only supposit for some white things (those that are birds) and some birds (those that are white). Hence complex phrases are appellative. Now appellative terms do not supposit for, although they may connote, additional entities, and so do not add to the ontology; therefore, ontological commitment is only carried by the individual absolute terms of mental

that is *t*’ can be added to an existential sentence, or to a sentence presupposing an existential sentence, to produce a true sentence. The demonstrative pronoun and the copula of (i) and (ii) should be taken in the appropriate tense, grammatical number, and mood. This definition is a generalization of the account of personal supposition Buridan sketches in TS 1.2.9. A term has material supposition at all other times, *e. g.* when an inscription such as ‘Socrates’ supposits for the inscription or for the concept of Socrates rather than for Socrates himself.

<sup>5</sup> Strictly speaking, three semantic relations are involved. A term such as ‘white’ *supposits* for an individual white subject, *connotes* the quality whiteness, and *appellates* the special disposition of inherence in a subject (TS 1.4.8). Buridan seems to call such terms ‘appellative’ and the relation they have to what they do not stand for ‘connotation,’ although such terms may also loosely be called ‘connotative.’ The characterization given in the text is not strictly accurate; it should be phrased as a conditional: if a term signifies something for which it does not supposit, something ‘extrinsic’ to the referent, then that term is appellative; see TS 1.4.1, 5.1.1., 5.2.5, and *Sophismata* 1 Theorem 6. Yet there are also appellative terms that signify something not really distinct from that for which the term supposits, having only ‘intrinsic’ connotation, such as ‘creative’ when speaking of God (since God’s creative power is identical with the divine essence according to QM VII q.4) or ‘rational’ in speaking of humans (since rationality is a constitutive differentia of humanity according to TS 1.4.6). For an alternative view of connotation, see L. M. De Rijk, “On Buridan’s Doctrine of Connotation,” in Jan Pinborg (ed.), *The Logic of John Buridan* (Copenhagen 1971)

language.<sup>6</sup>

Mental language, and the associated theories of signification and supposition, form the semantic framework for Buridan's analyses of philosophical problems, and in particular for his discussion of individuation. As a first step in uncovering Buridan's views, then, his discussion of the signification of the term 'individual,' and related terms such as 'singular' and 'numerically one,' should be examined. That is the task of the next section.

### 3. Criteria of Individuality

Buridan describes the principal signification of the terms 'singular' and 'individual' in QM VII q. 19 as follows (fol. 53vb):<sup>7</sup>

The name 'singular' is opposed to the name 'plural,' according to grammar, but this is not relevant for us; rather, we shall take it as opposed to the name 'common' or 'universal,' and then it seems to me that according to the logician these terms 'singular' and 'individual' are taken as synonymous terms to which [the terms] 'common' and 'universal' are opposed. These are all names of second intention, suppositing for significative terms: 'singular' and 'individual' supposit for discrete terms, and 'universal' supposit for common terms.

A term that ultimately signifies other terms is said to be 'a term of second intention,' while a term that ultimately signifies something that is not a term is said to be 'a term of first intention.'<sup>8</sup> Thus the terms 'individual'

<sup>6</sup> The distinction between terms with intrinsic and extrinsic connotation, combined with Buridan's thesis that accidents may exist while inhering in no subject (as they do in the Eucharist), complicates this claim; more exactly, ontological commitment is carried by individual absolute terms and individual non-absolute terms with only intrinsic connotation. It should also be noted the distinction between intrinsic and extrinsic connotation renders the claim 'complex phrases are appellative' not strictly accurate: phrases in which the individual terms each signify exactly the same and supposit for what they signify will not be appellative. This applies to trivial examples such as 'man man man,' but also to phrases that include an absolute term and an appellative term with only intrinsic connotation, such as 'creative God' (and perhaps 'one being,' as discussed in §3).

<sup>7</sup> Dico quod hoc nomen 'singulare' secundum grammaticam opponitur huic nomen 'plurale,' sed de hoc nihil ad nos; immo capiamus ipsum prout opponitur huic nomini 'commune' vel 'universale,' et tunc videtur mihi quod apud logicum isti termini 'singulare' et 'individuum' verificantur pro terminis synonymis quibus opponitur 'commune' vel 'universale.' Et sunt haec omnia nomina secundarum intentionum supponentia pro terminis significativis: 'singulare' enim et 'individuum' supponunt pro terminis discretis, et 'universale' supponit pro terminibus communis.

<sup>8</sup> Any term may materially supposit for a term, since it may materially supposit for

and 'singular' are on a par with terms such as 'verb,' since each is a general term signifying a kind of linguistic element. In particular, 'singular' and 'individual' signify discrete terms, *i. e.* terms that as a matter of semantics alone are 'predicable of only one,' namely in an identity-statement such as "This is Socrates."<sup>9</sup> Buridan offers us as examples of discrete terms 'Socrates' and 'this man' (TS 3.3.1); presumably proper names, demonstratives, and, were Latin to have a definite article, definite descriptions are candidates for discrete terms. (This will be discussed in §5 in more detail.) In the strictest sense, then, individuality and singularity are properties of terms rather than things.

However, Buridan admits a looser sense of 'individual' and 'singular' that applies to nonsemantic objects in the world, and I shall typically follow his dual use of these terms when no confusion can occur. Criteria for individuality as a property of things rather than terms can be inferred from Buridan's discussions of related terms; there seem to be two: (1) absence of division; (2) distinctness from all else.

As regards (1), in QM IV q. 7 Buridan raises the general question whether 'being' (*ens*) and 'one' (*unum*) convert, that is, are truly predicable of exactly the same things. Buridan argues that they do so convert, but nevertheless they are not synonymous, since "the term 'being' or 'something' (*aliquid*) is taken according to a simple concept, that is, [a concept that is] free from connotation, and the term 'one' is a connotative term—it connotes the absence of division (*cauentia divisionis*).” Yet they are predicable of exactly the same objects, and despite the fact that 'one' is connotative it does not involve any extra ontological commitment, since “the absence

itself, but only a term of second intention may personally supposit for terms. Buridan does not endorse the standard account that terms of first intention signify extramental entities while terms of second intention signify mental entities. Rather, terms of second intention signify terms *as* terms, that is, complete with semantic properties, and this applies indifferently to elements of written, spoken, or mental language. For example, the term 'mental act,' although it signifies mental entities such as concepts that are terms of mental language, presumably is not a term of second intention, while the term 'verb,' which also signifies concepts which are terms of mental language (as well as inscriptions that are terms of written language and utterances that are terms of spoken language), presumably is a term of second intention. There are borderline cases: 'inscription,' 'utterance,' and 'concept' are the most obvious.

<sup>9</sup> This characterization of singularity derives from Porphyry by way of Boethius: see Boethius's translation of Porphyry's *Isagoge*, edited by Lorenzo Minio-Paluello in the series *Aristoteles latinus* I.6–7, Desclée de Brouwer: Paris 1966. In Porphyry and Boethius the characterization is given as 'what is predicated of only one,' but Buridan is clear that predicability is at issue, not actual predication. The qualification 'as a matter of semantics alone' will be important, as we shall see in §5.

of division is not a thing that is added on beyond the thing that is the individual, as the privation or the absence of form is not a thing added to the matter.” Now ‘absence of division’ applies to anything that may be called ‘one’ in any way at all, including accidental unities (such as heaps). We are interested in a more particular case, namely what criteria must be satisfied by those things that are not just one but that are numerically one. In QM VII q. 19 Buridan points out that ‘numerically one’ is a name of first intention and semantically a common term, “insofar as it is true to say that every being is one in number,” and may characterize substances, parts of substances, and accidents: “whiteness or matter or the soul is as numerically one as man.” Yet Buridan does not specify the kind of division the absence of which ‘numerically one’ entails. If we restrict our attention to individuals capable of existing *per se*, then the traditional account has it that the divisibility the lack of which is in question is that such beings cannot be instantiated—they cannot be divided either “into beings [specifically] similar to themselves” or “into subjective parts”—and there is no reason to doubt that Buridan adopted this traditional view.

As regards (2), Buridan does not address the nature of individual distinctness so much as simply assume it to hold. In QM VII q. 17 he asserts that “individuals of the same species, such as Socrates and Plato, differ substantially according to their substances, as much by their forms as by their matter, in that neither is the form of Socrates the form of Plato nor the matter of Socrates the matter of Plato.” Distinctness from other individuals is an intrinsic feature of individuality. Note that this claim allows Buridan to offer a unified account of distinctness: individuals of different species differ as regards their substantial forms, a claim admitted by all mediæval philosophers, but Buridan holds that individuals of the same species also differ in their forms. This poses the problem how such individuals are classed together under the same species—indeed, what ‘sameness in species’ can mean if not possession of the same form—but Buridan will argue that this is a matter of a general term suppositing for distinct individuals, not a matter of a metaphysically identical constituent in distinct individuals.

Individuality consists, at least in part, in intrinsic indivisibility and distinctness from all else. They are features of individuality, though they form no part of its definition—indeed, if individuality is a basic notion then it cannot be defined. Buridan takes indivisibility and distinctness to characterize everything that exists. It is to the content of this claim that we now turn.

#### 4. Everything Is Individual

Buridan frequently asserts that every thing that exists is individual: “every thing exists as singular such that it is diverse from any other thing, since it is never possible that a term suppositing precisely for one thing be truly affirmed of a term suppositing precisely for another [thing]” (QSP I q. 7). No principle or cause accounts for the individuality of the individual, or at least no principle or cause other than the very individual itself. Individuality is a basic feature of the world. Substances and accidents are equally individuals; composites are individuals whose component parts are themselves individual.<sup>10</sup> Concepts, even general concepts, are individual acts of understanding in individual intellects, spoken and written language so many individual utterances or inscriptions. To support the thesis that every thing that exists is individual, Buridan argues that there are no nonindividual entities, whether existing independently or as metaphysical constituents either of things or in things, and hence that no real principle or cause of individuality (other than the individual itself) is required.

Buridan argues at length against the existence of universals as non-individual entities.<sup>11</sup> In QM VII q. 15, he asks whether universals are ‘separated’ from singulars, and he notes that, strictly speaking, ‘universal’ is a term of second intention, applying to a term which is “predicable of many and indifferently signifies many and supposits for many, and then its signification is opposed to the term ‘singular’ or ‘discrete.’” Universals are

<sup>10</sup> This claim should be stated more precisely, since the individuality of a composite that is an accidental unity may not be basic but rather derivative from the individuality of its component parts, as the individuality of a heap is derivative from the individuality of the pebbles that make it up; Buridan is willing to call any agglomeration of individuals an ‘individual’ in this sense, including the individual made up of Socrates’s ear, Rouen Cathedral, and the dark side of the moon. (Equally, Buridan would take the grammatically singular, rather than plural, number of ‘every thing’ into account, so that there are things that aren’t individual but rather individuals: see *e. g.* QC q. 7, QM IV q. 7, and TC 1.8.84–86.) More exactly, every thing capable of existing *per se* is individual, a proviso that includes primary substance, separable substantial form, separable accidents, and matter—see §6. In QSP I q. 20 Buridan states: “although many beings (*entia*) have *esse* through extrinsic causes of their entity or essence that are active either finally or subjectively, nevertheless, every *ens*, by its entity or essence alone, is that which is essentially and intrinsically.”

<sup>11</sup> It should be noted that universals may be only one kind of nonindividual entity; Buridan also argues against the existence of other ‘abstract’ entities, such as the *complexe significabile*. (The status of the connection between ‘abstractness’ and generality or nonindividuality is not clear in Buridan.) However, only universals will be examined here.

trivially 'separable' from singulars in this sense, for one person may have only a general term in mind and another person only a discrete term in mind. However, Buridan immediately points out that the question is not intended in this sense, but rather about "the things signified by universal terms," such that the 'separability' at issue is one of independent ontological existence: whether universals are things distinct from singulars. (In mediæval terminology, whether there is a real distinction between the universal and the singular.) Buridan takes the claim that there are universals, that is, things signified by universal terms, which are separate from singulars to be Plato's position, which he stigmatizes as "completely absurd."<sup>12</sup> He offers two arguments against the position characterized in this way. First, the sentence "Socrates is (a) man" would not be true, since "if *man* is separate from Socrates then it is diverse from him, and Socrates is not something diverse from himself." Second, either man is the same in "Socrates is (a) man" and "Plato is (a) man" or it is different; if it is the same, then "by an expository syllogism it follows that Socrates is Plato, for whatever are the same as one and the same undivided [thing] are the same as each other"; if it is different, "although separate, then there would be as many separate men as there are singular men, and this is absurd, and neither has anyone ever held it."<sup>13</sup> Buridan, unaware of the theory of participation, reads

<sup>12</sup> Buridan notes another sense in which something may be called 'universal,' namely "according to causality," the way in which causes may have more or fewer effects or kinds of effect (see *e. g.* QM VII q. 15 and QSP I q. 7). Plato's theory of Forms was familiar to mediæval philosophers solely through the characterization, or caricature, given by Aristotle in the *Metaphysics*. Nevertheless, Buridan thought enough of such 'platonism' to offer two formulations of it, and indeed to discuss it at all—it was customarily taken for granted in the Scholastic period that Aristotle had said all that needed to be said about 'platonism.' For example, neither Duns Scotus nor William of Ockham ever mention it as a live metaphysical option. Finally, it should be noted that Buridan regularly refers to Aristotle's disproof of platonic Forms in *Metaphysics* 7 (*e. g.* in TS 3.2.5 and in QM VII q. 15 and q. 16 *contra*), presumably to the discussion in *Metaphysics* 7.14 1039<sup>a</sup>23–1039<sup>b</sup>18, rather than the more extended treatment in *Metaphysics* 13–14. See Alessandro Ghisalberti, *Giovanni Buridano dalla metafisica alla fisica*, for a different interpretation of Buridan's discussion of Plato and platonism.

<sup>13</sup> Buridan's statement of the arguments is as follows: "This position is completely absurd, since it follows that the sentences "Socrates is (a) man" and "Socrates is (an) animal" would not be true. Surely Plato himself, and all others, would grant that the consequence is false. But the consequence is obvious, since if man is separate from Socrates then it is diverse from him, and Socrates is not something diverse from himself; therefore, Socrates is not (a) man. Again, if Socrates is (a) man and Plato too is (a) man, then by conversion man is Socrates and man is Plato. Therefore, I ask whether it is the same undivided man that is Socrates and that is Plato, or if it is one that is Socrates and another that is Plato. If it were said that it is the same

the copula in the conceded sentences of each argument as entailing strict coreferentiality, and so finds the separation of the Forms unintelligible.

Yet Buridan seems aware that this is too shallow an understanding. He develops an original interpretation of platonism, based on an analogy with Averroës's understanding of the active intellect, which severs the formal signification of a term from that for which it (materially) supposit and so might seem to permit some kind of separation of the universal and the singular (QM VII q. 15 fol. 50vb):<sup>14</sup>

Yet it is to be believed that [Plato] held [a position] like the position of the Commentator on the human intellect. [The Commentator] believed, as is apparent from [his commentary on] *De anima* 3, that all men understand by numerically the same intellect and that this [intellect] is separate from all men such that it does not inhere in them but still stands to them as present and without any distance

and undivided, then by an expository syllogism it follows that Socrates is Plato, for whatever are the same as one and the same undivided [thing] are the same as each other. Yet if it were said that it is not the same man but one in one and another in the other, although separate, then there would be as many separate men as there are singular men, and this is absurd, and neither has anyone ever held it. It is certainly to be believed that Plato never held that there were things separate from each other but not distinct for which the terms 'Socrates' and 'Plato' supposit and for which the sentence "Socrates is (a) man" is verified." Note that the conversions Buridan uses take *Socrates est homo* and convert it to *Homo est Socrates*; the lack of an article in Latin renders the translation somewhat obscure.

<sup>14</sup> Sed credendum est quod ipse opinabatur sicut commentator opinatur de intellectu humano. Ipse enim credidit, ut apparet III De anima, quod eodem intellectu in numero homines intelligerent et quod ille esset separatus ab omnibus hominibus ita quod non inhaerens illis sed tamen assistens eis praesentialiter et indistanter, sicut diceremus deum assistere toti mundo. Quamvis ergo essent multi intelligentes, tamen unico intellectu essent intelligentes, et iste terminus 'intelligens' bene supponat pro hominibus, tamen significat formaliter rem separatam ab eis, scilicet intellectionem in isto intellectu existentem; unde nullum est inconueniens quod terminus aliquis supponat pro aliquo et tamen formali significatione significat rem separatam ab illo. Sicut iste terminus 'agens' supponit pro re quae agit, et tamen formali significatione significat actionem qua ipsum dicitur agens—quae tamen non est in agente sed in passo—ita cum dico "lapis videtur" vel "lapis est visus" iste terminus 'visus' supponit pro lapide et tamen formali significatione significat visionem qua lapis videtur, quae non est in lapide sed in oculo. Ita ergo dicebat Plato quod humanitas vel animalitas est forma separata ab istis animalibus vel hominibus, quae licet sit una et eadem tamen illa humanitate omnes homines et omnia animalia illa animalitate sunt animalia. Et ideo indubitanter concessisset Plato quod alius homo est Socrates et alius Plato, et tamen eadem humanitate Socrates et Plato sunt homines. (Si aliquando ille terminus 'homo' sumeretur prout supponeret pro humanitate tunc ista non concederetur "Socrates est homo.").

(*praesentialiter et indistanter*), as we say God stands to the whole world. Therefore, although there would be many who understand, nevertheless they would understand by a unique intellect. The term 'understanding' would correctly supposit for men, yet formally signify a thing separate from them, namely the understanding existing in that [unique] intellect, and so there is no contradiction that some term supposits for something and yet by its formal signification signifies a thing separate from it. Just as the term 'agent' supposits for the thing that acts, and yet by its formal signification signifies the action by which it is called an agent—which nevertheless is not in the agent but in the patient—so too when I say "A stone is seen" the term 'seen' supposits for the stone and yet by its formal signification signifies the seeing by which the stone is seen, which is not in the stone but in the eye. Therefore, Plato said in this way that humanity or animality is a form separate from these men or these animals, which, although [the form] is one and the same, all men are nevertheless [men] by that humanity and all animals are animals by that animality. Hence Plato would doubtless have granted that one man is Socrates and another Plato, and yet Socrates and Plato are men by the same humanity. (If the term 'man' were sometimes taken so as to supposit for that humanity, then "Socrates is a man" would not be granted.)

Indeed, we might add that if the term 'seen' were sometimes taken to supposit for what it formally signifies, then "A stone is seen" is also false, since 'seen' then supposits for the act of seeing in the eye while 'stone' supposits for an external object.<sup>15</sup> Universal terms supposit for singulars as the recipients of the metaphysical activity and presence of the associated Form. Hence universal terms supposit for what they signify, although not for their formal signification. This interpretation seems to avoid the difficulties with coreferentiality which Buridan found decisive in rejecting the previous crude characterization of platonism.

Despite the ingenuity of the proposed interpretation, Buridan rejects 'platonism' of this sort, adopting two of Aristotle's arguments that are based

<sup>15</sup> There is an obvious difficulty with Buridan's suggestion, namely that a term need not supposit for that which it formally signifies, despite the fact that Buridan clearly takes such a term to have personal rather than material supposition. This problem is not local to the proposed interpretation, since, as Buridan correctly points out, it arises with regard to ordinary terms such as 'agent' and 'seen.' I do not know of any discussion in which Buridan tries to work out the details of ordinary signification and formal signification.

on the separateness of the Forms: such a position would entail that individuals would neither be knowable nor even entities. The first argument, that individuals would not be knowable, is a variation of the first argument given against the previous crude characterization of platonism (fol. 50vb):<sup>16</sup>

Those holding this [position] would hold that the humanity by which Socrates is a man is the quiddity of Socrates. Now any given thing is known properly and simply only in this, that its quiddity is known. But in knowing a thing separate and distinct from Socrates, Socrates is not known. Therefore, if the quiddity of those sensible things were separate and other than them we would not have knowledge of those sensible [things]. Yet this is clearly false, since a doctor only investigates the science of medicine in order to know how to cure those men regarding whom he has scientific knowledge, and still he only knows how to cure sensible men.

The objection is ineffective, even without the theory of participation, since it could be maintained that knowledge of sensible individuals is only knowledge of them insofar as they are what they are in virtue of a separate Form. After all, there is no scientific knowledge, strictly speaking, of Socrates, who is a contingent and mutable particular without a definition.

The second argument is that individuals could not even properly be counted as entities (fol. 50vb):<sup>17</sup>

Something is not intrinsically a being by a thing separate [from it], and yet nothing is a being except intrinsically by its entity; therefore, if the entity of this [individual] were separate from it, it would not be a being.

Yet this objection begs the very point at issue, namely whether something can be what it is in virtue of something separate from it. The defender of platonism will reply that it is possible, and Buridan's objection amounts to the mere assertion of the contrary. Buridan also adds an objection on the grounds of ontological parsimony (fol. 51ra):<sup>18</sup>

<sup>16</sup> Sic ponentes ponebant quod humanitas qua Socrates est homo est quidditas Socrates. Et unumquodque non scitur proprie et simpliciter nisi per hoc quod scitur quidditas eius, et tamen in sciendo rem separatam a Socrate non sciretur Socrates. Si igitur quidditas istorum sensibilium esset separata et alia ab eis non haberemus scientiam de istis sensibilibus. Et tamen hoc est manifeste falsum, quoniam medicus non quaerit scientiam medicinalem nisi ut sciat sanare illos de quibus habet scientiam, et tamen non scit sanare nisi homines sensibiles.

<sup>17</sup> Aliquid non est ens intrinsice per rem separatam, et tamen nihil est ens nisi per suam entitatem intrinsice; ergo si entitas huius esset ab isto separata non esset ens.

<sup>18</sup> Omnino frustra ponuntur talia si praeter ista omnia possint salvari quae cum illis

It is completely useless to posit such [separate forms] if, leaving them aside, everything can be preserved that could be preserved with them—but everything can be so preserved, as will be apparent in the resolution of [the principal arguments]; therefore, *etc.*

In short, there is no compelling reason to postulate such separate forms; “everything can be preserved that could be preserved with them,” that is, all the claims admitted by both sides of the dispute can be satisfactorily held as true without postulating separate forms.

In QM VII q. 16 Buridan takes up the question whether universals are distinct from singulars, taking ‘universal’ and ‘singular’ as the things that are signified by universal and singular terms. His answer, again, will be that they are not. Now Buridan does not specify the kind of distinctness involved, but it is clear from his discussion (and especially the principal arguments) that he means any distinction *a parte rei*. In particular, he does not mean to exclude the claim that the universal is distinct from the individual by a pure distinction of reason. Thus his target in this question is any theory which ascribes an ontological status to the universal other than that possessed by the individual. More precisely, Buridan is rejecting any theory which takes the individuality of an individual (anything capable of existing *per se*) to be derived from an extrinsic principle that has independent ontological status; for example, some factor that contracts a common nature, such as matter or haecceity.<sup>19</sup>

Buridan offers several arguments against such theories, the first two of which are the arguments proffered against the crude characterization of platonism. If ‘man’ in “Socrates is (a) man” supposits for something with an independent ontological status, then the terms are not coreferential and hence the sentence is false. Nor can it be maintained that strict coreferentiality is not required, since if *e. g.* the copula were interpreted along part-whole lines, the sentence “Socrates is (a) man” would be a denominative rather than an essential predication. Again, if ‘man’ supposits for something that is the same as Socrates and the same as Plato, then Socrates is Plato, and if it supposits for something distinct in each case, then each of

salvantur, sed possunt ut apparebit per solutiones; ergo *etc.*

<sup>19</sup> It is not clear whether Buridan took his arguments to be effective against theories which deny any independent ontological status to the common nature, *e. g.* theories maintaining that the common nature has no real being or that the common nature is neutral with respect to being (as Aquinas is alleged to have held). Presumably Buridan would simply ask what theoretical benefit is gained by taking individuality to be derived from a ‘common nature’ that does not and cannot exist rather than holding that individuality is a *per se* characteristic of individuals.

these distinct entities is just as singular as Socrates or Plato himself, “and so it turns out again that there are not universals distinct from singulars.”<sup>20</sup> Nor can it be maintained that there are individualized forms but that such forms are what they are in virtue of a distinct universal, since if that distinct universal has an independent ontological status it plays the role played by the platonist's separate forms, refuted in the previous question. Buridan offers an independent third argument against this position, a dilemma with a subordinate trilemma (QM VII q. 16 fol. 51va–b):<sup>21</sup>

If humanity is in [Plato] and in Socrates and we posit that Socrates is corrupted, then I ask whether the humanity that was in him is

<sup>20</sup> Buridan's statement of the arguments is as follows: “I say that there are not universals distinct from singulars, since then it would follow that the predication of a universal term of a singular term would be false, as in saying “Socrates is (a) man.” But the consequent is false, and the consequence is proved as follows: if there were some thing which the term ‘Socrates’ signified [other] than that signified by the term ‘man,’ these terms would not supposit for the same thing, and so the affirmative sentence would be false. Yet some reply that terms correctly supposit for the same [thing] even if one of them were to signify something that the other does not signify. Accordingly, “man is white” is true, and yet the term ‘white’ signifies whiteness, which the term ‘man’ does not signify. But this sort of reply runs into another unacceptable [difficulty], namely that the sentence [“Socrates is (a) man”] would not be quidditative, but rather denominative, just as “Socrates is white” [is denominative] in that the term ‘white’ signifies or connotes something other than Socrates, and this would also be so in the case at hand. Again, as was argued in Book VII q. 15, the universal is predicated of its inferiors as by saying *e. g.* “Socrates is (a) man” and “Plato is (a) man,” and these sentences are converted as “Man is Socrates” and “Man is Plato.” Either man is the same and undivided that is Socrates and that is Plato, or it is one in the one and another in the other. If you were to say that it is the same and undivided, then it follows by an expository syllogism that Socrates is Plato: “Man is Socrates, and the same man is Plato; therefore, Socrates is Plato.” But if you were to say that one man is Socrates and another man is Plato, it then follows that these are singulars just as much as Socrates and Plato, and so it turns out again that there are not universals distinct from singulars.” Note that the conclusion of the second argument, contrary to Buridan's claim, is not the same as the conclusion of the second argument against the crude characterization of platonism.

<sup>21</sup> Si humanitas est in Platone\* et in Socrate et ponamus quod Socrates corrumpatur, ego peto utrum humanitas quae erat in eo corrumpitur an manet. Si corrumpitur, ista est singularis sicut Socrates, et singularis distincta ab humanitate Platonis quae manet. Si vero dicas quod humanitas Socratis vel etiam asinitas Brunelli non corrumpitur, sed manet Socrate vel Brunello corrupto, tunc oportet dicere quod fugiat ad alterum locum sine corpore, quid est absurdum, vel quod adhuc manet in cadavere, et tunc in illa humanitate vel asinitate remanet adhuc cadaver homo et asinus, quid est absurdum, vel tu pones tertium membrum quod illa asinitas manebit separata a corpore, et sic reverterentur ideae Platonis separatae de quibus ante dictum fuit. [\* = The text reads *in te*, but the remainder of the argument discusses Plato.]

corrupted or remains. If it is corrupted, then it is as singular as Socrates, and a singular distinct from the humanity of Plato, which remains. But if you were to reply that the humanity of Socrates or even the asinity of Brunellus is not corrupted, but remains even when Socrates or Brunellus is corrupted, then it is necessary to hold either (*i*) that it flies off to another place without a body, which is absurd; or (*ii*) that it at least remains in the cadaver, and then the cadaver would remain either a man or an ass by [the presence of] that humanity or asinity, which is absurd; or (*iii*) that the asinity would remain as separate from the body, and so we return to the separate Ideas of Plato, discussed before.

Therefore, Buridan concludes, “it is vain to hold that there are universals distinct from singulars if everything can be preserved without them—and they can, as will be apparent in the resolution of the principal arguments,” where Buridan is largely concerned with contexts in which no individual seems to correspond to the action of the verb: “I promise you a horse,” but no particular horse; “I desire water,” but no particular water; “Fire generates fire,” but no particular fire; and the like.<sup>22</sup> His resolution generally consists in pointing out that any given singular will serve the purposes marked out by the main verb (and that a universal would not), and so there is no compelling reason to countenance separate universals.

Buridan is thorough in his semantic reinterpretation of aristotelianism. In QM IV qq. 8–9 he discusses the traditional question whether the essence and the *esse* of a thing are the same, and prefaces his discussion with the comment that “I understand by ‘essence’ the thing itself.” The essence of Socrates is not a nonindividual entity, but in fact is simply Socrates himself.<sup>23</sup> Indeed, as regards reality, Socrates is not only his essence but he is

<sup>22</sup> Verbs such as ‘desire’ introduce are ‘intentional verbs’—verbs introducing what we now call opaque contexts. Examples of such intentional verbs are (*i*) cognitive or epistemic verbs, such as ‘know,’ ‘understand,’ ‘believe,’ and the like; (*ii*) conative verbs, such as ‘want,’ ‘desire,’ ‘intend,’ and the like; (*iii*) promissory-verbs, such as ‘owe’ or ‘promise.’ The fullest list, though Buridan acknowledges its incompleteness, is found in TC 3.4.7; their characteristics are discussed in *Sophismata* 4 sophisms 7–15, TS 3.8.24–31, TS 5.3.1–8, TC 1.6.12–16, TC 3.7.3–10, QM IV q. 8 and q. 14, QSP II q. 12. For a more detailed discussion of intentional verbs see the introduction to *Jean Buridan’s Logic*. Note that the ‘opacity’ introduced by generation in Buridan’s example of fire generating fire is a consequence of final causality, which is the fundamental explanation for why these contexts are opaque; the opacity of intentional verbs is a special case of final causality. Whatever the deficiencies of the mediæval physics of final causality, they did not take it to presuppose cognitive capacities.

<sup>23</sup> Understanding ‘essence’ as the concrete thing itself is, in fact, an older mediæval

also his *esse*. Buridan argues that essence and *esse* only differ in reason, that is, that the terms 'essence' and '*esse*' have distinct connotation, which is not reflected in any difference of supposition.<sup>24</sup> Thus the doctrine of essences poses no problems for Buridan's theory, and, with suitable interpretation of claims involving essences, he can adopt the terminology while avoiding its apparent ontological commitments.

Buridan has argued for the negative side of his case, that there are no nonindividual entities, whether existing independently or as metaphysical constituents either of things or in things. Therefore, no real principle or cause of individuality (other than the individual itself) is required. But negative arguments can only be part of the story; Buridan also has to make out a positive case, to show how his semantic interpretation of individuation can provide an adequate explanation of other difficulties.

### 5. The Semantics of Individuation

The result of Buridan's negative arguments is that universals are not distinct from singulars in any metaphysically interesting way, that is, "the universal is a term or concept in the mind by which we conceive simultaneously and indifferently many things existing as singular outside the soul, and that concept is posterior to those singular things since it is objectively caused

understanding of the term '*essentia*'—it is common in philosophers of the twelfth century, *e. g.* Peter Abelard. Buridan gives no sign that he sees himself as reviving an older usage, however.

<sup>24</sup> Buridan's diagnosis of the difference in connotation between 'essence' and '*esse*' is worth remarking, since he seems to suggest an analysis of existence as presence: "It seems to me that the verb 'to be' (*esse*) connotes presence, which 'essence' does not connote, nor the name 'stone,' *etc.* It does not connote temporal and successive presence, but rather presence as you are present to me. Even if all things were at rest, it is nevertheless true that 'to be going to be' or 'to have been' necessarily connote succession; yet if succession were never apparent, because all the [things] that now are perpetually had been, without any succession or motion, I believe that we would never have judged something to have been or something to be going to be, but we would have judged those [things] to be that are now apparent to us in the aspect of sense. Perhaps we apply the connotation of such presence to the present time for distinguishing between 'to be' and 'to have been' and 'to be going to be,' although for understanding a thing to be it would not be necessary to understand some time (*aliquid temporis*) along with it, but only that a thing is apprehended in the mode of presence within the prospectus of the knower, even if there were no succession or it were imagined. Moreover, when we free (*absoluimus*) the concept of a thing from the concept of such presence, and also from the concept of the relation of a thing to such presence, then we impose the names 'essence' and 'man' and 'stone' for signifying things."

by them" (QSP I q. 7). Universals are 'really' distinct from singulars in the way in which concepts are 'really' distinct from that of which they are the concepts. Since the universal term signifies many individuals, it may supposit for those individuals; 'individual' and 'universal' are alternate ways of conceiving exactly the same things.<sup>25</sup> Since there are no nonindividual real entities, issues such as "whether in substances the species is contracted<sup>26</sup> to the individual by a substantial or accidental differentia," which is the subject of QM VII q. 17, are simply confused if taken with regard to real entities; they require instead a semantic interpretation (fol. 52va):<sup>27</sup>

This 'contraction' is not with respect to the things signified [by the concept], putting all concepts aside, since then man or animal or body or substance *etc.* would exist as singular, just as Socrates and Plato [exist as singular], for man is nothing other than Socrates or Plato. Therefore, since man or animal is a thing existing as singular, then if everything else were put aside it is clear that it would not require any contraction such that it would exist as singular. And so

<sup>25</sup> Put another way, the universal term or concept may be 'identified' with any one of its instances as that which the universal term or concept signifies; Buridan admits this usage, although properly speaking the relation is not identity but signification. What precisely a given universal term or concept supposits for is a function of the sentential context in which it appears; the most general case is 'distributive supposition,' according to which "from a common term there can be inferred any of its supposits individually or even all conjoined together in a conjunctive sentence" (TS 3.6.1). For example, the term 'man' in "every man is running" distributively supposits for each and every individual man. Buridan offers rules for distributive supposition in TS 3.7, and some rules for contexts which block distributive supposition in TS 3.8. Note that there is an asymmetry between 'individual' and 'universal': while these terms strictly apply to concepts, every thing capable of existing *per se* may correctly be described as individual, but only misleadingly as universal.

<sup>26</sup> 'Contraction' is the genus of which 'individuation' is the lowest species: it refers to the relation between the more general and the less general. Individuation is precisely the relation between the species and the individual, *e. g.* between man and Socrates; contraction includes this as well as the relation between the genus and species, *e. g.* animal and man.

<sup>27</sup> *Ista contractio non est quantum ad res significatas circumscriptis conceptibus, quia ita singulariter existit homo vel animal aut corpus aut substantia et caetera, sicut Socrates vel Plato, quia nihil aliud est homo quam Socrates vel Plato. Cum ergo homo vel animal sit res singulariter existens, etiam si omnia alia essent circumscripta manifestum est quod non indiget aliqua contractione ad hoc quod singulariter existat. Oportet ergo dicere quod huiusmodi contractiones habent intelligi quantum ad conceptus vel terminos significativos rerum. . . Ita etiam terminus qui est species diceretur contrahi ad terminum singularem per additionem differentiae restringentis terminum specificum ad supponendum pro illo solo pro quo supponit terminus singularis.*

it must be said that contractions of this sort have to be understood with respect to concepts or terms that are significative of things. . .

A term that is a species would be said to be contracted to a singular term by the addition of a differentia restricting the specific term to supposit for only that for which the singular term supposit.

The metaphysical question of contraction is interpreted as a semantic question about the restriction of supposition. The general application of this technique leads to a semantic reformulation of questions regarding individuation. Therefore, the appropriate context in which to raise philosophical problems about individuation is the semantic framework outlined in §2, with the full apparatus of mental language and concepts at its core. So stated, a closer look at the nature of the concepts which are the terms of mental language is in order.

In QSP I q. 7 and in QA III q. 8, Buridan inquires about the foundations of mental language, addressing the possibility of both universal and singular cognition: “since there are no universals outside the soul distinct from singulars but every thing exists as singular, whence does it come about that things are sometimes understood as universal?” He rejects the traditional response, that this is due to the immateriality and separability of the intellect, instead ascribing it to the internal functioning of the intellect (QSP I q. 7 fol. 8vb).<sup>28</sup>

The reason for this is that things are understood not through this, that they are in the intellect, but through their likeness existing in the intellect. Moreover, external things have agreement and likeness among themselves from their nature and from their essence, as I now assume and will later establish. Now if it were the case that there are many [things] similar to each other, anything similar to one of them in the respect in which they are similar [to one another] is similar to every one of them. Hence if all asses in fact have an agreement and likeness with one another, it is necessary that when the intelligible species will represent some ass in the intellect in the manner of a likeness it will indifferently represent any given ass at

<sup>28</sup> Et ratio huius est quia res intelliguntur non per hoc quod sunt apud intellectum sed per suam similitudinem existentem apud intellectum. Res autem extra ex natura et ex essentia sua habent inter se convenientiam et similitudinem, ut suppono et postea declarabo. Modo si sit ita quod sint multa invicem similia, omne illud quod est simile uni eorum quantum ad hoc in quo sunt similia est simile unicuique aliorum. Ideo si omnes asini ex natura rei habent adinvicem convenientiam et similitudinem, oportet quod quando species intelligibilis in intellectu repraesentabit per modum similitudinis aliquem asinum ipsa simul indifferenter repraesentabit quemlibet asinum, nisi aliud obstet (de quo postea dicitur). Ideo sic fit universalis intentio.

the same time, unless something prevents it (as will be discussed later). Thus a concept (*intentio*) becomes universal in this way. The same account is given in QA III q. 8. The intelligible species is a likeness, and so objectively similar to all the things it resembles.<sup>29</sup> Hence things are understood as universal due to the intrinsic 'processing features' of the intellect. Yet this response, while grounding universal cognition, seems to make singular cognition impossible: if the intellect always understands through a likeness, then the inherent generality of resemblance seems to preclude singular cognition.

Buridan avoids the difficulty by pointing out, in essence, that when the thing to be cognized is "within the prospectus of the knower," the direct contact between the knower and the object can supersede the mediating generality of representations. The external senses represent an object to the interior or common sense in a 'confused' manner (QSP I q. 7 fol. 9ra):<sup>30</sup>

<sup>29</sup> It might be thought that Buridan's account runs into difficulties with the nonindividual status of the objective resemblance (the "agreement and likeness") between individuals of the same species. Is this not to countenance some real similarity, and so to countenance universals? The answer is that it does not. In QM V q. 6 Buridan argues that "whatever [things] are said to agree or to be diverse of themselves, in those [things] the agreement or disagreement are not things or dispositions added to those things," and that "the diversity of Socrates from Plato is Socrates, and conversely that the difference of Plato from Socrates is Plato, just as the paternity of Socrates to Plato, positing that there is no thing added, would not be Socrates and Plato, but rather would be Socrates, and the filiation of Plato would be Plato." In general, the relation of *A* to *B* is just *A*, and the relation of *B* to *A* is just *B*. (Note that this entails that all relations are, in modern jargon, ordered pairs.) Relations are distinguished by what they connote. Hence 'similarity' has no real ontological status, reducible to pairs of similar items in a token-token reduction. Moreover, the degree of similarity required for distinct beings to be counted as the same may vary depending on context. Inscriptions and utterances are counted as 'the same' if they resemble one another strongly enough; Buridan terms this 'equiformity.' In most cases, distinct occurrences of an inscription, e.g. 'Socrates' and 'Socrates,' may be counted as equiform. Self-referential contexts, such as appear in the statement of the Liar-paradox, force a more fine-grained approach to similarity-classes. See Hughes, *John Buridan on Self-Reference*, for more detail on this point.

<sup>30</sup> The text reads: "Sensus autem exterior obiectum suum apprehendit confuse, cum magnitudine et situ ad ipsam tamquam apparens in prospectu eius aut longe aut prope aut ad dexteram aut ad sinistram; ideo percipit obiectum suum singulariter tanquam demonstratum hic vel ibi." See also QA III q. 8: "Exterior sense cognizes the sensible in the manner of existing within its prospect, in a certain location. . . although exterior sense cognizes Socrates, or whiteness, or white, nevertheless this is only in a species represented confusedly, since [it represents] the substance, the whiteness, the magnitude, and the location in accordance with what appears in the prospect of someone cognizing it" (trans. J. A. Zupko). The interior or common sense is no

An exterior sense apprehends its object confusedly, with the size and location pertaining to it as well as appearing within its prospectus as either near or far, or to the right or to the left. Hence it perceives its object as singular inasmuch as [it perceives its object] as picked out here or there.

This ‘confusedness’ is a matter of the agglomeration of particular circumstances that are fused together (*con-fusa*) in the act of sensing, not the ‘confusedness’ of generality. Now “sense represents a sensible object to the intellect with this sort of confusedness, and just as it primarily represents the object to the understanding, so the intellect primarily understands the thing; therefore, the intellect can primarily know the thing with confusedness of this sort and so as singular.” Singular cognition is possible in this way. Thus a singular concept is only acquired by direct contact with the individual, by means of intuitive cognition (QM VII q. 20 fol. 54va):<sup>31</sup>

Nothing is a singular concept unless it is a concept of a thing in the manner of existing in the presence and within the prospectus of the knower, insofar as that thing were to appear to the knower just as by an ostension picking it out, and in that manner of knowing some call ‘intuitive.’ It is true that by memory we conceive a thing as singular by this, that we remember it to have been within the prospectus of the knower, and in such a manner it was known.

Mental language is natural, in the sense that the connection between concepts and their significates is nonconventional, and its formal structure is universal to all thinking beings other than God, but its ‘material’ elements—the concepts that make up the nonlogical ‘vocabulary’ of mental language—must be acquired through experience. In effect, Buridan is claiming that the only way to possess concepts that are discrete terms in the vocabulary of mental language is through direct contact with the individual the concept is to signify. Past experiences of direct contact will serve, since the singular concept may be retained in memory. Nevertheless, there must be

better off as regards this confusedness (QSP I q. 7): “the interior sense cannot free and abstract the appearance (*speciem*) of the object as color or sound from this kind of confusedness... hence the interior sense only perceives singularly.” In QSP I q. 7 Buridan criticizes at length theories that take intellectual knowledge of the singular to be derived from a ‘reflection on sense’ rather than a distinctive and direct capacity of the intellect.

<sup>31</sup> Nullus est conceptus singularis nisi sit conceptus rei per modum existentis in praesentia et in prospectu cognoscentis tanquam illa res appareat cognoscenti sicut demonstratione signata et istum modum cognoscendi vocant aliqui ‘intuitivum.’ Verum est quod per memoriam bene concipimus rem singulariter per hoc quod memoramur hoc fuisse in prospectu cognoscentis, et per talem modum illud cognovisse.

a direct contact at some point for genuine singular cognition. The actual mechanism by which a new singular concept is acquired, that is, the way a new discrete term is introduced into mental language, is through imposition, a performative act Buridan describes as akin to baptism (QSP I q. 7 fol. 9ra):<sup>32</sup>

If I were to announce *this* [man] within my prospectus to be picked out by the proper name 'Socrates' (rather than by such-and-so [characteristics]), then the name 'Socrates' would never fit anyone else no matter how similar, unless there were a new imposition and [the name 'Socrates'] were imposed to signify that other person, and hence equivocally.

Singular concepts are related to their significates directly and not through a likeness, which would entail a degree of semantic generality.<sup>33</sup> The semantic property of individuality, that is, predicability of only one, is secured through "presence within the prospect of the knower" as an essential feature in the acquisition of the singular concept.

It follows from this account that there are only two classes of genuinely discrete terms, *i. e.* only two kinds of discrete term in mental language: the proper names of individuals with which one has come into direct contact, and demonstrative expressions.<sup>34</sup> The names of individuals with which one has never come into direct contact, Buridan holds, are not strictly dis-

<sup>32</sup> The text reads: "Si hunc in prospecto meo demonstratum voco 'Socratem' nomine proprio non quia talis vel talis sed quia isti nunquam alii quantumcumque simili conveniret hoc nomen 'Socrates' nisi ex alia impositione esset impositum ad significandum illum alium et sic equivoce." Buridan also describes imposition explicitly as baptism: "the name 'Aristotle' was imposed for signifying him in accordance with a singular concept, because those designating him [while Aristotle was] within their prospectus said 'Let this child be called "Aristotle!"' (QA III q. 8, modified from Zupko's translation and reading *vocetur* for *vocatur*); "the term 'Aristotle' is a singular term. . . and was imposed according to a singular concept, namely, when Aristotle was designated [and] it was proclaimed "Let him be called 'Aristotle!" (QM VII q. 20).

<sup>33</sup> Note, however, that this account of singular concepts sits uneasily with the basic claim that concepts signify their significates through natural objective similarity, that is, through intrinsic features, rather than through the genetic and causal story suggested by imposition—especially in QM VII q. 17, in which Buridan offers as a reason for the nondiscernibility of similar individuals that "our intellect understands things not as they are in it but according to their likenesses." This tension is not specific to Buridan. William of Ockham, for example, adopts the general line that concepts 'resemble' their significates, but in *Reportatio* II qq. 12–13 and *Quodlibeta* I q. 13 he asserts that intuitive cognition is of one individual rather than another, no matter how similar, due to the causal role played in the genesis of the concept by that very individual.

<sup>34</sup> Obviously such 'proper names' need not be the names of persons, or even animate

crete terms but rather disguised descriptions: “to others who have not seen [Plato or Aristotle], those names are not singular, nor do they have singular concepts corresponding to them simply” (QA III q. 8); we who have never come into direct contact with Aristotle “do not conceive him as different from other men except by a given circumlocution, such as ‘a great philosopher and teacher of Alexander and student of Plato, who wrote books of philosophy which we read, *etc.*’” (QSP I q. 7), which would equally signify and supposit for another individual if there were one having engaged in these activities. Put another way, the fact that ‘Aristotle’ supposits only for Aristotle is not a matter of semantics but depends on the contingent historical fact that no other individual happens to fit the description; hence it cannot be a discrete term. The same point may be made about descriptions generally, including definite descriptions: “the expression ‘the son of Sophroniscus’ is not, strictly speaking, singular, since ‘the son of Sophroniscus’ is immediately apt to fit more than one if Sophroniscus produces another son” (QA III q. 8).<sup>35</sup> However, Buridan isolates a class of expressions closely related to definite descriptions, expressions composed of a demonstrative combined with a common noun (*e. g.* ‘this man’). He calls such an expression a ‘vague singular’ (*singulare vagum*), noting that a genuinely singular concept may correspond to a vague singular due to the indexical force of ‘this,’ although “it is difficult to cognize singularly in this way” (QA III q. 8 and QM VII q. 17).

Clearly, though, vague singulars do not form a distinct linguistic class in mental language, since they are composed of elements already present. The semantics of mental language, based on the nature of concepts, determine

beings. In QM VII q. 17 *ad 2*, Buridan notes that a ‘proper name’ (a discrete term) may be imposed upon an accident, as in *e. g.* naming this whiteness ‘Robert.’ For Buridan, demonstratives are a subclass of the general linguistic class of ‘identificatory-relative terms,’ which may have anaphoric as well as pronominal reference (see TS §4). Buridan states the point clearly for ‘this’ in QA III q. 8: “the demonstrative pronoun ‘this’ is not correctly applied according to its mode of signifying unless there is a cognition of the thing in the mode of existing in the prospect of someone cognizing it” (trans. J. A. Zupko). In QSP I q. 20 Buridan notes that “when the pronoun ‘this’ is taken simply and without addition, it supposits only for a total substance subsisting *per se*,” that is, for an individual. The proper names of individuals with which one has come into direct contact are like constant-valued demonstratives. Buridan also allows demonstrative expressions of the form ‘this man’ to function as complex singular referring expressions: see the discussion of vague singulars below.

<sup>35</sup> This is contrary to the assertions in Peter King, *Jean Buridan’s Logic* 41, and Alan R. Perriah, “Buridan and the Definite Description,” *Journal of the History of Philosophy* 10 (1972), 153–160. Nevertheless, Buridan is clear on this point—or as clear as he can be, given the lack of a definite article in Latin.

what terms can be properly regarded as discrete. Buridan did not permit natural necessity or even metaphysical necessity to infringe upon the domain of semantics: terms such as 'sun' describe a kind of entity, namely 'the largest and brightest planet,' which are naturally unique, but the term 'sun' is nevertheless semantically general; indeed, he is so bold to assert the same for the term 'god,' who is not only naturally but metaphysically unique.<sup>36</sup> Truths about the world, even truths about the necessary uniqueness of certain entities, do not secure the semantic individuality of terms. What, then, exists in the world as the correlate to discrete terms? That is, what are the possible individuals discrete terms might supposit for? This is to ask about Buridan's ontology, at least in its general outlines, and is the subject of the next section.

## 6. Buridan's Ontology

What it is to be a being, strictly speaking, is to be capable of existence *per se*. Hence the capability to exist *per se* characterizes all individuals, and conversely.<sup>37</sup> What kinds of individuals are there, that is, what beings can

<sup>36</sup> See QSP I q.7 and QM VII q.18. Buridan states the point succinctly in QM VII q. 20: "There are many terms, each of which supposits for a single (*unica*) thing, and it is not possible (with its signification unchanged) that [each of these terms] supposit for many. For example, the term 'god' can never supposit for many things according to its proper signification, since it is impossible that there be many gods. So too the term 'sun' or the term 'moon' cannot supposit for many unless a miracle were to happen, since it is not possible by nature that there is another sun or another moon or another world, and so on. Yet the aforementioned terms are not singular terms; rather, they are more common terms due to their manner of imposition: it is not repugnant to these terms from the manner of their signification to supposit for many. Indeed, if *per possibile* or *per impossibile* there were another god or another sun or another moon, the aforementioned terms would, without any new imposition, supposit for them just as they supposit for those that now exist. Yet on the part of the things signified, it is repugnant that they supposit for many, although a term is not called 'singular' from such repugnance. Thus it should be said that the aforementioned terms do not correspond to singular concepts, but rather to specific and common concepts, since with regard to the manner of conceiving it is repugnant that such a concept be indifferent to many things."

<sup>37</sup> See QC q. 4A: "It should be noted that 'to exist *per se*' is taken in two ways—rather, in many ways. (1) [It is taken] for that which is not a part of something one *per se*, and which depends on or sustains nothing; in this sense only God exists *per se*. (2) It is taken for that which is not a part of something one *per se*, nor is in something as in a subject; in this sense separate substances and *per se* composites exist. (3) That is said to be and to exist *per se* which is not in something as in a subject, whether it is a part of something one *per se* or not; in this sense not only perfect substance exists *per se* but also that which is part of something else. And in the case at hand

exist *per se*? For Buridan, at least four kinds of beings count as individuals which may exist *per se*: (i) primary substances, that is, the things for which 'primary substance' terms supposit; (ii) separable substantial forms; (iii) prime matter; (iv) separable accidents. A closer look at each of these is in order.

First, all beings that Buridan characterizes as 'substances subsisting *per se*' will be individuals: God, the Intelligences, primary substances such as Socrates and Brunellus. Anything that, in aristotelian terminology, can be a 'this-something' (*hoc aliquid*) is an individual.<sup>38</sup> Second, at least some substantial forms are separable, namely the souls of humans, and hence are individuals capable of existing *per se*. So much is obvious and unproblematic.

Third, prime matter, which is of itself a being, may exist *per se*, at least by divine power: in QSP I q. 20 Buridan argues that "[prime] matter is in

I call all that 'one *per se*' which is one (i) indivisibly, as God and the angels; or (ii) essentially, as bronze and other substantial composites of their [own] essential parts; or (iii) by continuation, as wood and other things whose parts are continuous with each other (*cuius partes ad invicem continuantur*).” In the discussion that follows we shall concentrate on (2), that is, the ability to continue in existence independently, which characterizes primary substances, accidents, separable substantial forms, and matter. A complete understanding of this notion would also involve an analysis of what Buridan understands by 'existing' or 'subsisting,' especially in light of his comments in QM IV q. 9, in which *esse* seems to be equated with the presentiality of an object (see note 24 above).

<sup>38</sup> In QM VII q. 19, Buridan states that the term 'this-something' (*hoc aliquid*) is "a term of first intention, since it supposits for substance subsisting *per se*." What is more, it supposits for individuals, since "common terms are restricted by the demonstrative pronoun to supposit for only one supposit, namely only for that which we signify demonstratively." Buridan summarizes: "The term 'this-something' is a discrete term suppositing for only one. . . the term 'this-something' taken simply and strictly only supposits for the total substance subsisting *per se*, and not for some accident, nor for [some] part of a substance subsisting *per se* (*i. e.* for its matter or for [its] form). For the question simply inquiring "what is this?" inquires about the total substance subsisting *per se* and not about some part or some accident of it." That this is a feature of 'this-something' due to the presence of the demonstrative is borne out by Buridan's account in QSP I q. 20: "I say that although [when] the demonstrative pronoun 'this' is taken *secundum quid*, that is, with additions, it correctly supposits for accidents, such as 'this color,' 'this whiteness,' 'this accident,' nevertheless, when the [demonstrative] pronoun 'this' is taken simply and without addition, it only supposits for a total substance subsisting *per se*. Accordingly, although there are many accidents in a stone, nevertheless if we simply ask what this is, we do not say that it is whiteness or magnitude; nor do we say that this is an aggregate [composed] of whiteness and the stone; rather, we precisely answer that this is a stone. . . the term 'this' taken simply supposits for a substance subsisting *per se*."

act, and it would be in act even if it were to exist without either substantial or accidental form inhering [in it].” However, it naturally exists as informed by some form, and in that condition it is not individual, “unless God were to conserve it without them.” In its natural condition, prime matter is in act, but only as a component part of some composite substance; it is not of itself a ‘this-something,’ as Buridan specifically argues. The individuality of prime matter, whether as a component part or as existing independently by divine power, is purely negative, reflecting only the ‘absence of division’ described in §3.

Fourth, Buridan argues in QM V q. 8, in consequence of the phenomenon of the Eucharist, that accidents are capable of existing *per se* as separate from any substance: they may exist without inhering in anything at all, at least by divine power.<sup>39</sup> Now if it is not part of the nature of, say, whiteness to inhere in a substance, then a further special kind of metaphysical glue is required for the actual bonding of substance and accident. Buridan terms this glue an ‘added disposition,’ which is nothing other than an inseparable quality of inherence (inseparable since otherwise there would be an infinite regress of such qualities).<sup>40</sup> This is a clear philosophical break with Aris-

<sup>39</sup> Buridan establishes this claim as a general result, which is independent of the question which accidents actually exist. Certainly some accidents from the category of quality, such as whiteness, genuinely exist. Motions also exist: see Calvin Normore, “Buridan’s Ontology,” for a defense of the independent existence of motions. Relations, on the other hand, seem to be no more than the foundation, *i. e.* the principal *relatum*. There is as yet no consensus on the particular kinds of accidents Buridan countenances. However, see the remarks below about how *e. g.* every thing is a relation, for some reason to have skepticism about any neat summary of Buridan’s views on such matters.

<sup>40</sup> See QM V q. 8 *ad* 2: “I say that there must be an added disposition for this, that the whiteness inhere in the stone (or even for this, that it depend on the stone), for the reason that it is possible that it persist not inhering or depending on the stone. Further: [if] you say that the disposition inheres in the subject and depends on it, I concede [the point], but this is *inseparably*, just as Aristotle believed that whiteness inhere in the stone. Accordingly, God could not bring it about that there be an inherence of whiteness in the stone and that there not be whiteness, since that would imply a contradiction. It is not possible that there be such modes of relating this to that (*tales enim modos se habendi hoc ad illud*) unless this or that exists. Hence, since they inseparably\* inhere and depend, it should be said that they inhere of themselves and they depend without any further disposition, and hence there is no infinite regress. When it is asked what subject such a disposition inheres in, [my answer is that] I believe that it should be said that the disposition required for this, that man be white, beyond man and whiteness there is the inherence of whiteness in man and it exists subjectively through it, such that whiteness is formally inhering in that man through this inherence and subjectively through itself. And thus I say that the ray [of light] depends on the Sun through the added disposition which is

tote, and Buridan recognizes it to be such, carefully describing Aristotle's position before presenting his alternative view. What makes substances differ from (separable) accidents? Buridan's summary response is that substances can naturally exist *per se*, whereas accidents can exist *per se* only through direct divine intervention. Yet this is not an essential difference between substance and accident, and from the metaphysical point of view there is no difference between them.

If there is no metaphysical difference between substance and accident, it follows that a reassessment of the nature of the aristotelian categories is in order. Buridan regularly insists that the categories are not classifications of things or beings or entities. Nor do they categorize terms, strictly speaking; they are groupings of modes of predicating terms of proper names (primary substances). There are many illustrative comments to this effect, but one of the clearest statements is in QC q. 3 (18.96–104):<sup>41</sup>

But [the categories] are taken from diverse concepts (*intentiones*), according to which terms are connotative (or even nonconnotative) in different ways. From these diverse connotations there arise the diverse modes of predicating terms of primary substances; hence [the categories] are immediately and directly distinguished according to the different modes of predicating with regard to primary substances. If [terms] are predicated *in quid* or essentially of them, then such terms are in the category Substance; if they are predicated denominatively *in quale*, they are in the category Quality; if [they are predicated] *in quantum*, they are in the category Quantity...

This position, taken in isolation, is not atypical; many other mediæval philosophers would agree with Buridan's analysis, at least in its general outlines. The standard analysis, though, builds bridges to ontology by claim-

the dependence inhering in itself. These dispositions are truly accidents which are inseparably related to their subjects, as Aristotle believed [was the case for] whiteness and hotness." [\*For '*inseparably*' the text has *separabiliter*, which makes no sense given the context; it seems obvious that *inseparabiliter* is the correct reading.] Such 'added dispositions' are inseparable, but they may, of course, be destroyed, as when God preserves the accident without its inhering in any substance.

<sup>41</sup> Sed sumuntur ex diversis intentionibus, secundum quas termini sunt diversimode connotativi vel etiam non connotativi. Ex quibus diversis connotationibus proveniunt diversi modi praedicandi terminorum de primis substantiis; et ita directe et immediate distinguuntur penes diversos modos praedicandi de primis substantiis. Si enim praedicentur in quid sive essentialiter de ipsis, tunc tales termini sunt de praedicamento substantiae; si vero praedicantur in quale, tunc sunt de praedicamento qualitatis; et si in quantum, sunt de praedicamento quantitatis... See also *e.g.* QM IV q. 6; *Sophismata* 4 Remark 3; the beginning of Treatise §1 of the (as yet unedited) *Summulae de dialectica*; and elsewhere.

ing that such modes of predicating somehow reflect a deep truth about the way the world is. And this is where Buridan parts company with his aristotelian heritage: he wants to burn all the bridges connecting the categories to ontology. The modes of predicating terms of primary substances have no privileged role: Aristotle's list is neither necessary nor sufficient. Buridan frequently refers to *Topics* 4.3 124<sup>a</sup>10–14, in which Aristotle mentions only four categories, taking this as evidence that they are not necessary; he argues that they are not sufficient in QC q.3 (19.137–146).<sup>42</sup>

Many people labor in vain—those who seek to establish the sufficiency of the number of the categories. I believe that the sufficiency of the number of the categories could be established or proved only by finding [that there are] exactly so many distinct modes of predicating that are not reducible to some single more general mode of predicating according to a single general *ratio*, and, hence, there must be so many. But just because we do not find more general categories that are not contained under or reduced to these [ten] modes, we thereby do not posit more categories. Accordingly, if we were to discover more general modes of predicating beyond the aforementioned ten, it seems to me that we should not deny that there are more [than ten] categories.

In QM IV q.6, as elsewhere, Buridan insists that the terms 'action,' 'acting,' and 'active' pick out diverse most general genera, as do *e. g. qualitas, quale, and qualitativum*. Indeed, Buridan rejects the name 'substance' as a most general genus, preferring instead the term 'something' (*aliquid*) as the most general genus—motivated by his admission of separable accidents; substances and separable accidents both fall under 'something.' What is more, in QC q.7 Buridan proves successively that "every substance or divisible quality is quantity"; "every thing, or even every being, is a relation (*ad aliquid*)"; "every thing and every quantity is quality"; and, finally, "all things are quantity."<sup>43</sup> In short, Buridan simply discards the traditional

<sup>42</sup> Et ideo in vanum laboraverunt plures, qui per huiusmodi divisiones voluerunt assignare sufficientiam numeri praedicamentorum. Credo ergo quod non possit aliter assignari vel probari sufficientia numeri praedicamentorum, nisi quia tot modos praedicandi diversos invenimus non reducibiles in aliquem modum praedicandi communiorem acceptum secundum aliquam unam communem rationem, ideo oportet tot esse. Sed etiam quia non invenimus praedicabilia communia, quae sub istis modis non contineantur vel ad eos reducuntur, ideo non ponimus plura praedicamenta. Unde si aliqua praedicabilia communia inveniamus habentia alios modos praedicandi praeter dictos decem, apparet mihi omnino, quod non esset negandum, quin essent plura praedicamenta.

<sup>43</sup> The assumptions Buridan makes to establish these theorems are minimal: "I assume that the genus 'quantity' is truly and universally predicated of every abstract term

aristotelian categories as a guide to metaphysics. They are semantic in nature, merely classifying modes of predicating, and of limited value at that. Semantics and ontology are distinct enterprises. Only individuals exist, and individuals do not of themselves reflect any categorical features of the way the world is.<sup>44</sup>

Accidents, then, are just as individual as substances: whiteness is on a par with Socrates. The same analysis that applies to all individuals applies to accidents as well: there is no principle or cause of the individuality of an accident other than the accident itself. Thus accidents do not raise any difficulties with individuation the more standard cases of primary substances do not equally raise. Hence they need not be treated separately.

### 7. Identity Over Time and the Discernibility of Individuals

Buridan discusses two problems related to individuation, namely the identity of individuals over time and the discernibility of individuals. While not strictly a matter of the individuality of the individual, each question sheds some light on Buridan's understanding of the individuation, and each discussion is noteworthy in its own right.

Buridan devotes QSP I q.10 to the question whether Socrates "is the same today as he was yesterday, positing that today there is added to him something converted into his substance from what he ate, or even positing that some part were removed from him, as if his hand were cut off." He

which is strictly in the category of quantity, taking each personally, since the genus should be truly and universally predicated of any of its species. It is also assumed that all the abstract [forms] of concrete [terms] which strictly speaking predicate *in quantum* are strictly in the category of quantity, and so too the abstract [forms] of concrete [terms] which predicate *in quale* are in the category of quality. Otherwise, nobody could appropriately distinguish terms of the categories, nor assign in which category they should be placed" (QC q. 7).

<sup>44</sup> Given Buridan's rejection of the aristotelian categories, what is the status of metaphysics? In QM VI q.2 Buridan states that "the distinction [of the speculative sciences] is originally taken from some incomplex principles [*i. e.* terms], since after all this distinction should be taken from *rationes* or concepts, and not conclusions or principles." The speculative sciences are distinguished by different 'incomplex principles,' that is, by being concerned with different terms of sentences. Since we are speaking, as always, of Mental sentences, these terms are concepts, which are the reasons (*rationes*) for the imposition of the utterance or inscription as a term. Although "it is difficult to say what these terms are," Buridan remarks, they can be specified: metaphysics is concerned with the term '*ens*' (being); physics with the term '*ens mobile vel quantum*' (mobile being or quantity); mathematics with the term '*ens mesurabile*' (measurable being). See also QSP I q.3 and QCM I q.1 for further discussion of this point.

distinguishes three ways in which something is called 'numerically the same' as another (fol. 13vb):<sup>45</sup>

We customarily say that one thing is the same as another in three ways: either (1) *totally, i. e.* because the one is the other and there is nothing in the totality of the one which is not in the totality of the other, and conversely; this is to be numerically the same in the strictest sense. . . (2) *partially, i. e.* because the one is part of the other, and it is especially so-called if it is the greater or more principal [part], or even because the one and the other participate in something which is the greater or more principal part of each. . . (3) according to the continuity of diverse parts, with one [part] succeeding another.

Whether Socrates is numerically the same at different times depends on the sense of 'numerically the same' adopted. According to (1), "it should be said that I am not the same as what I was yesterday, for yesterday something was part of my totality which now is no longer (*resolutum est*), and also something else yesterday was not part of my totality that, after eating, is of my substance." In the strictest sense, then, Socrates is not totally the same yesterday as today. However, according to (2), "a man remains the same throughout his entire life, since his soul, which is the more principal (or indeed the most principal) part, remains totally the same." In this sense Socrates is partially the same yesterday and today, due to the total sameness of his principal part, the soul. According to (3), which is the loosest sense, a being with parts that succeed one another, either completely, such as a river, or partially, such as the organic matter of living bodies, can be called 'numerically the same' from one time to the next. In this sense, Socrates is successively the same from day to day, despite the processes of growth and decay.

Identity over time is clearly parasitic on more basic notions of identity, for no matter which of (1)–(3) may be in question, whether a being is numerically the same at one time as another depends on the more basic identity or nonidentity of its parts. Unfortunately, Buridan does not separate the

<sup>45</sup> Tripliciter consuevimus dicere aliud alicui esse idem in numero. Primo modo totaliter, scilicet quia hoc est illud et nihil est de integritate huius quod non sit de integritate illius et e converso; et hoc est propriissime esse idem numero. . . sed secundo modo aliud dicitur alicui idem partialiter, scilicet quia hoc est pars illius, et maxime hoc dicitur si sit maior vel principalior, vel etiam quia hoc et illud participant in aliquo quod est pars maior vel principalior utriusque. . . sed adhuc tertio modo et minus proprie dicitur aliquid alicui idem numero secundum continuationem partium diversarum in succedendo alteram alteri.

question of individuality from that of identity; it is one matter to grant that every thing is individual, another to ask about the criteria for identity and distinctness for different kinds of things. From his discussion of the various senses of 'numerically the same' it follows that simple beings, or beings without inessential component parts, are strictly numerically the same from one time to the next, so long as they exist. Hence souls and the Intelligences are numerically the same at all times. (The question cannot sensibly be applied to God, who is not in time.) A plausible conjecture would be that the issue of identity over time can only be raised for material beings; this would be the case if the quantitative parts of any object can only be material parts. Buridan's discussions of quantity, *e. g.* in QC qq. 8–9, support the conjecture.

There is a separate epistemic question about the discernibility of individuals, namely what the principle or cause is by which distinct individuals of the same kind are perceived or known to be distinct. In QM VII q. 17, Buridan asserts that "we have no way to perceive the difference among individuals of the same species except by accidents or by extraneous [factors]." He supports his claim by a striking example (fol. 52va):<sup>46</sup>

If there were two stones completely similar in shape, size, color, and so on for the other [accidents], and they were brought into your presence successively, you would have no way to judge whether the second brought to you were the same as the first brought to you or the other one. And so too if there were men completely similar in shape, size, color, and so on for the other accidents.

The impossibility of re-identification shows that there is no privileged knowledge of distinct individuals as distinct. (Note the form of this conclusion: there is certainly knowledge of distinct individuals, but the knowledge of distinct individuals as distinct is in question.) Now this version of the example applies to the limited case of individuals that are substances, but Buridan also offers a variation of the example that applies to discerning individual accidents (*ibid.*):<sup>47</sup>

<sup>46</sup> Si essent duo lapides omnino similes in figura, in magnitudine, in colore, et sic de aliis, et successive apportarentur in tua praesentia, tu nullam viam haberes ad iudicandum utrum secundus apportatus esset ille idem qui primus apportatus fuit an alter. Et ita etiam de hominibus si omnino essent similes in figura magnitudine et colore et sic de aliis accidentibus. (The same example is employed in QSP I q. 7 and QA III q. 8.)

<sup>47</sup> Immo etiam hoc non solum veritatem habet de substantiis immo etiam de accidentibus: si enim essent albedines consimiles in gradu et essent in subiectis consimilibus in figura magnitudine et caetera, tu non haberes viam cognoscendi utrum esset eadem albedo an alia quae tibi prius et posterius praesentaretur.

Indeed, this is true not only in the case of substances but also for the case of accidents: if there were whitenesses similar to each other in intensity (*gradus*) and they were in subjects similar to each other in shape, size, *etc.*, you would not have any way to know whether it was the same whiteness or the other one shown to you previously.

Accidents are metaphysically as individual as substances, and present the same epistemic problems of discernibility as substances. Buridan concludes that “the differentiae through which individuals of the same species appear to be distinguished by us are accidental differentiae, that is, certain accidents or [factors] extraneous to those individual subjects.” Thus individuals of the same species are distinct of themselves, and so differ substantially, but their distinctness is only known through accidental or extrinsic factors. Hence “we perceive the contraction of the species to the individual not by substantial differentiae but by accidental [differentiae], yet the things signified by individual terms are themselves substantially distinguished.”

This account raises two difficulties. First, if substances are discernible only through accidental differentiae, how can substance-terms fail to connote accidents? Buridan takes this problem up in QM VII q.17 *ad* 2 (fol. 52vb):<sup>48</sup>

It may be said that substantial terms in the category of substance are not completely free from the connotation of accidents; it is necessary to consider accidents at least in the imposing [of the term]. Still, because the intellect can free the concept of the subject from the concept of the accident, in imposing [the term] we intend to free it up so that the term does not connote the accidents, although by them we are led to the notion of the substance.

The direct intuitive contact with an individual is not to be confused with the intuition of an individual as individual. Direct intuitive contact allows a singular name to be imposed and a singular concept to be formed, but such concepts do not free one from the possibility of error, either as mistaken identification or being unable to re-identify the individual. Buridan explicitly points this out when discussing the formation of singular concepts (*e. g.* QSP I q. 7). Therefore, substance-terms may be absolute, despite the necessity of extrinsic individuating factors in the imposition of the term.

The second difficulty Buridan's account poses is that it seems to threaten an infinite regress. Grant that two substances can only be discerned as two

<sup>48</sup> Ad aliam posset dici quod termini substantiales de praedicamento substantiae non sunt omnino absoluti a connotatione accidentium; saltem in imponendo oportet considerare accidentia. Tamen quia intellectus potest absolvere conceptum subiecti a conceptu accidentis, nos imponendo sic intendimus absolvere ut terminus non connotet accidentia, quamvis per illa ducamur ad notitiam substantiae.

by some accidental or extrinsic factor. How will that accidental or intrinsic factor be perceived as distinct, especially if the two substances each possess it (*e.g.* if both are white)? Buridan takes this up in QM VII q.17 *ad* 4 (fol. 52rb):<sup>49</sup>

I grant that it is true in the case of accidents as well as in the case of substances, namely that the diversity of those which are of the same species is only perceived by certain accidents; neither is an infinite regress necessary, since we know how to distinguish the whiteness of a horse and the whiteness of a cow, for we perceive the distinctness of the cow and the horse in which there are these whitenesses. Similarly, we know how to distinguish a cow from [another] cow, since one is white and the other black, and [we know how to distinguish] colors of the same species by substances or shapes or by sizes of diverse species, and so too [we can distinguish] substances by shapes and colors or as being substances of this sort. Thus all these may be perceived in relation to each other without an infinite regress.

There is no principled way in which distinct individuals are discernible. Individual substances of the same species may be discerned by their distinct accidents, and if both are perceived at once than their distinct locations will serve; distinct accidents may be discerned by inhering in discernibly distinct subjects, as for example whitenesses inhering in the specifically distinct subjects of a horse and a cow. As Buridan notes in QM VII q.15, even putting matter aside a man and an ass “have extremely different accidents and extremely different natural operations, which appear sensibly to us and of different kinds.” In short, discernibility is a relational property, not an intrinsic feature of individuals or due to some factor in a principled way. Hence there need be no infinite regress, since in practice there is a way to discern distinct individuals.

## 8. Conclusion

Buridan rejects the metaphysical form of the problem of individuation, maintaining instead that the apparently metaphysical difficulties it raises

<sup>49</sup> Ad ultimam concedo quod ita bene verum est in accidentibus sicut in substantiis, scilicet quod eorum quae sunt eiusdem speciei non percipitur diversitas nisi per quaedam accidentia; nec oportet procedere in infinitum, quia albedinem equi et albedinem bovis scimus distingui, quia percipimus distinctionem bovis et equi in quibus sunt ille albedines. Similiter, bovem a bove scimus distingui quia ille albus est ille niger et colores eiusdem speciei per substantias vel figuras vel per magnitudines diversarum specierum, et sic etiam substantias per figuras et colores aut substantias huiusmodi. Et sic sine processu in infinitum percipiuntur invicem omnia.

can better be understood as semantic questions—an approach having some affinities with contemporary philosophical work. The legacy of Buridan's treatment of such problems is the rigorous and careful application of the semantic framework of mental language to metaphysical questions, even to the point of casting doubt on metaphysics as a discipline independent of semantics. What, in the final analysis, makes substances differ from accidents, given that accidents are capable of existing *per se*? I think the correct answer, for Buridan, is that it is a question he doesn't much care about. Once the bridges from the aristotelian categories to ontology have been burned, the status of the theoretical vocabulary of substance and accident is left up in the air—which is exactly where, it seems to me, Buridan leaves it. There is a suggestion in his writings that a kind of 'functionalist' approach to ontology is the correct one, that we should identify substances as central points of causings and effectings, so that to characterize something as a substance is to say that it is a pattern in the ebb and flow of events distinguishable as a node in the causal nexus such that the work nominally done by metaphysicians should in fact be done by physicists. But it is no more than a suggestion, and Buridan does not work it out. It was left to the philosophers of the next several centuries to complete the break with Aristotle, and eventually to reject the substance-accident terminology Buridan has deprived of theoretical foundations.

Buridan's theory of individuation may be summarized in three claims: individuality is a basic feature of the world; there are no nonindividual beings; metaphysical problems are, by and large, disguised semantic problems. These deceptively simple claims provide the seeds of a radical break with Aristotle and traditional aristotelian philosophy. His contribution is to work out some of the implications of these claims in a rigorous manner, leaving the rest for his successors. Contemporary philosophy is again sympathetic to Buridan's claims. Perhaps it has something to learn from his results as well.

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