A BRIEF GUIDE TO SUPPOSITION THEORY

[1] There are two phases of supposition theory in the Middle Ages, the first in the mid-12thC which includes most famously the works of Peter of Spain, William of Sherwood, and Lambert of Auxerre; the second from roughly the beginning of the 14thC onwards, which includes Walter Burleigh, William of Ockham, and Jean Buridan. The best logician of all was Buridan, whose views I’ll be considering in what follows.

[2] There are two fundamental semantic relations, signification and supposition, which are (very roughly) like our notion of meaning and reference respectively. Signification, like meaning, is a property that a word may have in isolation (and perhaps it is an atomic fact about a word), whereas reference is something we do with words, and hence occurs in sentential contexts — Buridan would say: exclusively. The kind of supposition a term has depends on its sentential context; broadly speaking, the theory of supposition aims to specify what a term is used to talk about in a given sentence.

[3] There are two parts to any theory of supposition, namely the division of the different kinds of things a term may refer to in a sentence — its ultimate signification [personal], or itself in some way [material], and for some thinkers a universal or a concept [simple] — and the so-called “modes of personal supposition,” which describe how many of its ultimate significates a term may stand for: exactly one [discrete]; at least one [determinate]; several together [merely confused a.k.a. confused and not distributive]; all present instances [distibutive confused]; all past, present, and future instances [natural]. So much is reasonably common. Buridan rejects simple supposition, and he adds special rules for pronominal references (which often act as quantifiers or are bound by them); most logicians ignore natural supposition; and so on, with individual variations.

[4] On to the modes of personal supposition! A discrete term, that is, a singular referring expression such as a proper name, a simple demonstrative, a demonstrative combined with a common term, and so on, is an expression which is semantically capable of being predicated of a single item. (The restriction ‘semantically’ is important; a common term might have only one item in its extension, but that does not make it a discrete term.) They are contrasted with general referring expressions. Hence it’s obvious when using a discrete term that one is talking about the very thing the term refers to, since there are no other choices. Hence personal supposition is in the first instance divided into
discrete supposition and common supposition, where discrete terms have discrete supposition and common terms have, you guessed it, common supposition.

[5] Common supposition is divided into two varieties. First, a common term is said to have determinate supposition in a sentence when a sufficient condition for the truth of the sentence is that it be true for some determinate singular falling under the common term, where ‘some’ means for at least one such singular. Roughly, a common term will have determinate supposition if if is in the scope of a particular quantifier which is not in the scope of another logical operator. Buridan gives two conditions that a term in determinate supposition must meet (not that these conditions apply in virtue of the inferential connections between the given sentence and related sentences: (a) from any given singular falling under the common term the sentence with the common term follows, all else remaining unchanged, which is more or less a version of existential generalization; (b) all of the singulars can be inferred disjunctively in a disjunctive series of sentences, more or less instantiation. A term in determinate supposition, then, is used to talk about at least one of the things which is (ultimately) signifies. Which one? Well, ‘some weasel’ refers to some weasel, where we take this latter occurrence of ‘some’ referentially (rather than attributively). In some contexts ‘some weasel’ does not have determinate supposition, depending on the presence of other logical particles, as discussed below; modern logicians focus on the attributive reading of the existential quantifier while Buridan insists on the referential reading, but that’s just a different decision about how to regiment the logic.

[6] Second, a common term may fail to have determinate supposition, in which case it has confused supposition, where it is used to refer to a plurality of what it signifies. Confused supposition has two varieties. The first is confused and distributive supposition, sometimes called only distributive supposition, when it is used to talk about any or all of the things it signifies. Buridan offers the following condition: a common term has distributive supposition in a sentence when any of the singulars falling under the common term can be inferred individually, or all inferred conjunctively in a conjunctive series of sentences. Thus the term ‘marmot’ in “Every marmot is furry” has distributive supposition, because “Every marmot is furry; therefore Mickey the Marmot is furry” holds (universal instantiation) and we can also infer “Mickey the Marmot is furry and Elmer the Marmot is furry and so on.” Reference is made to every presently existing item falling under the common term, which is ‘distributed’ over them all. Buridan offers five syntactic rules for identifying when a common term in a sentence has distributive supposition, based on scope conventions governing negation, quantification, and comparison: (a) a universal affirmative sign distributes the common term it governs; (b) a infinitizing negation (term-negation) distributes terms in its scope; (c) sentential negation distributes every term in its scope which would otherwise not be distributed; (d) negative syncategoremata have similar effects; (e) comparative contexts, such as the use of a comparison, an adjective of degree, or a superlative, also produce distribution. Clearly distributive supposition is cousin to universal quantification.

[7] The other variety of confused supposition is called non-distribute confused supposition, sometimes called only merely confused supposition. A common term in a sentence has merely confused supposition when neither (a) any of the singulars individually follow, nor (b) do the singulars follow disjunctively in a disjunctive series of sentences, although sometimes a sentence with a disjunctive extreme does follow. Hence the term ‘animal’ is “Every man is an animal” has merely confused supposition, because “Every man is this animal” does not follow from it, and neither does “Every man is this animal or every man is that animal or...” – although in this case “Every man is this animal or that animal or...” does follow. Semantically, a term has merely confused supposition when it is used attributively of its extension: in such a case the term applies to a definite number of individuals in its extension (depending on the facts of the matter), but it does so indifferently, applying to each for exactly the same reason. Such sentences presuppose their truth to determine the (actual) reference of the term, i.e. the subclass of the significates which actually possess the property in question. (In this sense merely confused supposition is rather like the contemporary logician’s use of existential quantification.) Now
the syntactic specification of merely confused supposition is less easy to spell out than for distributive supposition. Buridan offers two rules and two guidelines: (a) a universal affirmative sign produces merely confused supposition in a term not in its scope which is construed with a term in its scope; (b) a term has merely confused supposition when it is in the scope of two universal signs of which either would distribute the rest were the other not present; (c) temporal and locative locutions often produce merely confused supposition, as do (d) terms which introduce opaque contexts, such as knowing, owing, and desiring.

[8] The effect of Buridan’s syntactic rules is to permit us to extend supposition theory to complex sentences, perhaps with multiple quantification, such as “Every weasel steals some fish from every stream.” This range is extended even further in Buridan’s category of relative supposition, which deals with binding and scope – more generally, with anaphoric reference: the term ‘they’ in “Some cats are Siamese and they are finicky” picks out Siamese cats, not cats generally, and so it acts as a restricted quantifier, referring to those items its antecedent supposits for which the predicate also supposits for. Relative supposition is a key element in the dictum de omni et nullo, which is the main semantic principle governing syllogistic inference: the middle term has to have the same supposition in each of the premisses to be “distributed” over them in a syllogism.

[9] That said, it might be helpful to run through the supposition of terms in the traditional Square of Opposition.

[A] In universal affirmatives, which have the form “Every S is P,” S has distributive supposition and P has merely confused supposition.

[E] In universal negatives, which have the form “No S is P,” S and P each have distributive supposition.

[I] In particular affirmatives, which have the form “Some S is P,” S and P each have determinate supposition.

[O] In particular negatives, which have the form “Some S is not P,” S has determinate supposition and P has distributive supposition.

If we augment the traditional Square of Opposition by adding sentences with singular terms as subjects, then in singular affirmatives and negatives the predicate has the same supposition as the corresponding particular form, and the subject has discrete supposition.

[10] A final note. Buridan, reviving a use found in Peter of Spain, also allows for natural supposition, in which the copula is read ‘timelessly’ – that is, the personal supposition of terms is extended beyond its normal present use to all instances, past, present, and future. (This is how to read scientific sentences, as making timeless claims about how general terms are interconnected.) This type of supposition is a form of ampliation, where the supposition of a sentence is extended beyond its ordinary domain; the two main forms of ampliation, which are discussed at length with regard to ampliative terms appearing in a sentence (unlike natural supposition which is a matter of reading the copula in a certain way), are time and modality. Conversely, there is also restriction, where the supposition of a term is restricted to a subclass of its ordinary domain; syncategoremata like ‘except’ produce restriction.