

*These philosophers nonetheless do accept propositions, and use them to explain sentences in which 'proposition' explicitly occurs, e.g., ('Some proposition that John believes is true', 'John believes the proposition that snow is white').*

**Brief History** We will attempt only the briefest history of the topic, focusing on key episodes rather than on a comprehensive survey. It is difficult to find in the writings of Plato or Aristotle a clear endorsement of propositions in our sense. Thinking that Theaetetus flies would seem to require thinking the non-existent flying Theaetetus. Were Plato a propositionalist, we might expect to find Socrates or the Eleatic Stranger proposing that false belief certainly has an object, *i.* But it seems no such proposal is seriously considered. In both dialogues, it is suggested that thought is a kind of inward dialogue carried on in the mind itself. Theaetetus *ea* and *Sophiste*, and that judgment results when the two inward voices affirm the same thing. Plato is standardly understood as explaining false belief *doxa* in terms of the assertion of a false statement *logos*. But it is far from clear that he takes the objects of belief to be statements rather than simply the ordinary concrete objects *e.* Statements, for Plato, might simply be tokens of inner speech, as Nuchelmans, *p.* Aristotle expends great energy in investigating what in reality makes true statements true, but less investigating the nature of truth-bearers themselves. In his most significant discussions of truth and falsehood, he seems not to take a clear stand on the question of propositions. In *On Interpretation* 1 16a, for instance, Aristotle remarks that falsity and truth require combination and separation, whether of names and verbs in speech, or of elements in thought. However, it is unclear whether the resulting combination of thought elements is anything other than a token thought, as opposed to something which is the content of the token thought and which could be thought by others, could be denied, asserted, etc. Arguably, the first employment in the western philosophical tradition of the notion of proposition, in roughly our sense, is found in the writings of the Stoics. In the third century B. Among *lekta*, they distinguished the complete from incomplete or deficient, the latter corresponding roughly to the meanings of predicates, the former to the meanings of sentences. Among complete *lekta* they included *axiomata*, or the meanings of declarative sentences. For the Stoics, only *axiomata*, and not the words used to articulate them, were properly said to be true or false. *Axiomata* were therefore the proper subject matter of Stoic logic. *Lekta* posed a problem for Stoic materialism, according to which everything real is corporeal. For the Stoics, the real was limited to that which can act or be acted upon, and therefore to the bodily. *Lekta*, however, were thought to be incorporeal. For instance, I see Cato walking; the sense of sight reveals this to me and the mind believes it. What I see is a material object and it is to a material object that I direct my eyes and my mind. It is not a material object that I now state, but a certain affirmation about himâ€” Epistulae morales, , 13 The notion of a proposition can also be found in the works of Medieval philosophers, including especially Abelard â€” and his followers, but also among later scholastic philosophers in England, including Adam Wodeham *d.* Abelard distinguishes between *dicta* or what is said and acts of assertion or thinking, the former being the fundamental bearers of truth-value. While Abelard himself seems to have had little to say about the nature or identity conditions of *dicta*, his successors took up the subject with vigor Nuchelmans, *pp.* Are *dicta* particular acts of thinking, concrete events or facts, or entities having the same sort of being as universals? Each of these views is considered and evaluated in the treatise *Ars Meliduna*, of unknown authorship. A similar debate raged among the English scholastics in the fourteenth century. Unsurprisingly, one looks in vain in the writings of the British empiricists. As for Descartes, particular acts of judgments serve as the primary bearers of truth-value although there is considerable debate about the status of his eternal truths. These possible thoughts seem to play the role of thought-contents and the fundamental bearers of truth-value. However, it is a matter of debate whether they are accorded real ontological status. Propositionalists were by no means rare in the 19th century, Gottlob Frege being the best known example. The Czech philosopher and mathematician Bernard Bolzano also deserves special mention. They are the fundamental bearers of truth and falsity, and the objects of the attitudes. It is the goal of every science, including mathematics, is to state the fundamental true sentences in themselves pertaining that subject matter. Like Frege after him, Bolzano conceived of propositions as

complexes composed of wholly abstract mind-independent constituents *Vorstellungen an sich*. Arguably, the three figures whose work has most shaped the framework for contemporary Anglophone work on propositions are Gottlob Frege, G. Moore, and Bertrand Russell. We will give short summaries of their thought on the matter. This paper contains his first formulation of the distinction between sense *Sinn* and reference *Bedeutung*. Roughly speaking, the sense of an expression is the mode of presentation of its referent, or the cognitive value of its referent. Expressions were said to express their senses. Sentences, too, had both referents and senses, according to Frege. The referent of a sentence is its truth-value. Its sense is a thought *Beaney*, p. Thus, in Fregean jargon, meaningful sentences express thoughts. Frege conceived of thoughts as structured complexes of senses. It should be noted that this claim about structure does not strictly follow from the fact that sense is compositional, i. They are not part of the outer realm, which consists of those entities perceivable by the senses. This Frege thinks is obvious. Nor are they part of the inner realm, which consists of ideas. Unlike ideas, thoughts do not require an owner i. A third realm must be recognized, he tells us "a realm of abstract eternal entities which we can grasp by virtue of our power of thinking. However, Frege is explicit that thoughts do act: Thoughts are not wholly unactual but their actuality is quite different from the actuality of things. And their action is brought about by a performance of a thinker; without this they would be inactive, at least as far as we can see. And yet the thinker does not create them but must take them as they are. They can be true without being grasped by a thinker; and they are not wholly unactual even then, at least if they could be grasped and so brought into action *Beaney*, p. This is perhaps the locus classicus for platonism in the modern sense of that term, that is, for the doctrine that there exist mind-independent abstract entities. In their early writings, Russell and Moore endorse propositionalism. In his book *The Principles of Mathematics*, Russell affirms the existence of propositions, taking them to be complexes of ordinary concrete objects the referents of words rather than of Fregean senses p. Propositions so conceived are now standardly called Russellian, and propositions conceived as complexes of senses or abstract entities are called Fregean. Russell and Moore later grow suspicious of propositions although Russell seems to have accepted them later as a kind of derived or immanent entity. Before Christmas, Moore claims: In the one case what is apprehended is the meaning of the words: Twice two are four; in the other case what is apprehended is the meaning of the words: Twice four are eight! Now by a proposition, I mean the sort of thing which is apprehended in these two cases! I hope it is plain that there certainly are such things as propositions in this sense. While the theory of propositions is admittedly simple and natural p. He specifies two problems, both having to do with facts, a topic he avoided in his earlier lectures. Primitivism, Moore now claims, requires the claim that facts consist in the possession by a proposition of the simple property of truth. This Moore now finds unacceptable. The second problem is simply that the theory seems intuitively false: It seems rather as if the thing he was believing, the object of his belief, were just the fact which certainly is not "which certainly is not, because the belief is false. These doubts led Russell to propose a multiple relation theory of judgment, to replace the standard two-place relational theory which is discussed at length in section 3. This theory, and its contemporary incarnations, is discussed in a supplementary document. When a subject believes that x is F and x is not F, the object of belief is the non-existent but possible fact that x is F. See section below for further discussion of possible facts and their relations to propositions. Modality If there are propositions, they would appear to be good candidates for being the bearers of alethic modal properties necessary and possible truth, as well as the relata of entailment. And if propositions stand in entailment relations, then there would seem to be maximal consistent sets of them. Prima facie, such sets seem to be good candidates for possible worlds Adams; A proposition will be true in a possible world at a maximal consistent set of propositions iff it is a member of that world. The latter is part of I and all my surroundings, but only a proper part. One would therefore expect that if there are propositions, they would figure importantly in the semantics of attitude- and truth-ascriptions. For, that-clauses are not proper names, nor are they noun phrases. More carefully, then, the propositionalist will find it natural to accept the following account of attitude-ascriptions: Analogously, there is the Property Analysis of truth-ascriptions: One of the great advantages of these analyses "the combination of which we will simply call The Relational Analysis "is the smooth explanation of the validity of certain inferences. Charles believes everything Thomas said. Thomas said that cats purr. So,

Charles believes that cats purr. Something Barbara asserted is true. Nothing John denied is true. So, something Barbara asserted John did not deny. John believes that every even is the sum of two primes. These inferences are valid if they have the following simple logical forms:

**Chapter 2 : The Nature of Propositions**

*Propositions are also eternal, necessary and intersubjectively available (i.e., common mental property). Now, what is the role of that-clauses, or nominalizations?*

Propositions[ edit ] Many authors [10] use the term proposition as truth-bearers. There is no single definition or usage. All and only meaningful-declarative-sentences are propositions Theory 2b: A meaningful-declarative-sentence-token expresses a proposition; two meaningful-declarative-sentence-tokens which have the same meaning express the same proposition; two meaningful-declarative-sentence-tokens with different meanings express different propositions. Criticisms of Theory 2a. If all and only meaningful-declarative-sentences are propositions, as advanced by Theory 2a, then the terms are synonymous and we can just as well speak of the meaningful-declarative-sentences themselves as the truthbearers - there is no distinct concept of proposition to consider, and the term proposition is literally redundant. Criticisms of Theory 2b Theory 2b entails that if all meaningful-declarative-sentence-tokens typographically identical to say, "I am Spartacus" have the same meaning then they i express the same proposition ii that proposition is both true and false, [15] contrary to the definition of truth-bearer. The concept of a proposition in this theory rests upon the concept of meaning as applied to meaningful-declarative-sentences, in a word synonymy among meaningful-declarative-sentence s. Quine argues that the concept of synonymy among meaningful-declarative-sentences cannot be sustained or made clear, consequently the concepts of "propositions" and "meanings of sentences" are, in effect, vacuous and superfluous [16] see also Willard Van Orman Quine , Proposition , The Russell-Myhill Antinomy, also known as the Principles of Mathematics Appendix B Paradox [1] see also Internet Encycypedia of Philosophy Propositions are abstract entities; they do not exist in space and time. Terminology aside, the essential point is that propositions are not concrete or material objects. The theory that propositions are the bearers of truth-values also has been criticized. Nominalists object to the abstract character of propositions. The relationship between sentences and propositions is a serious philosophical problem. Statements[ edit ] Many authors consider statements as truth-bearers, though as with the term "proposition" there is divergence in definition and usage of that term. It is not always clear in which sense the word is used. This provides two possible definitions for the purposes of discussion as below. A particular concept of a statement was introduced by Strawson in the s. The author of Waverley is dead J: The author of Ivanhoe is dead K: I am less than six feet tall L: I am over six feet tall M: The conductor is a bachelor N: The conductor is married On the assumption that the same person wrote Waverley and Ivanhoe, the two distinct patterns of characters meaningful-declarative-sentences I and J make the same statement but express different propositions. What these examples show is that we cannot identify that which is true or false the statement with the sentence used in making it; for the same sentence may be used to make different statements, some of them true and some of them false. Two meaningful-declarative-sentence-tokens which say the same thing of the same object s make the same statement. Theory 3a All and only statements are meaningful-declarative-sentences. Theory 3b All and only meaningful-declarative-sentences can be used to make statements Statement is not always used in one or other of these ways. Arguments for Theory 3a "All and only statements are meaningful-declarative-sentences. If the former, the stipulation is useful or it is not; if the latter, either the descriptive definition correctly describes English usage or it does not. In either case no arguments, as such, are applicable Criticisms of Theory 3a If the term statement is synonymous with the term meaningful-declarative-sentence, then the applicable criticisms are the same as those outlined under sentence below If all and only meaningful-declarative-sentences are statements, as advanced by Theory 3a, then the terms are synonymous and we can just as well speak of the meaningful-declarative-sentences themselves as the truth-bearers " there is no distinct concept of statement to consider, and the term statement is literally redundant. Arguments for Theory 3b Thoughts[ edit ] Frege argued that an indicative sentence in which we communicate or state something, contains both a thought and an assertion, it expresses the thought, and the thought is the sense of the sentence. The pattern of characters A: This toucan can catch a can. Only those word-tokens which are meaningful-word-tokens can have the same

meaning as another word-token. Although it contains only five word-types, the two occurrences of the word-token can have different meanings. On the assumption that bucket and pail mean the same, the pattern of characters B: If you have a bucket, then you have a pail contains ten word-tokens, seven word-types, and six word-meanings. The pattern of characters D: He is grnd is a sentence-token because grnd is a word-token albeit not a meaningful word-token. He is grnd is not a sentence-token because grnd is not a meaningful word-token. The pattern of characters E: The pattern of characters F: Cats blows the wind is not a meaningful-declarative-sentence-token because it is grammatically ill-formed The pattern of characters G: This stone is thinking about Vienna is not a meaningful-declarative-sentence-token because thinking cannot be predicated of a stone The pattern of characters H: This circle is square is not a meaningful-declarative-sentence-token because it is internally inconsistent The pattern of characters D: The patterns of characters F: Cats blows the wind, G: This stone is thinking about Vienna and H: This circle is square are nonsense-declarative-sentence-tokens because they are declarative-sentence-tokens but not meaningful-declarative-sentence-tokens. He is grnd is not a nonsense-declarative-sentence-token because it is not a declarative-sentence-token because it contains a word-token grnd which is not a meaningful-word-token. The pattern of characters T: Spartacus did not eat all his spinach in London on Feb 11th is a meaningful-declarative-sentence-token but, in all probability, it has never been used declaratively and thus there have been no meaningful-declarative-sentence-token-uses of T. A meaningful-declarative-sentence-token can be used zero to many times. Two meaningful-declarative-sentence-tokens-uses of the same meaningful-declarative-sentence-type are identical if and only if they are identical events in time and space with identical users. A use of a token of the meaningful-declarative-sentence-type U: No use of a token of the meaningful-declarative-sentence-type V: The highest prime has no factors other than itself and 1 is not a referentially-successful-meaningful-declarative-sentence-token-use since the embedded referring-expression The highest prime is always a referential failure. The term utterance is frequently used to mean meaningful-declarative-sentence-token. Grice, Meaning, [http: A sentence that stays forever true, or forever false, independently of any special circumstances under which they happen to be uttered or written. More exactly, a meaningful-declarative-sentence-type whose tokens have the same truth values. The whole is greater than the part is an eternal sentence, It is raining is not an eternal sentence but It rains in Boston, Mass. Statement Archived at the Wayback Machine.](http://) Other writers hold that successful declarative sentences express propositions; and formulas of formal languages somehow display the forms of these propositions.

## Chapter 3 : Willard van Orman Quine (Stanford Encyclopedia of Philosophy)

*Quine explains that the stimulus-meanings of eternal sentences may be propositions, and that synonymous eternal sentences may express identical propositions. Rather than describing propositions as abstract concepts, or as objects of propositional attitudes, Quine describes propositions as meanings of eternal sentences.*

He has been pursuing his doctoral work in Bochum, West Germany and Paris. He is working in the area of social ontology. The following article appeared in *Process Studies*, pp. It is in this way that propositions account for the process view of the world and the self-realization of the subject. We must end with my first love -- Symbolic Logic. When in the distant future the subject has expanded, so as to examine patterns depending on connections other than those of space, number, and quantity -- when this expansion has occurred, I suggest that Symbolic Logic, that is to say, the symbolic examination of pattern with the use of real variables, will become the foundation of aesthetics. From that stage it will proceed to conquer ethics and theology. SP What audacity to claim that symbolic logic could conquer ethics and theology. Shall we cry heretic! Why does symbolic logic hold such a privileged position for Whitehead? What is he inviting us to understand, what is he attempting to invoke by such a statement? Symbolic logic, he tells us above, is the symbolic examination of "pattern with the use of real variables"; in other words, it is the systematic examination of "propositions. On the basis of this insight, which opens a hermeneutical dimension to propositions, I shall, third, specify the role that propositions play in the process view of the world. In concluding I shall suggest in what sense the systematic examination of propositions can function foundationally for other domains of life. By speaking of propositions in this context, Whitehead tacitly portrays propositions in a way befitting a characterization of eternal objects. As Ford observes, in *Principia Mathematica* Whitehead understands the "subject" of the proposition as the "placeholder" giving determination to predicates, thus transforming propositions into complex eternal objects. EWM Since both propositions and eternal objects are potentialities for realization in the sphere of actuality, a proposition does exhibit a certain type of universal relevance akin to eternal objects. Moreover, an eternal object is absolutely general; there is no criterion to found the truth or falsity of an eternal object. Likewise, a proposition -- taken in itself -- is essentially neither true nor false according to Whitehead. With these considerations it is possible to note the following characteristics which both eternal objects and propositions share: Nevertheless, Whitehead is quite candid about the distinctive features of propositions. Put differently, the expression "intermediate universal" signals an approach to propositions from the "top down" and not from the "bottom up," that is, from the perspective of actual entities or actual occasions invested with indeterminacy. A proposition differs from an eternal object insofar as the latter refers to actuality with abstract generality, and the former refers to actuality with incomplete abstraction from determinate actual entities. Whereas eternal objects abstract from all determinate actualities, even God, and are merely referent to any actual entity devoid of selection, propositions circumscribe actual entities and lose their absolute generality in the fusion of eternal objects with a set of actual entities. For Whitehead, then, a proposition is truly "intermediate," not merely with respect to eternal objects, but also with regard to actual entities. A proposition is not a pure essence; though it does not give information as to how it actually functions in particular instances like an eternal object it does gesture towards how it could function in concrete occasions. Compared to eternal objects a proposition shares in the concrete particularity of actual occasions, and compared to actual occasions, it participates in the abstract generality of eternal objects. In other words, a proposition is doubly intermediate by virtue of what Whitehead calls a "double elimination. The proposition is a "new kind of entity" -- an oft-touted phrase echoed by Whitehead throughout his commentary on propositions. While the proposition presupposes both types of "primary" entities, actual entities and eternal objects, it is distinct in kind, and therefore enjoys a unique status. Guided by a dynamic understanding of propositions, one that can account for a process view of the world, Whitehead abandons the traditional conception of propositions. His distinctive contribution to the theory of propositions, however, requires an analysis with more attention to detail. Let me proceed in the following section in two stages which correspond to the two subjects inherent in the proposition, namely, the "logical

subject" and the "percipient" or "prehending subject. II A proposition is the possibility of an actual world including a set of actual entities in a type of relatedness involving the hypothetical realization of a definite set of eternal objects. Properly speaking, however, propositions do not contain "actual entities" or "eternal objects" per se. In a proposition, the "logical subjects" are not tied down to objectivity, given as already realized. As Whitehead contends, their role in actuality, their complete determinateness, is eliminated. The particular facts function no longer as "factors," but become "bare its," that is, function as logical subjects with a hypothetical relevance to a predicative pattern now potentially determinate of these logical subjects. While the objectified facts are invested with a certain levity, no longer fully sedimented, the logical subjects as an indicative system, on the other hand, restrict the freedom of the proposition to apply to any actual entity in absolute generality. The indicative character of logical subjects disciplines the scope of the predicative pattern; they enjoy the function as "food for possibility" and enable the proposition to refer to the actuality of the world, to existential particularity. The fact that a proposition is provided with an "element of sheer givenness," a foothold in the world, as it were, enables a proposition to be not merely an eternal object, a pure possibility, but a real possibility See WAP f. And because the proposition is not given as a finished fact, but presented as a way it could be the optative quality preserving the indeterminacy unique to eternal objects, a proposition is a real possibility. The restrictive abstractness of the predicative pattern, and the abstract definiteness of the indicative logical subjects provide the necessary indeterminacy and determinacy for a proposition to be true or false. This quality can be seen as an advance towards concreteness not present in an eternal object. Yet a proposition regarded simply in terms of its logical subjects admits too much vagueness to have a de facto truth value. For this reason a proposition as such can go no further than its ability to be true or false: In *Adventures of Ideas*, for example, Whitehead contends that a great deal of confusion has been generated in the discussion of propositions by conflating the psychological attitude with the proposition itself AI f. Sentence Proper Name Concept-word Sense of sentence Sense of proper Sense of concept-word Thought name Reference of Reference of Reference of sentence proper name concept-word object Truth-value Object Concept which falls under concept According to Frege, the semantics of sense and reference is primarily a semantics of whole sentences and not of sentence parts. Thus, because the reference of a sentence is a truth-value, and because a sentence either refers to the state of affairs in which it is true the True or the state of affairs in which it is false the False, all true sentences will refer to the same thing, the True, while all false sentences will have the same extension, the False NS This is not to say that every sentence has a reference for Frege. For example, the sentence "Odysseus was set ashore at Ithaca while sound asleep" has a thought, a sense, while it is doubtful, Frege writes, that it has a reference. Still, the thought remains the same whether the sentence has a reference or not. Even if the name "Odysseus" in the sentence just cited did designate a real person after all, and not a fictional character, this new fact would not alter the proposition of the sentence. The proposition as such is independent of its truth-value. Nonetheless, as Frege writes to Husserl, it is sufficient if poetic strings or works of art have a sense, but for scientific work, i. In fact, it is the striving for truth that drives us to advance from the sense to the reference FBB 48; WB Like Frege, Whitehead cautions against the all too prevalent tendency of his time to confuse psychological attitudes with the proposition itself. The intrinsic togetherness of the indicated state of affairs as logical subject and the assigned predicative pattern in their potentiality for realization is phenomenologically distinct from the eventual truth or falsity of the proposition. It is now, in fact, that one can begin to address more specifically the role propositions play in the creative advance of the world. A proposition is not simply that fusion or "contrast" of predicative patterns and logical subjects, for it does not "contain" only one subject, i. Rather, in the provocative words of "The Metaphysical Scheme of March," a proposition "contains" two subjects, the logical subject and the "percipient subject" for whom the proposition is or is not a valid element in experience; a proposition is not only about its logical subject, but is for any one of its percipient subjects, and thus relevant for the future MS, Expressed still differently, realizing the predicative pattern P of logical subjects x is precisely a matter of "taking" x as P. For this reason a concrete, contextual treatment of propositions for Whitehead in distinction to traditional approaches e. The "percipient" subject is a general term Whitehead uses in the "Metaphysical Scheme" to denote "any one of a set of acts of experience" MS In both cases, the percipient or prehending subject is meant to encompass those

types of experiencing which have a sufficient degree of complexity to admit or not admit a proposition into feeling. The fact that Whitehead is prompted to designate a more comprehensive concept in the discussion of propositions is instructive. For a unique tenet of his theory of propositions lies in the distinction between a judging and a nonjudging subject. That is, he is careful not to reduce the experience of a proposition to the judging activity simply -- the traditional presupposition in theories of propositions. Indeed, the realization of propositions occurs without more complex prehensions such as judgments, "synthetic feelings" which involve consciousness. Propositional feelings are not in the simplest case conscious feelings. He is even more explicit: Accordingly, propositions are given primarily as eliciting valuation from the entertaining subject and not for conscious evaluation unique to judgments, although the latter is a possibility too. This is, of course, not to say that consciousness or judgments should be denigrated. Rather, it is simply the case for Whitehead that consciousness entails more than the "entertainment of theory [i. Unfortunately though, maintains Whitehead, our understanding of propositions has been truncated by having considered them habitually and exclusively in terms of judgments. When we analyze a proposition, Whitehead writes, it includes acts of experience among its components. As I have indicated, albeit briefly, the range of these acts of experience is expressed by the notions of a percipient or prehending subject, and where propositions are concerned those acts are particularly judging and entertaining. Although Whitehead does not expressly repeat the formulation tendered in the "Metaphysical Scheme" that a proposition "contains" two subjects, its sense and significance for understanding propositions in the process view of the world is maintained in his analysis of propositions in *Process and Reality* in the sense that a proposition is also given for a prehending subject. The logical subjects equip the proposition with indicative references enabling the proposition to be true or false. The logical subjects, however, are not capable of doing more than indicating how the proposition could be realized: Instead, the logical subjects in a potential pattern are divested of all formal content, leaving only their bare rootedness, their bare actuality. As such, the proposition is simply too indeterminate for further disclosure; propositions require completion. An abstract analysis of propositions, according to Whitehead, could rest content without reaching beyond its logical subjects. Taking propositions concretely, however, means having recourse not only to its logical subjects, but to the contextual conditions brought to bear with the prehending subject entertaining the proposition. To contend that prehending subjects are in a unique way integral to propositions concretely considered is not to assert that propositions are random, reducible to mental processes or have less integrity. It is to realize that the proposition regarded simply in terms of its logical subjects is vague in the sense of poly-valence and that to become what it is, the proposition requires valuation, i. According to the "ontological principle" which demands that every entity  $e$ . If the proposition does not already contain the locus of the prehending subject and logical subject, the proposition cannot be entertained. Since every proposition "presupposes" actual entities which are its logical subjects, the presupposed or purported logical subjects may not be in the actual world of some prehending entity; in other words, because not all entertaining subjects will admit the proposition into its concrescence, such a proposition will refer to the hypothetical future beyond that concrescent occasion, and the proposition must "await" its logical subjects as it must "await" a subject admitting it as it is into feeling. As proposed for some unspecified subject initially, the proposition is rendered determinate by being entertained and thus actualized concretely in the context of the purpose, interest and historical situatedness of the subject experiencing the proposition. Accordingly, the second condition for the realization of a proposition goes beyond that peculiar commerce of logical subjects and predicative patterns, and concerns the determination of a truth-value: Indeed, common parlance has acclimated us to propositions as declarative usually true statements of fact; if they are anything but this, they are useless. As something worthy of assiduous analytical attention, computation, and contemplation, propositions are hardly appealing, and least of all enticing. One reason for our incredulous start at the mention of propositions as lures for feeling is based in our tacit and uncritical appropriation of propositions from logicians. Propositions, however, are not judgments, for the former concern the actual self-realization of the subject directly and hence belong to the sphere of metaphysics. Judgments, on the other hand, raise the question concerning the intuitive perception of a real fact in the constitution of the judging subject and therefore belong to the sphere of epistemology. While a proposition entails truth or falsity, a judgment which

functions illocutionarily concerns correctness or incorrectness, belief, disbelief or suspended belief. Moreover, propositions are not reducible to linguistic entities because the verbal expression, as hopelessly ambiguous, can never exhaustively express a proposition. Finally, as indicated above, propositions are not primarily given for a judging subject.

**Chapter 4 : Translating Propositions**

*Translation of Propositions Abstract: Some well-known techniques for translating ordinary language sentences into standard form categorical propositions are explained. For reasoning in everyday life, as you well know, people do not use standard categorical form.*

In this essay I shall first outline some of the reasons that have motivated philosophers to postulate the existence of propositions. Bealer identifies some of these key theoretical roles that propositions play: Of these, 2 needs some explanation – it looks like there are some sentences in language which are syntactically different, but which mean the same thing. Bealer also outlines some key claims made by the traditional theory of propositions: Before I go on to look at the reasons that philosophers have given for rejecting the claim that propositions exist, I shall briefly explain 1. The traditional view of propositions is that they are mind-independent – acceptance of this claim commits us to a form of Platonism, since we must hold that at least some propositions actually exist as abstract entities. The following argument is of a sort that commonly leads people to believe that this is the case: There are mind-independent propositions. Although some have attempted to explain away the appeal of this argument and thus render propositions mind-dependent, this will not be a focal point of my essay. In what follows, I shall distinguish between sentence types and sentence tokens. Any two sentences which are identical in meaning regardless of whether they are spoken, written, etc. Thus, sentence types are abstract objects just as propositions are. If our motivation for rejecting propositions was just that they are abstract objects then sentence types are no better, and if there are some theoretical roles that sentence types struggle to fulfil then it looks likely that propositions are the objects of the formulas of logic. In any case, someone who objects to abstract objects will have to argue that the formulas of logic stand for sentence tokens. I shall look at one preliminary argument before I go on to look at Quine which looks like it limits the possible candidates for being the objects that the formulas of logic stand for to sentences and propositions. I will refer back to this argument near the end of this essay. It looks like that-clauses in attitude ascriptions are singular terms – this would explain the validity of inferences such as the following: Graham believes that Russell was right. So the referents of that-clauses must be things that can be either true or false – that leaves us with either sentences or propositions. A nominalist is someone who denies either that universals or that abstract objects exist. Quine is a nominalist in the sense that although he accepts that sets or classes exist, he denies that any universals exist. There are two general kinds of nominalist strategy: If we should not multiply entities or kinds of entities unnecessarily, then we can legitimately deny that propositions exist if we can show that all the roles that propositions are supposed to play can be fulfilled by concretely existing entities such as sentences. Another way you might argue that it is improbable that propositions exist is to appeal to the principle that you should not postulate ad hoc entities unnecessarily. This objection is applicable in cases where the only motivation for postulating an abstract entity is that they perform a particular theoretical role. This is the case with propositions, and assuming there is no evidence for the existence of propositions independently of the roles they play, if any alternative to propositions is available, that alternative is much more appealing. Propositions are thought of as the intensions of sentences; to eliminate them from our ontology we must show that sentences have no such intensions, and that sentences have only extensions, so an attack on propositions of this kind attempts to show that sentences simply stand for their extensions. However, intensions are more fine-grained than this; the property of being a creature with a heart is different from the property of being a creature with kidneys. The fine grained nature of intensions creates difficulties for simply inferences. A believes that P can X C: This is an intensional operator, and it creates an intensional context. Because of the problems that they cause, Quine denies that logic is intensional, and thinks that it contains no intensional operators or contexts. For example, logical operators may be defined solely by their extensions. It may be claimed that if two logical constants have the same set of truth conditions then they mean the same thing. Since it looks like logical concepts may be defined solely by their extensions, there seems to be no need to postulate intensional entities such as propositions. Quine argues that the reason philosophers wrongly think that propositions exist is routed in a confusion about the difference between using a sentence and mentioning

it. This difference is grammatically significant; the quotation marks perform a function known as nominalization, and effectively turn A into a noun phrase. So it looks like a believer in propositions wrongly thinks of the variables in propositional logic as being mentioned in much the same way as A is in ii. If Quine is right then logical connectives are actually sentence connectives, which are used for making complex sentences out of simpler ones. On this picture, theorems are not expressions of true propositions, but are statements about sentences – namely statements which say that a given sentence has the property of being true. Proposing that the formulas of logic stand for sentences faces two main problems. Standard logic requires that whatever a formula stands for has exactly one truth-value. Since the truth-value of most sentences is context dependent, their truth-values must be derived by appeal to a principle such as this: A sentence is true iff all of its utterances are true, and false iff all of its utterances are false. The second difficulty with the claim that sentences are what the formulas of logic stand for is of a similar kind; for most sentence types, the truth-value of their tokens is dependent on linguistic and factual context. Therefore, there is no guarantee that all tokens of the same type of sentence will have the same truth-value. So it looks like sentences are ill-equipped to play the role of primary truth-bearers and unless this criticism can be responded to it looks like we need to postulate something like propositions to play this role. On this proposal utterances have to be prepared before logical analysis can start – indexicals have to be tuned up with contextual information and ambiguous or vague expressions must be eliminated. Brun outlines three problems which look damning for this proposal. Firstly, it is unclear that these problematic elements can always be eliminated. Secondly, it is not clear what conditions may be met so that a sentence counts as free from these elements which prevent utterances from clearly having only one truth-value. The problems with eternal sentences make it seem like an implausible solution to the problem of what makes sentences true. Quine realized this and put forward another possible solution: Brun summarizes this approach by replacing T1 with a new rule T2 and introducing a rule E which bans the fallacy of equivocation: Within an inference, tokens of the same type must have the same semantic value. In the context of an inference *i*, a sentence is true iff all its utterances in *i* are true, and it is false iff all its utterances in *i* are false. This proposal is stronger than the previous one in that it avoids the major criticisms levelled at the notion of eternal sentences. Unfortunately though, it has two problems of its own which make it an equally unappealing position to maintain. The fatal problems with this second attempt at showing that the sentences which logical formulas stand for always have only one truth value resides in the superficial appeal of E – when examined in more detail it is clearly not fit for purpose. It can be shown that E is too strong by applying it to sentences such as: But there is another sense in which E is too weak, since it does not address syntactic ambiguities or expressions directly relevant to logical form. It may be possible to reformulate this position to meet these criticisms, but I do not have space for a deeper discussion of that here. In any case, there are wider objections to the position that Quine argues for which even an improved defence of this kind would not be able to explain away. The first general problem with maintaining that the formulas of logic stand for sentences is that the standard identity criteria for two tokens of a sentence being of the same type – that they contain the same words in the same order – is too fine-grained. Specifically, the issue faced by the Quinean theory is that under it logically irrelevant aspects of linguistic expression count as differences in sentence type. It looks like propositions are far better equipped for dealing with fine-grained content in logic than sentences ever could be. To close this essay I shall look at some attempts to argue that sentences are the referents of that-clauses. It looks like no such proposal stands up to scrutiny, and that propositions are a much more plausible answer to the question. There are two anti-platonist alternatives to the view that belief reports refer to propositions: Firstly, there is the mentalistic view that belief reports refer to sentences in our heads. Secondly, there is the physicalist view that belief reports involve reference to external sentence tokens *i*. Both of these views cope badly with some apparently valid inferences in a way that propositions do not. Consider two agents, Matt and Ulgar. Both believe that the sky is blue. Ulgar speaks only Russian, while Matt speaks only English. Now consider the following argument: Ulgar believes that the sky is blue. Matt believes that the sky is blue. There is at least one thing that both Matt and Ulgar believe which is that the sky is blue. This looks like a valid argument, and acceptance of its validity rules out the possibility that belief reports refer to sentence tokens. In order to account for the arguments validity we have to take the

two that-clauses as referring to the same thing, but there is no sentence that both Matt and Ulgar could be referring to. The that-clauses cannot refer to a single external token sentence, since Ulgar cannot understand English sentences and Matt cannot understand Russian sentences. Since these are ordinary belief ascriptions that we have considered, it follows that the that-clauses in ordinary belief ascriptions do not refer to sentence tokens. Now, as Mark Balaguer notes , the argument as I have stated it does not rule out the view that that-clauses refer to mentalese sentence types. It does however look like a parallel argument could be run to eliminate this view by replacing the two agents with creatures that have different internal languages of thought. If such an argument succeeds then it looks like the only remaining candidate for the referents of belief reports is propositions. I have registered my personal feelings of unease about being forced to accept the existence of abstract objects such as propositions. Unfortunately, having looked in depth at one attempt at removing such objects from our ontology I am forced to conclude that nothing I have looked at shows that propositions do not exist. Seeing as there is clearly a philosophical need for something that plays the role of propositions, and in the absence of a coherent alternative proposal, it looks like it is reasonable to believe in the existence of propositions.

**Chapter 5 : Sprachlogik: Granularity and Quine**

*What is a preposition? A preposition is a word used to link nouns, pronouns, or phrases to other words within a sentence. Prepositions are usually short words, and they are normally placed directly in front of nouns.*

Reviewed by Christopher Gauker, University of Cincinnati. Propositions, by Andrea Iacona, is a very good book on the existence of propositions. I am hoping to give the book a wider exposure through this review. The first is to reveal the fallacies by which others have tried to establish the existence of mind-independent propositions. The second is to offer his own deflationary account of the existence of propositions. The book is useful not only for its arguments and ideas but also as a guide to the relevant literature from the early 20th century up to the present. In the first chapter, Iacona takes up several arguments for propositions that in one way or another appeal to our ordinary ways of speaking. We say that two sentences mean the same or that one sentence has two meanings and identify these meanings with propositions. We distinguish between the sentence uttered and the assertion made and explain the latter in terms of the proposition expressed. In this chapter, Iacona simply shows that we cannot derive from these observations any of a number of assumptions that are often made about propositions. In particular, we cannot conclude that propositions are language-independent, or mind-independent, or the bearers of truth, or that they have internal structure. In the second chapter, Iacona criticizes a more metaphysical argument for propositions. The starting point for this argument is the premise that the truth of propositions is mind-independent. From this it is inferred that propositions themselves exist mind-independently. The basic mistake in this argument is the assumption that if a truth bearer is true in a world then the truth bearer exists in that world. The argument takes more subtle forms in the writings of Stephen Schiffer and George Bealer, but each of them, Iacona shows, misapplies one or another principle of logic. Chapter 3 initiates this program with a deflationary account of the relation of expressing that is commonly supposed to hold between sentences and propositions. In terms of this relation of interpretation, an account of expression can take the form of the following schema: As for the interpretation relation between sentences, Iacona acknowledges that there is not just one way to take this. 'Ypsilanti is taller than most people alive in ?' According to Iacona, we can understand interpretation in either way and so can countenance different kinds of propositions, such as indexical propositions as well as absolute propositions  $p$ . But do propositions exist? The question this raises is whether the truth of the identity on the left-hand side reduces to the truth of the sentence about inter-interpretability on the right-hand side so that, despite appearances, the left-hand side does not really imply that there are propositions. The position that Iacona adopts on this question is that we can stand by the equivalence of the left-hand side and right-hand side without first deciding whether propositions exist and then can take that equivalence as grounds for asserting the existence of propositions. But in the course of this Iacona does make at least one important observation. This is that the issue between deflationists and correspondence theorists about truth cannot be very well framed in terms of the truth of propositions. According to traditional notions of propositions, propositions have their truth values essentially. So there really can be no question of propositions being true or false according to whether or not they correspond to reality. There are a couple of important motives for positing propositions to which Iacona gives too little attention. The motives I am thinking of stem from a common conception of linguistic communication and from a nearly universal conception of logical validity. Supposedly, a speaker chooses his or her words in the expectation that on the basis of the words spoken hearers will be able to recognize that the speaker has in mind a thought with a certain propositional content. Communication is successful if in this way the hearer is led to attribute to the speaker the attitude toward a proposition that the speaker intended the hearer to attribute to him or her. If we are to explicate linguistic communication in this way, then it is important that we understand propositions in one particular way rather than any other. Propositions cannot be the sort of indexical propositions that Iacona mentions. Multiplying such examples, we find that the propositions that we appeal to in this theory of linguistic communication have to be the sort of propositions that have their truth values absolutely. First, it complicates what we have to say about expression. Second, while this conception of communication does not just deny that there are such

things as indexical propositions, it does give a certain theoretical privilege to absolute propositions, which have their truth values essentially. So if we think of propositions as introduced into our ontology via the relation of inter-interpretability between sentences, we have to say what is special about the relation of inter-interpretability that introduces such absolute propositions. Contemplation of relations of inter-interpretability leads to the second motive for propositions that Iacona basically ignores. This is that the concept of a proposition plays a special role in formal semantics and, in particular, in the definition of logical validity. It is commonly said that an argument is logically valid if and only if for every possible world  $w$ , if the premises are all true in  $w$ , then the conclusion is true in  $w$  as well. If we want to allow that the truth of a sentence is relative to a context of utterance as well as to a world, we can say that an argument is valid if and only if for every world  $w$  and every context  $c$ , if the premises are all true in  $c$  in  $w$ , then so is the conclusion. We obtain what is merely a notational variant on this definition if we assign to each sentence-context pair the set of possible worlds such that the sentence in that context is true in the worlds in that set and then say that an argument is valid if and only if for each context the intersection of the sets assigned to the premises in that context is a subset of the set assigned to the conclusion in that context. In this way mere notational variation takes us from a common conception of logical validity to a conception of sentences as expressing propositions in contexts. Such propositions will be absolute propositions whose truth values depend only on whether the actual world is a member and whose truth values do not vary with context. The fact that we have this motive for introducing absolute propositions raises the prospect that Iacona is guilty of a major begging of the question. He can acknowledge that absolute propositions are one kind of proposition that we can introduce via one kind of inter-interpretability relation. But what is this inter-interpretability relation? The only kind of inter-interpretability that he actually talks about is inter-interpretability on the basis of functional role  $p$ . But that kind of inter-interpretability is not what is wanted for purposes of introducing absolute propositions. When we go to explicate the relation of inter-interpretability by which absolute propositions are introduced, we might find ourselves positing absolute propositions in much the same way we found ourselves doing so in defining logical validity. The kind of inter-interpretability to which we must appeal in introducing the propositions in terms of which we define logical validity will apparently be just the kind of logical equivalence that we will define in terms of that same kind of proposition. In conclusion, one can say that Iacona has done an excellent job of isolating the issue concerning the nature and existence of propositions. One could almost just grant that he has decisively undercut the arguments for mind-independent propositions, except that until we have a fully successful alternative account of our talk of propositions we will want to leave our options open. For that, we will need an alternative conception of semantics, one that does lead us to posit absolute propositions simply by altering our notation.

**Chapter 6 : Do Propositions Exist? | Solomon Radley's portfolio**

*Quine explains that the stimulus-meanings of eternal sentences may be propositions. According to Quine." or "that water. in that they may refer to more than one object. the response to 'occasion sentences' may depend on prompting by simultaneous stimulation.*

An Essay in the Metaphysics of Propositions Published: Reviewed by Ulrich Meyer, Colgate University This ambitious book aims to revive two controversial theses: Unlike eternal propositions, whose truth-value remains constant over time, temporal propositions have different truth-values at different times. The subtitle promises an account of the metaphysics of propositions, but most metaphysical questions about propositions, such as their role in accounts of facts, or the nature of propositions themselves, play a minor role in the discussion. This is a book in the philosophy of language, addressed to experts in the field, and it should be appreciated as such. The majority view amongst philosophers is that the contents of beliefs are eternal propositions. Brogaard challenges this consensus view in Chapter 2, which aims to rebut an objection due to Mark Richard. If the contents of beliefs were temporal propositions, Richard argues, then the following argument should be valid, but it is not: Mary believed that Nixon was president Mary still believes what she once believed Therefore, Mary believes that Nixon is president. This would allow us to deny the validity of the argument without having to reject temporal belief content. Brogaard then argues that the advocates of eternal belief content are unable to give a plausible account of how people actually retain beliefs, by storing them in their brains. To establish that the content of some belief is a temporal proposition, we would need to find two times  $t_1$  and  $t_2$  such that the same proposition is believed at both times, but what is being believed at  $t_1$  is true and what is being believed at  $t_2$  is false. Since there is no need for the believer to be the same at both times, belief retention is really of secondary importance. Indeed, if Brogaard is right that belief retention does not require an agent to believe the same proposition at the two times, then the issue of belief retention is irrelevant to our question about belief content. I wish Brogaard had addressed this issue in a bit more detail. Following a brief period of popularity in the 1980s, the operator theory was quickly abandoned when it emerged that it is unable to provide a plausible account of how verb tense actually functions in English. Verb tenses in English do not iterate like this. Consider the following sentence, which contains two verbs in the past tense: John heard that Mary was pregnant. On a natural reading of the sentence, Mary is said to have been pregnant at the time of hearing, not before it. This is one of many examples that seem to show that verb tenses in English do not function like sentential operators, and which helped to persuade most linguists and philosophers of language to abandon the operator theory in favor of quantificational theories that try to account for verb tense in terms of explicit quantification over times or events. Brogaard thinks that this shift to quantificational theories was a mistake. In Chapters 3 and 4, she embarks on a sustained defense of the operator theory, by trying to account for all known counterexamples. Experts will find a lot of interesting material in these chapters, but the larger picture sometimes gets a little bit lost amongst the many examples. Some promising proposals also do not get developed as fully as one might have wished. Personally, I would have been interested to read more about the theory of composite temporal operators that Brogaard mentions in Section 4. The stated aim of Chapters 3 and 4 is to show that the operator theory can account for the same linguistic evidence as quantificational theories. The operator theory is an empirical claim about the structure of English. Like any other scientific theory, it not only needs to account for all the evidence, it also needs to outperform its rivals with regard to secondary virtues, such as overall simplicity. The worry is that the operator theory might end up like Ptolemaic cosmology: Brogaard does not alleviate these concerns; in fact, she repeatedly praises the elegance of quantificational theories. Different tokens of the same tensed sentence can have different truth-values if they occur at different times, but this alone does not show that the proposition expressed is temporal. Even if tenses do work like operators, it does not follow from this alone that utterance tokens of the same tensed sentence type that occur at different times always express the same proposition. Nor is it obvious that the contents of belief must always coincide with the contents of assertions. If the eternalist about the content of assertion is right, then this utterance asserts that  $a$  is  $K$  at time  $t$ . However, the utterer

clearly does not believe this; not every belief at a time is a belief about that that time. It seems that even an honest agent can sometimes fail to assert what she believes, or fail to believe what she asserts. For the most part, Brogaard combines these various theses by stipulation. On page 5, she presents a list of claims about propositions advocated by Gottlob Frege, which includes the claim that propositions are the contents of assertions, that they are the objects of belief and other attitudes, and that they are the contents that certain sentential operators operate on. I think the overall case of the book could have been strengthened by a more explicit account of the relation between the various claims Brogaard defends. This review focused on a few open questions and some issues that I wish Brogaard had addressed in more detail, but these concerns should not detract from the overall merits of the book. *Transient Truths* is a welcome addition to the philosophical literature that is bound to reignite the discussion about the temporal features of propositions.

## Chapter 7 : Propositional calculus - Wikipedia

*Many of the great slogans of both past and present contain a USP - a Unique Selling Proposition. Here are a few of the best. checkout best 5 Examples of Unique Selling Propositions.*

A, major in Mathematics with honors reading in mathematical philosophy. Navy, working chiefly in Naval intelligence. There are, of course, developments, as he comes to appreciate difficulties in his view, or its implications, or distinctions that need to be made. Outright changes of mind, however, are relatively rare and mostly on relatively minor points. We can, for the most part, treat him as having a single philosophical orientation, to which what he calls naturalism is fundamental. This is not to say that his naturalism is self-conscious and explicit from the start; it is, rather, something that he became clearer about over the years. First, it is less restrictive than it may seem. Quine certainly takes the natural sciences, especially physics, as paradigmatic. Second, Quine does not see scientific knowledge as different in kind from our ordinary knowledge; he sees it, rather, as the result of attempts to improve our ordinary knowledge of the world: We might add that the scientist is more narrowly focused on issues of truth and objectivity and, as contributing to these goals, clearer and more systematic. Many philosophers would no doubt accept that the methods and techniques of science are the best way to find out about the world. Quine would insist that this claim too must be based on natural science. If this is circular, he simply accepts the circularity. This is the revolutionary step: The point here is that Quine denies that there is a distinctively philosophical standpoint, which might, for example, allow philosophical reflection to prescribe standards to science as a whole. He holds that all of our attempts at knowledge are subject to those standards of evidence and justification which are most explicitly displayed, and most successfully implemented, in the natural sciences. This applies to philosophy as well as to other branches of knowledge. The epistemologist, therefore, reflects on science from within science; there is no theory of knowledge distinct from science. Philosophers are thus to be constrained by scientific standards. In he puts it this way: The latter is better-known and Quine is perhaps often thought of as a negative philosopher, primarily concerned to criticize others. He casts doubt on terms which many philosophers take for granted. He does not dismiss such terms as meaningless, but simply as not meriting a place in serious science, or in the objective account of the world at which science aims. A well-known and important example is his criticism of the idea of meaning. The term is insufficiently clear, and putative explanations which employ it are in fact unexplanatory. He says about the first two on this list and would no doubt extend the comment to the others: This criticism of the scientific and philosophical use of certain ordinary terms goes along with rejection of philosophical questions which make essential use of those terms. Many philosophers have found the vagueness or unclarity of the term to be a fertile field in which to cultivate what they take to be important philosophical problems: What exactly are the conditions on knowledge? Do we really know anything at all? For Quine, by contrast, such questions may simply be dismissed. Far more than is generally recognized. It is, nevertheless, a mistake to think of him as primarily a critical or negative thinker. His criticisms rely on his positive doctrine; articulating and defending that doctrine generates its own questions and problems. But certainly he accepts that some questions are sufficiently general, abstract, and remote from experiment and observation, that they may be classified as philosophical. At times he assimilates the questions with which he is concerned to those which have traditionally occupied philosophers. In some places, Quine approaches epistemology through the problem of scepticism about the external world. Quine has no room for the kind of scepticism which asks the following kind of question: The next paragraph enlarges on the theme: Our scientific theory can go wrong, and precisely in the familiar way: But what if we have achieved a theory that is conformable to every possible observation, past and future? In what sense could the world then be said to deviate from what the theory claims? There is, however, a way of understanding the sceptical question which Quine can make sense of. Invoking gestalt psychology, he argues that the simple sensory idea which Berkeley and Hume had claimed were given by the senses are not in fact given, that we see things in three-dimensions, for example, instead of having to infer the third. He does not, however, claim that there is no problem here. What is the challenge? The sceptical challenge is then: In short, if our science were true, how

could we know it? It is, rather, a serious question, to be answered by deploying the full resources of our knowledge—it is a scientific question. Quine recognizes that the question, thus construed, is not exactly what earlier epistemologists had in mind, but argues that the change is justified: It also requires that he set out just what is to be included in a naturalistic account of the world; in other words, it requires an account of the world, at least in broad outline. Among other things, this account constrains his epistemology, since it is a naturalistic account of knowledge that is required. Regimented theory is our overall science, the sum total of our best and most objective knowledge about the world, reformulated in the clearest and simplest form. Quine sees this kind of reformulating as of a piece with ordinary scientific endeavour, but carried further than working scientists are likely to have reason to do. He discusses the distorting effect which language is likely to have on our view of the world and comments: To some degree—the scientist can enhance objectivity and diminish the interference of language, by his very choice of language. And we [meaning we philosophers, we scientists at the abstract and philosophical end of the spectrum], concerned to distill the essence of scientific discourse, can profitably purify the language of science beyond what might reasonably be urged upon the practicing scientist. It is not a complete and finished object, available for us to examine. Since the enterprise is not in fact going to be carried out all the way we are not going to get a complete answer. But on some important general issues, Quine holds, we can get answers. In particular, he argues that the framework of regimented theory is first-order logic with identity, that the variables of this theory range over physical objects and sets, and that the predicates of the theory, the only non-logical vocabulary, are physicalistic, in his somewhat complicated sense. See section 4, below. Although this is not traditional a priori metaphysics, we should not underestimate the ambition of the project. The claim that the variables of regimented range only over physical objects and sets is, as far as he is concerned, the same claim as that only physical objects and sets really exist. The distinction between analytic truths and synthetic truths plays a crucial role in their philosophy. Analytic truths might be characterized as those true solely in virtue of the meanings of the words they contain; synthetic truths, by contrast, state matters of extra-linguistic fact, and are known by experience. The Logical Empiricists accounted for truths which do not seem to be answerable to experience, most obviously the truths of logic and mathematics, by saying that they are analytic, and this position was very widely held by the s. Quine, however, famously casts doubt on analytic-synthetic distinction, and rejects the use made of it by the Logical Empiricists and other philosophers from the s on. Notable among the others is C. Lewis, first a teacher and then a colleague of Quine; his influence on Quine has perhaps been underestimated. The issues here are complex, and the argument takes many twists and turns. He holds that there are languages which differ in expressive power, not merely as notational variants. The difference between intuitionistic logic and classical logic is an important example here, as is the difference between the language of Newtonian mechanics and the language of relativistic mechanics. He also holds that there is no one correct language. That there is such a difference is a point which Carnap never questions. The Principle of Tolerance requires that, for any language, there be a clear difference between the analytic sentences of the language and its synthetic sentences. The former are roughly those which are constitutive of the language: Carnap speaks of a change of this sort as external, since it involves a change of language. A change of mind about an ordinary synthetic sentence is, by contrast, internal, since it takes place within a given language. External changes are a matter for tolerance, whereas internal changes are correct or incorrect, not matters to which we should apply the Principle of Tolerance. For the principle to make sense, each sentence of the language must fall clearly into the one category or the other. At least as Quine sees the matter, the use of the Principle of Tolerance also requires that analytic sentences be on an entirely different epistemological footing from synthetic sentences. Synthetic sentences are answerable to evidence; analytic sentences are a matter of the choice of language, which does not require theoretical justification. Quine rejected the idea that there is an epistemological difference of this kind. Even if we can distinguish the analytic sentences from the synthetic sentences, we may still have reasons to reject an analytic sentence. And those reasons may be of the same kind that lead us to reject synthetic sentences. A change of mind about an analytic sentence would be a change in the language. Still, we might have reasons to make such a change, reasons that are of the same sort that lead us to make revisions to synthetic sentences. This is the view that Quine argues for. On the one hand, he emphasizes the

point which Carnap largely accepts that choice of language is not theoretically neutral: Hence, he claims, the two sorts of choice are on the same epistemological footing, and the Principle of Tolerance is unjustified. This is the claim that most of our sentences do not have implications for experience when they are taken one-by-one, each in isolation from the others. What has experiential implication is, in most cases, not an individual sentence but a larger chunk of theory. Holism is not a very controversial doctrine. Carnap accepts it see Carnap, , , but Quine holds that he does not think through its implications far enough. In particular, Quine claims that holism shows that most of our sentences are not justified by the relation of the individual sentence, considered in isolation, to experience. Almost always, what matters is the relation to experience of some larger chunk of theory and, in principle, although perhaps never in practice, of the theory as a whole. This means that the correctness of a given claim is almost never settled simply by gathering empirical evidence. Other factors will play a role, in particular the way in which accepting that claim would contribute to the efficacy and simplicity of the theory as a whole.

**Chapter 8 : Propositions (Stanford Encyclopedia of Philosophy)**

*Eternal sentence nonrepresentationalism manages to join the communicative agreement criterion of the directed-toward relation (see V&S2) with the syn- tactic criterion of identity for the objects of that relation.*

Not only that, but they will also correspond with any other inference of this form, which will be valid on the same basis that this inference is. Propositional logic may be studied through a formal system in which formulas of a formal language may be interpreted to represent propositions. A system of inference rules and axioms allows certain formulas to be derived. These derived formulas are called theorems and may be interpreted to be true propositions. A constructed sequence of such formulas is known as a derivation or proof and the last formula of the sequence is the theorem. The derivation may be interpreted as proof of the proposition represented by the theorem. When a formal system is used to represent formal logic, only statement letters are represented directly. Usually in truth-functional propositional logic, formulas are interpreted as having either a truth value of true or a truth value of false.

History of logic Although propositional logic which is interchangeable with propositional calculus had been hinted by earlier philosophers, it was developed into a formal logic Stoic logic by Chrysippus in the 3rd century BC [1] and expanded by his successor Stoics. The logic was focused on propositions. This advancement was different from the traditional syllogistic logic which was focused on terms. However, later in antiquity, the propositional logic developed by the Stoics was no longer understood[ who? Consequently, the system was essentially reinvented by Peter Abelard in the 12th century. Although his work was the first of its kind, it was unknown to the larger logical community. Consequently, many of the advances achieved by Leibniz were recreated by logicians like George Boole and Augustus De Morgan completely independent of Leibniz. One author describes predicate logic as combining "the distinctive features of syllogistic logic and propositional logic. Truth-Trees were invented by Evert Willem Beth. Within works by Frege [6] and Bertrand Russell , [7] are ideas influential to the invention of truth tables. The actual tabular structure being formatted as a table , itself, is generally credited to either Ludwig Wittgenstein or Emil Post or both, independently. When the formal system is intended to be a logical system , the expressions are meant to be interpreted as statements, and the rules, known to be inference rules, are typically intended to be truth-preserving. In this setting, the rules which may include axioms can then be used to derive "infer" formulas representing true statements from given formulas representing true statements. The set of axioms may be empty, a nonempty finite set, a countably infinite set, or be given by axiom schemata. A formal grammar recursively defines the expressions and well-formed formulas of the language. In addition a semantics may be given which defines truth and valuations or interpretations. The language of a propositional calculus consists of a set of primitive symbols, variously referred to as atomic formulas , placeholders, proposition letters, or variables, and a set of operator symbols, variously interpreted as logical operators or logical connectives. A well-formed formula is any atomic formula, or any formula that can be built up from atomic formulas by means of operator symbols according to the rules of the grammar. Mathematicians sometimes distinguish between propositional constants, propositional variables, and schemata. Propositional constants represent some particular proposition, while propositional variables range over the set of all atomic propositions. Schemata, however, range over all propositions.

Basic concepts[ edit ] The following outlines a standard propositional calculus. Many different formulations exist which are all more or less equivalent but differ in the details of: All propositions require exactly one of two truth-values: For example, let P be the proposition that it is raining outside. We then define truth-functional operators, beginning with negation. Conjunction is a truth-functional connective which forms a proposition out of two simpler propositions, for example, P and Q. For any two propositions, there are four possible assignments of truth values: Disjunction resembles conjunction in that it forms a proposition out of two simpler propositions. It expresses that either P or Q is true. Thus, in the cases listed above, the disjunction of P with Q is true in all cases except case 4. Using the example above, the disjunction expresses that it is either raining outside or there is a cold front over Kansas. Note, this use of disjunction is supposed to resemble the use of the English word "or". However, it is most like the English

inclusive "or", which can be used to express the truth of at least one of two propositions. It is not like the English exclusive "or", which expresses the truth of exactly one of two propositions. That is to say, the exclusive "or" is false when both P and Q are true case 1. An example of the exclusive or is: You may have a bagel or a pastry, but not both. Often in natural language, given the appropriate context, the addendum "but not both" is omitted but implied. In mathematics, however, "or" is always inclusive or; if exclusive or is meant it will be specified, possibly by "xor". The proposition to the left of the arrow is called the antecedent and the proposition to the right is called the consequent. There is no such designation for conjunction or disjunction, since they are commutative operations. It expresses that Q is true whenever P is true. Thus it is true in every case above except case 2, because this is the only case when P is true but Q is not. Using the example, if P then Q expresses that if it is raining outside then there is a cold-front over Kansas. The material conditional is often confused with physical causation. The material conditional, however, only relates two propositions by their truth-values which is not the relation of cause and effect. It is contentious in the literature whether the material implication represents logical causation. It expresses that P and Q have the same truth-value, and so, in cases 1 and 4, P is true if and only if Q is true, and false otherwise. It is extremely helpful to look at the truth tables for these different operators, as well as the method of analytic tableaux. Closure under operations[ edit ] Propositional logic is closed under truth-functional connectives. In order to represent this, we need to use parentheses to indicate which proposition is conjoined with which. By evaluating the truth conditions, we see that both expressions have the same truth conditions will be true in the same cases , and moreover that any proposition formed by arbitrary conjunctions will have the same truth conditions, regardless of the location of the parentheses. This means that conjunction is associative, however, one should not assume that parentheses never serve a purpose. One can verify this by the truth-table method referenced above. For any arbitrary number of propositional constants, we can form a finite number of cases which list their possible truth-values. A simple way to generate this is by truth-tables, in which one writes P, Q, Below this list, one writes 2k rows, and below P one fills in the first half of the rows with true or T and the second half with false or F. Below Q one fills in one-quarter of the rows with T, then one-quarter with F, then one-quarter with T and the last quarter with F. The next column alternates between true and false for each eighth of the rows, then sixteenths, and so on, until the last propositional constant varies between T and F for each row. This will give a complete listing of cases or truth-value assignments possible for those propositional constants. Argument[ edit ] The propositional calculus then defines an argument to be a list of propositions. A valid argument is a list of propositions, the last of which follows from or is implied by the rest. All other arguments are invalid. The simplest valid argument is modus ponens , one instance of which is the following list of propositions:

### Chapter 9 : Truth-bearer - Wikipedia

*Propositions*, by Andrea Iacona, is a very good book on the existence of theinnatdunvilla.com was published, in English, by the Italian publisher Name (that's right, the name is "Name") (theinnatdunvilla.com).

The best USPs take a unique quality and explain how that quality will benefit your customers, all in a few memorable words. Many companies past and present use USPs as their slogans, so that they can put them in front of as many prospective customers as possible. In fact, some of the best slogans of the past have used unique product qualities that no one would think were good selling points -- until they worked! Here are a few particularly great examples of Unique Selling Propositions. This USP does a remarkable job of turning what seems like a negative quality into a benefit. For many years, Avis was in the unfortunate position of being the second-largest car rental company, while Hertz claimed the 1 spot. In fact, Avis was having trouble just staying solvent. So Avis decided it was time for a total image makeover and hired the famous ad agency Doyle Dane Bernbach to come up with a new ad campaign that would pull the company out of its hole. FedEx Corporation When it absolutely, positively has to be there overnight. FedEx no longer uses this slogan, but while it lasted it was perhaps the perfect example of a great USP. In a few words, FedEx gives its customers the guarantee that it will deliver their packages safely and on time. The slogan actually delivers not one but two benefits: This is an example of how even a quirky USP can attract customer interest. This goes to show that as long as a benefit is meaningful to prospective customers, it will be effective. DeBeers A diamond is forever. The USP here is that diamonds, being almost unbreakable, last forever and thus are the perfect symbol for eternal love. As a result, diamonds became by far the most popular choice for engagement rings. The terms of the deal are laid out so specifically that Dominoes customers know they can hold the company to it. I continued through a variety of sales jobs ranging from retail sales for a storage company to selling bank products for a Fortune financial institution. As a small business owner, I now focuses on selling for my own company, Tailored Content, a website content provider. I write on a wide range of topics but my primary focus is sales and how to sell effectively.