## **Contents**

			1
ntr	oduc	ledgements tion: Suppositiones terminorum in the twentieth century: tio functionalis and functional being	
1.	Semi	antic functions, science, and philosophy	
	1.1	Semantic functions and theoretical science	
	1.2	Semantic functions and philosophy	
	1.3	"Generic" terms as functions of degrees of (rational) perfection	
	1.4	Generic terms, communicative presupposition, and non-specificity	
	1.5	Derivation as an operation on the intensions of terms, and derived functions	
	1.6	Properties of semantic functions, and the contextual medieval theory of the <i>suppositiones terminorum</i>	
	1.7	Comparison with Wittgenstein's Tractatus	
	1.8	Non-mathematicized intensions (non-mathematicized functions from "possible worlds")	
2.	Semi	otical relations and semiotical terminology to be used in this book	
	2.1	Concepts and other things as possible "meanings" of expressions	
	2.2	A word's denotation/meaning in a given sentence (of a language)	
	2.3	Carnapian concepts in the narrower and in the wider sense	
	2.4	Are there concepts that are not functions?	
	2.5	The theory that expressions always denote concepts	
	2.6	Terminological recommendations	
	2.7	Summary (chart)	
3.	Prod	ucer and Interpreter	
	3.1	Producer and Interpreter — two fundamentally distinct semantic roles	
	3.2	Should the linguistic community be mentioned explicitly in our theory as a third instance?	
4.	Som	e theorists — a very short and incomplete list	
5.	A su	rvey of seven problems, solutions, and auxiliaries	



A list of examples illustrating our seven official problems, in their of introduction (from Ch. I onwards)		
apter I: Intentional intensions	29	
Recapitulation of problem, solution, auxiliary (in outline)	29	
	-	
<ul><li>2.2 The Interpreter's intentional intensions</li><li>2.3 Immediate (direct, initial) and mediate (indirect, basic)</li></ul>	33 deno-	
Auxiliary: A classification of "extensional" and "intensional" ordinary learns and verb phrases, for interpretational purposes	-	
<ul> <li>3.3 Transitive verb phrases, solely left-extensional (group 3.4 Intransitive verb phrases, extensional (group C)</li> <li>3.5 Intransitive verb phrases, intensional (group D)</li> <li>3.6 Transitive verb phrases, solely right-extensional</li> </ul>	B) 38	
<ul> <li>3.7 Transitive verb phrases, doubly intensional (group F)</li> <li>3.8 Abbreviations</li> <li>3.9 Intentional and referential uses of terms (supply-side see</li> </ul>	41 41 eman-	
Preliminary survey (incomplete): Applications to the sentences illustrat	•	
apter II: Functional sentence perspective and syntactically		
Recapitulation of Problem II, and a partial solution	44	
Syntactic ambiguity and semantic ambiguity. Frege's principle	48	
A very small fragment of role-invariant overt ordinary English. Its categories, lexicon, and the Grammarian's role-invariant syntactic rules (auxiliary).		
3.2 The lexicon of the expressions (overt phrases) of our frag	gment 51	
pressions	52	
123	introduction (from Ch. I onwards)  Apter I: Intentional intensions  Recapitulation of problem, solution, auxiliary (in outline)  The Interpreter's distinction of "intension" and "extension" of line expressions of ordinary English (solution)  2.1 A survey of suggested solutions to this problem  2.2 The Interpreter's intentional intensions  2.3 Immediate (direct, initial) and mediate (indirect, basic) tations of terms  Auxiliary: A classification of "extensional" and "intensional" ordinary liverbs and verb phrases, for interpretational purposes  3.1 Definitions  3.2 Transitive verb phrases, doubly extensional (group A)  3.3 Transitive verb phrases, extensional (group C)  3.4 Intransitive verb phrases, intensional (group D)  3.5 Intransitive verb phrases, intensional (group D)  3.6 Transitive verb phrases, solely right-extensional (group E)  3.7 Transitive verb phrases, doubly intensional (group F)  3.8 Abbreviations  3.9 Intentional and referential uses of terms (supply-side setics)  Preliminary survey (incomplete): Applications to the sentences illustrate problem  Apper II: Functional sentence perspective and syntactically acous sentences in ordinary English  Recapitulation of Problem II, and a partial solution  Syntactic ambiguity and semantic ambiguity. Frege's principle  A very small fragment of role-invariant overt ordinary English. Its cate lexicon, and the Grammarian's role-invariant syntactic rules (auxilia)  3.1 Categories and classes of meaningful expressions  3.2 The lexicon of the expressions (overt phrases) of our frag  3.3 Role-invariant syntactic rules for the juxtaposition of pressions	

Contents	XIII

4.	Application of the role-invariant grammar to the examples illustrating the problem, with the addition of Producer's FSP		
	4.1	Syntactic ambiguity: A sentence constructed in two ways, on the strength of this syntax	55
	4.2 4.3	Functional sentence perspective and the Grammarian's syntax An undesired consequence of our theory: Semantically unambiguous sentences which on the strength of our role- invariant syntax are ambiguous	58 58
	4.4	A sentence that is an example of two problems	59
5.	Refir	nement of the survey in Ch. I, Section 4 (chart)	60
6.	A no	ote on practical logic and subject-predicate grammar	60
		III: A first theory of the Interpreter's representational s: Enriched English (EE) and Begriffsschrift No. 2	61
1.		pitulation of Problem III, and a solution — the super-Fregean treatment dinary English quantifier phrases and proper names	61
	1.1	Some reasonable semantic principles, and Problem III	61
	1.2	"Generic" men, "generic" pigs	62
	1.3 1.4	Generic Man, generic Woman, and their generic State  Frege's solution — his treatment of the quantifiers, and abolishment of Principle Two	64 65
	1.5	Montague's solution — the super-Fregean treatment of quantifiers in ordinary English	66
	1.6	Comparison of theories	67
	1.7	An ontological Philosopher's interpretation of the super- Fregean treatment of terms, and "Philosophers' English" (PE)	68
2.	Tow	ards a systematic explanation of the solution to this problem	69
	2.1	Now we have three problems	69
	2.2	Preliminary remarks on substitution. A sketch of Churchian functional abstracts and their uses	71
	2.3	[A speculative aside on possible connections between functional sentence perspective and the production of proper	_,
	2.4	names]	76
	2.4 2.5	[A speculative interlude on the connection between functional sentence perspective and the production of OE quantifier	78
	2.6	phrases] Possible production of OE quantifier phrases, and their interpretation	81 82
	2.7	Possible production of OE pronouns, and their interpretation	83

	2.8	Survey of hypotheses about the fundamental syntactic roles of representations of ordinary English expressions in the Interpreter's auxiliary language
3.	Auxi repres	liary III; $A$ more precise formulation of an occult Interpreter's sentational extension of our fragment of ordinary English (first theory)
	3.1 3.2 3.3	The occult lexicon of EE (Enriched English), categorized Extensions and intensions of OE expressions
4.	Rules 4.1	for the "translation" of OE expressions into EE, and their denotations Immediate (direct, initial) denotations of expressions. Survey (chart)
	4.2 4.3	The general principle of OE-EE "translation"
	4.4 4.5	phrases The translation of OE terms and pronouns Translation of (the results of) the Grammarian's OE jux-
	4.6	taposition
	4.7 4.8	Translation of the Grammarian's OE substitution results . Retrieving the likely referential meaning-in-use; or, development of initial EE representations into basic representations
	4.9	"by λ-conversion"  Development sometimes results in collapse of the A-B distinction and sometimes not
		Object terms with existential import under a certain assumption about the Producer's FSP
5.	Begr	tions
Cha	apter link v	IV: Relational-meaning postulates in Enriched English; with Begriffsschrift No. 1
		lem IV and its solution (in outline)
	Indit	oidual-relational meaning postulates (IRMP's) concerning representations t-ext OE verb phrases
3.		pectivically limited individual-relational meaning postulates (IRMP's) rning representations of ext-int OE verb phrases
4.	A va	riant with parametric individual-relators
5.	The	logical temperature problem is now solved
6.	Dire	ct and indirect denotations of OE terms. Linking up with medieval logic

Cont	ents	XV
7.	Caveats; chart	113
	pter V: Improved theory of the Interpreter's representational guage: Intensional English (IE) and Begriffsschrift No. 3	115
1.	An intermediary problem situation for the Theoretician	115
2.	Solution	117
	<ul> <li>2.1 A new theory of the Interpreter's representational language</li> <li>2.2 Explicitation of our semantic hypotheses in an improved theory of interpretational representation</li> </ul>	117 118
3.	Auxiliary: A systematic description of a "language" containing names for functions from possible worlds (outline)	121
	<ul> <li>3.1 Concerning the IE lexicon</li> <li>3.2 Concerning the syntax of IE</li> <li>3.3 Concerning the Theoretician's EE-IE translation</li> <li>3.4 A theoretical choice — and two styles of the new theory</li> <li>3.5 Comparison of Style 1 and Style 2 — assumptions and</li> </ul>	121 122 122 122
	consequences  3.6 Concerning the Theoretician's EE-IE translation — a comparison of the two styles	<ul><li>123</li><li>126</li></ul>
4.	Begriffsschrift No. 3	126
	npter VI: A systematic description of the Interpreter's recon-	128
1.	Recapitulation of the problem, the solution and the auxiliary (in outline)	128
2.	Defining syntactic categories by domain and range (auxiliary)	130
{	2.1 The EE categories	130
1	and syntactic rules for EE  2.3 The OE-EE translation rules once more  2.4 The relational-meaning postulates of EE once more	132 133 133
3.	Emergence of hidden variables in IE — Style 2	134
	<ul> <li>3.1 The Interpreter's completed functional abstraction. Reinterpretation of EE categories</li> <li>3.2 The Interpreter's IE lexicon</li> <li>3.3 The Interpreter's IE " syntactic" rules</li> </ul>	134 134 137
4.	EE-IE translation	138
	4.1 The Theoretician's rules for exhibiting occult variables and their values	138

	4.2	Abbreviations (whereby possible-world symbols are eclipsed)	14
	4.3	Translation of EE representations of terms — proper names,	
	4.4	pronouns, and quantifier phrases; and a translational theorem Application of the TEI-rules to some of our examples of EE	14
		sentence representation	14
	4.5	Binary notation	14
5.	Remi	inders, results, and important observations	14
	5.1 5.2	Ad OE	14 14
	5.3	Concerning our second theory of the Interpreter's representational language (IE)	14
6.	Rein	terpretation of syntactic categories — comparison of Style 1 and Style 2	14
7.	Relai	tional-meaning postulates. Reinterpretations and additions	14
	7.1	The Interpreter's IE phenomenal-relational meaning postulates concerning representations of doubly extensional OE	
	7.2	transitive verbs  The Interpreter's individual-functional relational-meaning postulates (FRMP) concerning representations of OE transitive	14
	7.3	verbs. Functional identity and functional genidentity The ext-ext transitive verb "be", and three representational	14
	7.4 7.5	notions of equality	15 15 15
8.		Interpreter's phenomenal-characteristic meaning postulates concerning sentations of extensional intransitive basic OE verbs	15
9.	indit	Interpreter's constant-value postulates concerning IE constants for vidual-functions. Functional identity and functional genidentity efined)	15
١٥.	Appi	lication of the above to the premisses of the temperature problem	15
11.		terpretation of the OE/EE sentence category d ("dialectical object", arative sentence")	15
	_	VII: Substantive common nouns and the reification of al-functions	16
1.	Reca	pitulation of Problem VII. Solution and auxiliary in outline	10
2.	Fund	tional sentence perspective and the institutional-substantive ambiguity	10

Contents XVII

3.	Mean nouns	ing-postulates concerning representations of substantive OE common	162
		The problem in IE symbols	162
		of substantive OE common nouns	163
	ic the	/III: Existence, negation and roles: Prolegomena to a pragory of denotation and existential import in "negative" sen-	167
		uction. A new problem, its solution (in outline) and an auxiliary	167
2.		inary observations concerning the communicative functions of negations inary language	171
		Contradiction of statements and hypotheses: Exclusion	171
	2.2	negation Signalling extra-logical discrepancies in the outer world: Discrepancy negation	171 172
		Choice negation Functional comparison of negative sentences and positive sentences	174 175
3.	Affirm	nation, negation and existence	176
		An existential-meaning postulate concerning representations of extensional intransitive OE verb phrases  Existential-meaning postulates concerning representations of transitive OE verbs	176 178
4.		the introduction of an interpretational predicate of existence help us solve	178
	•	Exclusion negation and existence Discrepancy negation and existence Choice negation and existence Conclusions	178 179 180 180
Epi	logue		181
1.	On th	ne philosophy and reality of semantic roles	181
2.	A two	o-role semantical analysis of the Paradox of the Liar	182
3.	Scient	tific arguments vs. levels of dialectical strictness	184
4.	Expli	citation of hidden variables in science	184
5.	A ph	ilosophy of "generic" terms	185
6.	On r	esearch into the language and foundations of the empirical sciences	186

XVIII			Contents		
Bibliography			188		
Index of Names			192		
Index of Subjects			194		