

Toward a Philosophical Theory of Everything

*An Introduction and Contributions to
the Structural-Systematic Research Program in Philosophy*

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o Preliminaries

o.1 The structure of this book

According to its subtitle, this book is an introduction and further contributions to the structural-systematic research project in philosophy. That research project is undertaken in *Struktur und Sein* (Puntel 2006), *Structure and Being* (Puntel 2006/2008a), and *Estrutura e Ser* (Puntel 2006/2008b), so this book is also an introduction to those volumes. Following the preliminaries covered in this chapter (o), Chapter 1 is a concise introduction designed to provide enough information that readers of it will be able to understand sections throughout *Structure and Being* (or *Struktur und Sein* or *Estrutura e Ser*) without having read preceding sections in those books. Chapter 2 provides a section-by-section summary of *Structure and Being* that aims both to clarify its trajectory and to aid readers in locating passages of relevance to their specific interests. Chapter 3 treats several topics already treated in *Structure and Being*, in some cases bringing together closely related matters that are treated in *Structure in Being* in disparate places, in some cases suggesting emendations, and in some, providing additional detail. Chapter 4 brings into the framework of the structural-systematic philosophy some subject matters not treated in *Structure and Being*.

o.2 Preliminary remarks on methodology

The structural-systematic philosophy of which this book is a partial presentation is a theory of everything or, in technical terms explained below, of the most universal structures of being as such and as a whole. This theory is presented by means of a linguistic account that aims to be true both in a general and easily intelligible sense and

in a precise sense specified by one of its own subtheories (see 1.4.2.1 and 3.2, below). The development and to some extent the presentation of this theory are guided by a method that is the focus of Section 1.5, but some preliminary methodological remarks are appropriate at this point. One reason for this is that this book aims at maximal clarity, and that includes clarity concerning the status of its own sentences. A second reason is that if the theory this book presents is indeed of everything, in the relevant sense, then it must also be a theory of itself—it itself, and therefore its method, must be included within its subject matter.

To be clarified at this point, in a general manner, are the criteria that the sentences presented in this account must satisfy if they are to qualify as true. Negatively, the account's method does *not* require—and indeed does not allow—for it to begin with or to include any sentences that would be *foundational* in the sense of satisfying the following two criteria: (a) being self-evidently or indubitably or in any way non-problematically true, and (b) providing a basis that would be required for the establishing of subsequent sentences as true. Positively, the method requires instead, from the outset, (1) that its sentences be adequately intelligible (loosely, that they not be nonsensical or meaningless), (2) that they not be defective in ways that would preclude the possibility of their being true (thus, most clearly, that they not be self-contradictory), and (3) that they be mutually consistent (that they not contradict one another). As additional sentences are added, the method comes to require that, in addition to satisfying the three criteria just identified, these sentences also serve in some cases to increase the intelligibility of previously introduced sentences or groups of sentences (arguments, subtheories, and so

forth) and, in all cases, ultimately to increase the intelligibility, coherence, and comprehensiveness, with respect to its subject matter, of the account as a whole.

Differently put, this account is structured as a holistic network of sentences collectively constituting a partial presentation of a theory of everything, or of being (what is, the world, the universe) as such and as a whole. Nodes within the network—individual theses and later subtheories—are stabilized by means of inferential interlinkings of various sorts, some of which are explicitly identified below (1.5). Obviously, the sentences in this account must be presented sequentially; for this reason, sentences articulated as the account begins cannot, when initially presented, be tightly inferentially interlinked. To the extent that the account is successful, linkages both multiply and strengthen as the account proceeds. Thus, for example, the intelligibility and coherence (within the book as a whole) of this section’s description of its method should increase as the density of the presented network increases, as should that of the SSP’s reliance on the network-structure. The increasing density of the network is also accompanied by increasing refinement. The reason for this is that clarity and intelligibility are often served by, and in many cases indeed require, initial reliance on formulations that prove, in light of subsequently introduced terms, theses, and arguments, to be less than fully adequate. An example: at the outset, technical terms such as “theoretical framework,” “theory of everything,” and “being as such and as a whole” are of necessity relatively vague; their vagueness decreases as the account develops.

To put the central point of the two preceding paragraphs colloquially: the reader should be guided implicitly, upon encountering a given sentence or group of sentences in this book, *not* (in the overwhelming majority of cases) by such questions as “Is this true?,” “Has this been proved?,” or “Do I agree?,” but instead by the questions, (i) “Does this make sense?,”¹ (ii) “*Is it possible* that this is true?,” and (iii) “Does this fit together with what has come before?” As the account develops, it becomes increasingly appropriate for

¹ The relevant question is *not* the *pragmatic* (subject- or reader-related) question, “Does this make sense *to me*?,” but instead the *semantic* (language- or meaning-related) question, “Does this make sense *in the language in which it is expressed*?” To clarify: the sequence “is or tomato anxiously,” presented simply as such, makes no sense *in ordinary English* (although it could make sense in some other language, for example in a code, or even in ordinary English if presented *not* simply as such, but instead, say, as a response to the instruction, “Produce a list consisting of a verb, a conjunction, a noun, and an adverb”). In contrast, the sentence “The structural-systematic philosophy is a theory of being as such and as a whole” might well at least initially make relatively little sense *to many readers* conversant in English, but it cannot be identified as *nonsensical* in English. Its attaining adequate *semantic* intelligibility *within this book* requires the introduction of other sentences explaining and stabilizing it, and its adequate *pragmatic* intelligibility—its making adequate sense *to readers*—of course depends in part on the readers’ own efforts.

the reader to keep in mind the additional question, (iv) “In what ways and to what degrees does this sentence or group of sentences increase the intelligibility and coherence of the theory or theories within which it is situated?” Ultimately, of course, the account as a whole must be assessed for its theoretical adequacy and indeed for its truth, but how the theory is best assessed is a question addressed by the theory itself; how this is accomplished, and why its accomplishment involves no crippling circularity, are explained below (1.5.4; see also *SB* 1.5.2.2–1.5.2.3, 6.3.2.1).

0.3 Preliminary stylistic, terminological, and typological clarifications

0.3.1 Acronyms

According to its subtitle, this book, *Toward a Philosophical Theory of Everything—TAPTOE*—contributes to the structural-systematic research program in philosophy—the SSRPP—in part by presenting an introduction to that research program. The SSRPP is devoted to the development of the structural-systematic philosophy—the SSP—a theory presented in part in Puntel 2006 and Puntel 2006/2008a, i.e., respectively, in *Struktur und Sein—S.u.S*—and its English counterpart, *Structure and Being—SB*.

0.3.2 Philosophy

Except in explicitly identified exceptions, *TAPTOE* uses the word “philosophy” to designate a *theoretical* and indeed *scientific* endeavor, or a theory produced by that endeavor—that is, as an endeavor that aims to discover and present truths, not to influence beliefs or behavior or to cure ills or anything of that sort (this distinction is clarified in 1.2.1.4, below).

0.3.3 Theoreticians and theories

One stylistic feature that *TAPTOE* shares with *SB* and that is unusual in philosophical literature (as elsewhere) is that it speaks of itself rather than of its author: neither book relies on formulations like “I hold that” or “As I note in Chapter 1.” There are two basic reasons for this. The first is that, according to one of the SSP’s central theses, the theoretician is not centrally relevant to the activity of theorization. Among the consequences of this thesis are that whether *SB* author Lorenz Puntel or *TAPTOE* author Alan White or any other theoretician believes or argues or contends something or other is not of central philosophical importance, and that what is of central philosophical importance is that that something or other is a component of a theory presented in *SB* or in *TAPTOE* (or elsewhere).

The second reason for avoiding first-person pronouns is that unless qualified, the relevant kinds of sentences that use them have unstable truth values. A sentence in a theoretical work beginning “I hold that” becomes, on one reasonable interpretation, false if the author’s mind changes or if the author dies. It makes no sense, for example, to write without qualification about Hilary Putnam’s metaphysical beliefs. The kinds of qualifications required are present in the following sentence: “In ‘Time and Physical Geometry’ (1967/1979), Putnam presupposes metaphysical realism, but in ‘Sense, Nonsense, and the Senses’ (1994) he rejects metaphysical realism.” Sentences containing such qualifications can be important in philosophical accounts, but it is not important that they attribute beliefs or positions to theoreticians instead of attributing theses to

texts. *TAPTOE* does the latter, relying on formulations like “Putnam 1967/1979 presupposes metaphysical realism, but Putnam 1994 rejects metaphysical realism.”

To put this latter point somewhat differently: no matter what Lorenz Puntel or Alan White may believe or indeed may ever have believed, *SB* and *TAPTOE* will continue to present the theories that they present as long as copies of them exist, and it is those theories—and not Lorenz Puntel or Alan White—that are the proper focus of philosophical attention. In order accurately to reflect this centrally important fact, *TAPTOE* speaks for itself, and allows *SB* and other texts to speak for themselves as well. Hence, the following sentence is true: *SB* often attributes theses and theories to philosophers (e.g., “Quine presents,” “Quine maintains,” “Quine designates” (112/84)), whereas *TAPTOE* attributes them only to works (e.g., “Quine 1992a argues”).

0.3.4 Theoretical frameworks

According to its subtitle, *SB* presents “a theoretical framework for a systematic philosophy.” According to the SSP, every theory has and depends on a theoretical framework whose components include its language, its methodology, and its logical resources. *TAPTOE* uses the term “framework,” with the sole exceptions of its occasional uses of “linguistic frameworks,” as a convenient abbreviation for “theoretical framework.”

0.3.5 Intuitions

It is common in contemporary philosophy to present “our intuitions” or what is “intuitive” as evidence or premises in “intuitive arguments.” *TAPTOE*, like *SB*, occasionally describes terms and formulations as “intuitive,” but neither book ascribes to what it terms “intuitive” any evidential value. Here, “intuitive” means “relatively easily

intelligible within the theoretical frameworks speakers of ordinary English rely on in their everyday lives.”

0.3.6 Stabilization

In the philosophical literature, there is much talk of justifying, proving, grounding, supporting, and undermining. For reasons presented in 1.4.2.1, *TAPTOE* does not rely on those or similar terms to articulate how well its theses and subtheories fit together and fit into the SSP, or to consider the adequacy of the SSP or the SSRPP; it speaks instead of stabilizing theses, subtheories, etc., within the SSP or within the theoretical framework of the SSP.

0.3.7 Being

The SSP is, according to the quasi-definition presented in *SB* 1.2, a “theory of the most universal structures of the unrestricted universe of discourse” (35/26). In the quasi-definition, “unrestricted universe of discourse” names what *SB*’s title names “being.” Why *SB* can often use the terms “unrestricted universe of discourse” and “being” interchangeably, and precisely what the terms signify, is an issue *SB* does not fully address until the fifth of its six chapters. Drawing on the relevant *SB* sections (especially but not exclusively 5.2 and 5.3), this subsection introduces some distinctions *TAPTOE* relies on from this subsection on.

According to the SSP, the unrestricted universe of discourse encompasses everything that can be articulated by means of indicative sentences, and that, according to the SSP’s thesis that being is universally expressible, is absolutely everything. According to the SSP, indicative sentences can be true or false. True sentences are

sentences that express true propositions, and true propositions are identical to facts within what *TAPTOE* terms primary being (*SB*, “being in the primary sense”; 581/436). False sentences are sentences that express false propositions, and false propositions are identical to facts within what *TAPTOE* terms derivative being (*SB*, “being in the secondary or derivative sense”). Derivative being is possible but non-actual being and hence encompasses possible but non-actual facts, whereas primary being includes both absolutely necessary being and contingent but actual being, and hence encompasses both absolutely necessary facts and contingent but actual facts. “Rafael Nadal is the 2012 Wimbledon Champion” expresses a proposition identical to a fact whose semantic and ontological status is, at the time of *TAPTOE*’s composition, incompletely determined. Its semantic and ontological status will not be fully determined until the 2012 Wimbledon champion has been crowned, or perhaps earlier, if for example Nadal does not enter the tournament or if the tournament is cancelled. Its semantic and ontological status is fully determined when the proposition and hence fact are situated either within primary being or within derivative being.

0.3.8 Sentences and sentencings, propositionings, and factings

TAPTOE, like *SB*, uses sentences with subjects and predicates to express propositions, but denies that the syntactic structure of those sentences reflects the structure of the propositions they express. A grammatically correct English sentence whose syntactic structure more closely reflects the structure of the propositions expressed by the sentences in *TAPTOE* and *SB* is “It’s raining.” The SSP interprets the “It” in sentences of this form—schematically, of the form “It’s F-ing”—as a syntactic placeholder

that has no semantic counterpart: the sentence does not say that there is an it that is raining, it instead expresses raining as occurring or happening.

SB terms sentences of the form “It’s F-ing” “primary sentences,” and says of primary sentences that they can express primary propositions that are identical to primary facts. *TAPTOE* relies on an alternative terminology, one that dispenses with the adjective “primary” and adds the suffix “ing”; it speaks of sentencings, propositionings, and factings. There are two chief reasons for *TAPTOE*’s use of this terminology. First, whereas (for example) talk of primary facts could misleadingly suggest that not all facts are primary—that there were also secondary and perhaps tertiary facts—talk of factings cannot suggest anything of that sort. Second, the “-ing” terms accurately mirror the syntactic structure of formulations of the items, all of which use that suffix. In an example adapted from *SB*, and introducing typography used throughout *TAPTOE*, the sentencing “It’s redding” can express the propositioning *It’s redding*, which is identical to the facting IT’S REDDING.

The typographical practice introduced in the preceding paragraph is, explicitly, the following: in many instances, *TAPTOE* indicates that it is thematizing syntactic items (including words, sentences, and sentencings) by enclosing the relevant letters in quotation marks, semantic items (including propositionings), by printing the letters in italics, and ontological items (including factings), by printing the letters as small capitals. When it is important to indicate whether sentences, sentencings, or propositionings are true or false, true ones are printed in boldface letters, false ones, in letters that are struck through. Correspondingly, factings that are identical with propositionings expressible by

true sentences are indicated by boldface type, and those identical with propositionings expressible by false sentences, by type that is struck through. In sum:

“It’s raining”	a sentence (indeed a sentencing) not determined either as true or as false
<i>It’s raining</i>	the propositioning expressible by “It’s raining”
IT’S RAINING	the facting identical to <i>It’s raining</i>
“ It’s raining ”	a sentence (sentencing) determined as true
<i>It’s raining</i>	the propositioning expressed by “ It’s raining ”
IT’S RAINING	the facting identical to <i>It’s raining</i>
“ It’s raining ”	a sentence (sentencing) determined as false
<i>It’s raining</i>	the propositioning expressed by “ It’s raining ”
IT’S RAINING	the facting identical to <i>It’s raining</i>

These same typographical conventions are sometimes used with individual words, with quotation marks indicating that the focus is on the word itself, italics², that it is on the semantic content associated with the word, and small capitals, that it is on the (possibly putative) entity under consideration. Thus, for example, in ordinary English (the word) “unicorn” is associated with (the concept) *unicorn*, but there are no (such beings as) UNICORNS.

² *TAPTOE* also uses italics for the purpose of emphasis; contexts make clear when this is the case, and when semantic contents are being thematized.

1 An Introduction to the Structural-Systematic Research Program in Philosophy

1.1 Abstract theoretical frameworks and their concretizations

As is noted in 0.1 and is in any case obvious, *TAPTOE* is a collection of sentences. To be a collection of sentences, it must rely on some language or languages. To this point, the language it relies on is largely indistinguishable from ordinary English, although one way in which it diverges from that language already is its use of such technical terms as “abstract theoretical framework” and “structural-systematic philosophy.” As the account proceeds, it becomes increasingly apparent that it relies not on ordinary English, but instead on its own artificial language—a technical, scientific language—which both refines and expands ordinary English. How scientific languages of the sort relied on here differ from ordinary languages is considered in detail in various places both below and in *SB*.

Its language is one of several components on which *TAPTOE*, as a presentation of a theory, relies. To name the collection of all these components it uses the just-mentioned term “abstract theoretical framework.” Two relatively well-known philosophical terms with significations at least similar to that of “theoretical framework” are “linguistic framework” and “conceptual scheme.” The SSP avoids those terms because they could be taken to imply, misleadingly, that the components of the relevant frameworks or schemes are, respectively, exclusively linguistic or exclusively conceptual, and although it is a thesis of the SSP that abstract theoretical frameworks for systematic philosophies include linguistic and what are commonly termed conceptual components, an additional thesis of the SSP is that any presentation of any theory requires other components as well. The

most important additional components the SSP relies on are its method, its ontology (its theory of what kind(s) of beings or entities compose the world or the universe or what is), and its truth-theory (which makes fully explicit how its linguistic component interrelates with its ontological component or, colloquially, how its sentences relate to the world).

The components identified in the preceding paragraph are constituents of the *abstract* theoretical framework of the SSRPP in that they specify (1) what qualify, universally, as beings about which theories can be developed, (2) the language in which those theories can be formulated, (3) the methodology guiding the development and presentation of the theories, and (4) the status of the theories as true. Abstract theoretical frameworks for systematic philosophies are *concretized* when theories about beings within specific universal domains, and about being as such and as a whole, are developed and presented.

Seven of the SSRPP's central theses concerning theoretical frameworks—theses that, as is emphasized in 0.1, are in no way foundational, and that are presented at this point only as intelligible and plausible—are the following:

TF 1: *Truths emerge only within theoretical frameworks, albeit often within frameworks that are tacitly presupposed and only vaguely determined, as is the case with the frameworks human beings rely on in their everyday lives when they are concerned with discovering and presenting truths—as, for example, when someone looks at a clock in order to discover what time it is, and presents the truth thereby discovered by uttering an indicative sentence, perhaps “We’ve got plenty of time,” or perhaps, “We’re late!”*

TF 2: *All truths are relative to the theoretical frameworks within which they emerge, beginning with the mundane truths that, like “We’re late!,” emerge within everyday frameworks.*

TF 3: *Being—reality or actuality, the world, the universe, what is—veridically manifests itself—truly or genuinely reveals itself— within all adequately determined or determinable theoretical frameworks. Thus, for example, within the most common everyday frameworks, the sun reveals itself, veridically, as moving across the sky, and the Earth as motionless. Within the framework of contemporary astronomy, of course, the sun reveals itself, veridically, as stable relative to the Earth, and the Earth, as both rotating on its own axis and revolving around the sun. Superior to both of these frameworks, with respect to intelligibility and coherence and thus to the demands of theorization,³ is a metaframework encompassing both, because within that framework it can be made clear why the Earth, although*

³ That the theoretical frameworks of everyday life are inadequate for the development of scientific theories is not of course a good reason for simply abandoning them; for the purposes of everyday life, which differ extensively from those of theorization, those frameworks are often optimal. An example: asking when the sun will set this evening is clearly more concise and convenient than asking when the Earth’s rotation will make the sun disappear beyond the horizon.

veridically revealing itself within the framework of astronomy as in motion, also veridically appears within everyday frameworks as immobile.

TF 4: As is suggested by the example of Earth and sun, *the fact that being veridically manifests or reveals itself within all theoretical frameworks does not lead to any crippling relativism, because within metaframeworks, theoretical frameworks can be compared and ordered with respect to their theoretical adequacy.* The SSRPP's criteria for comparing and ordering theoretical frameworks for systematic philosophies are relatively maximal coherence and intelligibility, such that the relativity is both internal (the superior account is more coherent and intelligible than is any other available concretization of its own framework) and external (the superior account is more coherent and intelligible than are concretizations of alternative theoretical frameworks that are available).⁴

TF 5: Although theoretical frameworks can be ranked with respect to theoretical adequacy, *no human theoretician could ever establish that the framework she or he relied on was the best possible framework for any sufficiently complex*

⁴ Determining the degree to which the truth of TF 3 is relative to the theoretical framework of the SSP requires considering the relation between the purely systematic level and the metasytematic levels of the SPP; see *TAPTOE* 2.1, 2.2.2, and 2.2.6, and *SB* 1.5.2.2–1.5.2.3 and 6.

subject matter, including that of systematic philosophy. Establishing a framework as absolutely optimal would require identifying and comparing all of the infinitely many possible theoretical frameworks for the framework's subject matter, and that, for human beings, is impossible.

TF 6: From the theses that all truths are relative to theoretical frameworks (TF 2) and that human beings can identify neither all such frameworks nor any optimal framework (TF 5), it does not follow that there cannot be or indeed that human beings cannot identify any absolute truths, given the additional thesis that *absolute truths are truths that are components of all theoretical frameworks.* The most obvious such truth is the principle of non-contradiction, for no framework lacking it as a component could qualify as a *theoretical framework*.⁵ The reason is that within such a “framework,” no definitive truths whatsoever could emerge.

TF 7: A clear consequence of TF 5 is that the SSRPP cannot include the thesis that its own theoretical framework is the best possible for systematic philosophy, much less anything like absolutely valid. It can and indeed does however include the thesis—stabilized in part by examination of alternative frameworks, either in isolation or in comparisons developed

⁵ This is baldly stated; for necessary qualifications, see *SB* 3.3.4.3.

within appropriate metaframeworks—that *the SSRPP's theoretical framework is the best that is currently available for systematic philosophy.*

One consequence of TF 7 is that the status claimed by the SSRPP is in one respect highly ambitious, but in another is notably modest. It claims, ambitiously, to provide the best theoretical framework currently available for systematic philosophy, but it also anticipates, modestly, the future development of frameworks that will be better. It thereby claims for systematic philosophy a theoretical status in no way inferior to that of any of the natural sciences: those sciences, too, operate within the best theoretical frameworks that are currently available, but nothing precludes, and there are overwhelming reasons to anticipate, future developments of superior frameworks.

1.2 The SSP as a philosophical theory of everything

1.2.1 Systematic philosophy as the universal science

1.2.1.1 Systematic philosophy as a science

According to the *Oxford English Dictionary*, in “the dominant sense in ordinary use,” the word “science” is “synonymous with ‘Natural and Physical Science’, and thus restricted to those branches of study that relate to the phenomena of the material universe and their laws, sometimes with implied exclusion of pure mathematics” (“science,” 5.b). Like many dominant senses in ordinary language, this one is clear, if at all, only superficially. What does the phrase “natural *and* physical science” mean? Does it mean that only sciences that are *both* natural and physical qualify as sciences “in the dominant sense? Are there then sciences that are natural but not physical, or vice versa? Moreover, how do the natural and the physical relate to the material, given that “the

material universe” is what “Natural and Physical Science” is said to study? Finally, what is the status of pure mathematics, said to be only sometimes, and then only implicitly, excluded, from science?

As is emphasized above, the SSRPP does not rely on ordinary language, and clarifies its terms and theses contextually in the sense that initial clarifications are often replaced by more precise ones as additional terms and theses become available. At this early point, it suffices to characterize sciences, within the theoretical framework of the SSRPP, as methodical and sustained attempts to produce accounts that defend themselves as true—hence, in a word, theories. It is thus not the case, according to the SSP, that some subject matters can be investigated scientifically and others cannot. It is instead the case that every subject matter can be treated scientifically, and that the adequacy with which a given subject matter is treated scientifically depends on the adequacy of the best available theoretical framework for that subject matter.

Given the thesis that sustained and methodic investigation of any subject matter qualifies as scientific, it is clear that systematic philosophy can be a science only if it has an identifiable subject matter. That subject matter can be clarified by historical considerations. What the SSRPP terms science has a relatively precisely identifiable point of historical origin in ancient Greece, with a process whose first participant known by name is Thales and that reached vital points of initial culmination with Aristotle’s *Posterior Analytics*, which shows how explanations can be developed on the basis of axioms and deductions, and Euclid’s *Elements* and Archimedes’s mechanics, which present explanations of just that sort (see Wolpert 1993: xii, Ch. 3). Shortly following

these points of culmination, the scientific endeavor proceeded only sporadically for many centuries, but enough had been recorded in texts to make possible its revival in the late Middle Ages and its sustainment into the present.

As it developed, the process here characterized as that of science was designated in various distinct ways. Until the seventeenth century and even beyond, it was often termed φιλοσοφία in Greek and, consequently, *philosophia* in Latin. In most European languages, it has come to be named by cognates of the Latin *scientia*, although the German *Wissenschaft* is an exception. The ways these various terms have been used, in their various languages, is far too complex to be considered here in any detail, but clarification of the SSP as universal science is facilitated by the identification of a numbers of issues that emerge from their various uses. The most important of these concern subject matter (1.2.1.2), an aspect of method (1.2.1.3), and theory as distinct from practice (1.2.1.4).

1.2.1.2 The universal science and the many restricted sciences

In the course of the revival of philosophy/science from its period of relative dormancy, distinct fields of theoretical inquiry emerged as what came to be generally termed sciences⁶ established themselves by focusing on restricted subject matters:

⁶ In the United States and in France, the humanities (*les humanités*) are terminological exceptions and, as the cited passage from the *OED* indicates, the so-called social sciences are often considered to be sciences in name only, or soft rather than hard sciences.

physics (still, with Newton, natural philosophy) on the smallest and (along with astronomy) the largest components of the domain of the inanimate, chemistry on those of an intermediate domain of the inanimate, biology on those of the animate, and so forth. Because in this process inquiries that had once been termed philosophical lost that designation, the process could be—and indeed often has been and still is—understood as one of the diminution of philosophy, whose subject matter not unreasonably appeared to be restricted to the ever smaller domain of whatever was not studied by any inquiry not designated as philosophy.

The SSRPP understands the development described in the preceding paragraph not as diminishing the subject matter of systematic philosophy but instead as facilitating its clarification. If indeed non-philosophical inquiries establish themselves as non-philosophical by restricting their subject matters or, in a technical term, their universes of discourse, then what emerges as the subject matter for systematic philosophy is the *unrestricted universe of discourse*. From at least the time of Aristotle until at least the early nineteenth century, the unrestricted universe of discourse was *a* subject matter for philosophy, often more precisely characterized as *the* subject matter for *first* philosophy.⁷

⁷ Heyde 1961 presents a powerful case in support of the thesis that greater clarity in German translations of Greek texts would have been achieved if *Wissenschaft* had been used for φιλοσοθία and *Philosophie* for πρίμα φιλοσοθία (first philosophy).

The SSRPP aims to revive theoretical investigation of the unrestricted universe of discourse by developing a systematic philosophy, the SSP.⁸

1.2.1.3 Foundation and stabilization

As is indicated in 1.2.1.2, what the SSRPP terms the scientific endeavor included among its most important points of initial culmination the articulation and application of axiomatic theories. As physics began to emerge as a distinct science, the need for axiomatization decreased in importance as increasing emphasis was put first on quantification—reflected in Galileo’s dictum that the book of the world is written in the language of mathematics—and later on experimentation. Because however what remained (or what is revealed) as the subject matter for what Descartes termed first philosophy is not quantifiable and not available for experimentation, the axiomatic method so successfully applied in geometry continued for far longer to appear to be the only one available for it.

Presumably in significant part because of the success of Euclidean geometry and philosophy’s lack of identified alternatives to the axiomatic theory-form, throughout modern philosophy, philosophical theories have had, as their most prominent analogical

⁸ More precisely, as is indicated above in 0.3.7 and clarified below in 1.2.2.4, the SSP is a theory of the most universal structures of the unrestricted universe of discourse; less universal and often quite specific structures are subject matters for sciences with restricted universes of discourse.

counterparts, buildings having foundations. Conceived of in light of this analogy, components of the theories are supported (or grounded) by resting on previously supported components, down to the foundation that, in the analogy, supports the entire superstructure. Among metaphorical uses of language that reinforce this analogy, in addition to talk of theses and theories being founded, grounded, and supported, is talk of their having groundworks, bases, and footings, and of their being undermined.⁹

As is indicated above, first in o.3.6, *TAPTOE* avoids foundational language by using variants of the term “stabilization.” In order better to stabilize that usage, this section identifies some of the flaws in the building-with-foundations analogy, introduces two analogies that avoid some of those flaws, then clarifies the SSP as a comprehensive theory by means of theses drawn from consideration of the two analogies.

One central flaw in the building-with-foundation analogy arises from what can reasonably be termed its pre-Copernican status: buildings with foundations are terrestrial structures whose structural integrity can require but is also threatened most

⁹ A famous passage from Wittgenstein’s *Investigations* (§115) reads as follows:

A picture held us captive. And we could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably.

The building-with-foundations analogy has held philosophy captive, and is repeated in the English terms and phrases introduced in the main text; but it is possible to “get outside it.”

significantly by gravity, and is preserved not only (in some but not in the simplest cases) by their inner structurations but also (in all cases, ultimately) by the Earth on which they stand. The Earth is presupposed simply to be stable, so even in uses of the analogy that recognize—as, for example, does Kant’s *Critique of Pure Reason* (A5/B9)—that foundations must be laid on solid ground presuppose that whatever underlies that ground supports it.

The notion that philosophical theories can be built on self-supporting foundations is now rarely held—for an exception, see the account of various of Höslé’s texts in 4.x, below—but foundational language retains popularity, particularly in the form of rejections of theses and theories that are not proved by deductive argument.

A somewhat different way of articulating the decisive flaw in the building-with-foundations analogy is the following: support for buildings with foundations presupposes ground and gravity, but there is nothing analogous to ground for theories to rest on and nothing analogous to gravity that either threatens them or holds them together. A first analogy that avoids this flaw is provided by D-Stix geometry sets. These sets include colored wooden sticks of various lengths and flexible plastic connectors, each of which has several slots into which the sticks can be securely inserted. The stability of heaps of such sticks and connectors, like that of buildings with foundations, presupposes ground and gravity, but even the simplest of linkages, that consisting of a single stick inserted into a single connector, does not: the two components stabilize each other in that the two would remain connected if they were tossed into the air or jettisoned from a space station.

As components are added to the simplest D-Stix structure, stabilizations of various sorts become possible. Adding two more sticks and two more connectors yields a structure that is stable in that the linkage of the sticks does not depend on ground or gravity, but that structure is made more stable if it is transformed into a triangle.

D-Stix structures are of course constructed, and hence require constructors. There is however an important sense in which the role played by the constructor is not determinative with respect to structural stabilization. The sense is revealed by an example: the most stable structure that can be made with six sticks of the same length and four connectors is a tetrahedron, and this fact is independent of any constructor. This is relevant to theorization because when theories are assessed, the assessment is of the theories, and not of the theoreticians who formulate them. If, in either D-Stix structures or formulations of theories, there are loose ends that can be connected, connecting them increases stability.

The D-Stix analogy can also clarify the distinction between consistency and coherence. Any heap of D-Stix pieces consistent in the sense that there will be no piece whose inclusion precludes the inclusion in the heap of any other piece, and that consistency remains unchanged if the pieces are heaped differently. As merely heaped, however, the pieces are incoherent in the sense that none are interlinked. As pieces are interconnected, the coherence of the collection of pieces increases.

D-Stix structures, considered as analogues to theories, avoid some of the most important flaws of the building-with-foundations analogue, but one important way in which they are disanalogous to philosophical theories is that their components can be

definitively determined: they include only sticks and connectives. A second analogy or analogue, which improves on the D-stix analogy in this respect, is that of the space station. Components of space stations, like those of D-Stix structures, are stabilized not by being grounded or supported; the reason for this in the case of space stations is the at least frequent and possibly permanent absence of significant gravitational fields that those components must resist. The components are therefore stabilized, like those of D-stix structures, by being interconnected. The components and their interconnections can be of various sorts and of various strengths; a wire that dangled loosely would be minimally connected, whereas a wire well-secured at both ends could be, broadly speaking, as fully or tightly stabilized as a wire can be. Wires or girders (for example) connected to many other wires or girders would generally be more integral to the structure than would those with fewer connections, in that their destabilization would destabilize the station itself to greater degrees. Correspondingly, theses within the network-structure of the SSP vary in status in that some are more central, some more peripheral. Likewise, a space station, like a systematic philosophy, could qualify as the best available at some time, but not as absolutely the best; the possibility of superior alternatives could not be excluded.

Although the space-station analogy is appropriate to the SSP in ways that the building-with-foundations analogy is not, it is potentially misleading in one important way: space stations are situated within space—there is much that is outside them—whereas the SSP is coextensive not only with the physical universe, but with being as such and as a whole. Being as such and as a whole is the totality of factings identical to

propositionings expressible by sentencings. To be sure, no presentation of the SSP could include all of those sentencings (and thereby those propositionings and those factings), but that is not because there are any factings that are somehow beyond or outside of its scope, it is because human finitude precludes the possibility of fully articulating everything that is within its scope—which is, literally, everything—and because the subject matters of the special sciences are within its scope only in that those sciences themselves are within its scope.

1.2.1.4 Theory and practice

Lack of clarity concerning theory and practice pervades the history of philosophy and the history of the non-philosophical sciences; for the latter, the central unclarity concerns science (in *OED* sense introduced above) and technology. This topic is treated in greater detail in *TAPTOE* 3.1 as well as in various passages in *SB*, but it is important at this point to emphasize that the systematic philosophical project of the SSRPP is purely theoretical in that it aims to be maximally coherent and intelligible, not to influence behavior or change beliefs. Clarity is therefore served by distinguishing this aim, the theoretical aim, from what *TAPTOE* (although not *SB*) terms pragmatic-doxastic and pragmatic-activistic aims. The pragmatic-doxastic aim is to change the content or strength of opinions or beliefs, the pragmatic-activistic, to influence behavior. Of course, reading texts that are theoretical may lead some to change what they believe or how they act, and texts that are pragmatic-doxastic or pragmatic-activistic may include true sentences. The important point, however, is that texts can be highly successful as theoretical even if have no influence on beliefs or behavior—the most plausible case is

perhaps that of a text produced by a mathematical prodigy that is recognized to be and to have been magnificent only many years following its appearance—and that texts can attain either pragmatic aim even if much that is in them is false.

1.2.2 The SSP as a systematic philosophy

The SSP is theory of everything in that—in a more precise formulation whose terms are clarified in the following subsections—it is a theory of the universal structures of the unrestricted universe of discourse. Because those structures are universal, they structure the restricted universes of discourse of the non-philosophical sciences, but only universally, not specifically. Thus, for example, according to the SSP the entities thematized by theories in physics are all factings, but determining specifically what those factings are—determining them as photons, quarks, black holes, and so forth—is a task for physics, not for systematic philosophy. Consequently, the SSP is a theory of everything that is holistic but not imperialistic: it leaves to the other sciences their own investigations, but provides for them a universal framework within which those investigations can be situated with currently maximal intelligibility and coherence.

The relation of the SSP to the other sciences is treated in various places in *SB* and in *TAPTOE*. The task of the following subsections is, as is indicated above, clarification of the terms of the formulation introduced in the preceding paragraph specifying the sense in which the SSP is a theory of everything.

1.2.2.1 Theory

The theory articulated in this book is presented by means of a linguistic account that aims primarily and could indeed aim exclusively to be true. At this point, further

specification of “theory” cannot be provided, because such specification requires terms and concepts that have not yet been introduced. What can be provided at this point is an initial characterization of how linguistic accounts that aim to be true differ from linguistic accounts of two other kinds, i.e., aesthetic and practical ones.

Linguistic accounts of the three kinds just introduced are all *presentations*; in the terminology of the SSP, their presentations are made within importantly distinct arenas of engagement (*SB* “dimensions of presentation”). The distinction among the dimensions or arenas is stabilized, in one important way, by the identification of truth (as intelligibility), goodness, and beauty as fundamental characteristics of being as such and as a whole and therefore of every facting (see *SB* 5.2.4). The three arenas of human engagement are theoreticity, practicality, and aestheticity (see 3.1.1, below). Engagements within the arena of theoreticity are with factings as intelligible, within the arena of practicality, with factings as good, within the arena of aestheticity, with factings as beautiful.

Active engagement within the arena of theoreticity aims to discover and present truths, and although there are many ways human beings can *discover* truths, there is only one way they can *directly and explicitly present* them, and that is by means of language. For this reason, language is central to active engagement within the arena of theoreticity in a way that it is not central to engagement within the arenas of practicality or aestheticity. Identifying language as the means of the direct and explicit presentation of truths and thus of theories is therefore an important step with respect to clarifying the

theoretical enterprise, but it is one that is far from adequate, in significant part because there are various languages potentially available to theoreticians.

As is noted above, this book relies at the outset primarily on a language in many specific cases indistinguishable from ordinary English, but one that is in fact an artificial language developed as a refinement and expansion of ordinary English. Among the chief reasons for its reliance on an artificial language are the vagueness and ambiguity of most of the terms and the insufficiency of the vocabulary and semantics of ordinary English. In relying on an alternative language, the book proceeds in a manner comparable to that of (for example) theories in physics, which refine the significations of such terms as “force,” “mass,” and “acceleration” by precisely interrelating the concepts with which they associate those terms, and which expand the vocabulary of ordinary English when they first introduce such terms as “quantum gravity,” “meson,” and “superstring.”

1.2.2.2 Structures

Clarification of structures, as central to the SSP, can begin with the modification of a familiar ordinary-language sense of the term. That sense, as presented in the *Oxford English Dictionary (OED)*, is the following: a structure is “the coexistence in a whole of distinct parts having a definite manner of arrangement.” The SSP’s modification of this definition involves “wholes” and “parts.” Once the appropriate modification has been made, the ontological status of the “definite manner of arrangement” can be clarified.

The terms “whole” and “parts,” as used in the *OED*’s formulation, might be taken to suggest that there is an ontological difference between whole and parts, such that only wholes would qualify as structures. Within the SSP, however, not only configurations

(the *OED*'s "wholes of parts having a definite manner of arrangement") qualify as structures, but so too do all constituents or components of structures or configurations, thus, all the "parts" (and indeed all aspects of the "definite manner of arrangement," of which more below).¹⁰ According to the SSP, then, to be is to be an ontological structure—a facting—but in addition to complex factings, which are configurations of factings, there may be simple factings, and these too would be ontological structures.¹¹ This requires explanation.

To a degree, deeming parts or components of wholes or structures themselves to be wholes or structures is fully intuitive. Automobiles, for example, are structures composed of interrelated constituents, but their carburetors, engines, and transmissions, among many others, have the same ontological status that automobiles have in that they too are composed of interrelated constituents, and thus are structures, in the senses both of the *OED* and of the SSP. The situation is different with constituents that are *not* themselves configurations, ones that are simple rather than complex: these do *not* qualify

¹⁰ Ultimately, the vocabulary and logic of wholes and parts—in a technical term, mereology—proves inadequate with respect to articulating the relation between some configurations of factings and their components, including human beings; see *SB* 357–358.

¹¹ Whether or not there are simple physical structures (factions) is a question for physics; developed ontologies of formal domains might also include simple structures, for example, points in some geometrical domains.

as structures in the *OED* sense introduced above, but they *would* qualify as structures within the SSP.

Consideration of two relatively familiar and relatively easily intelligible mathematical concepts (or structures) may make the notion of simple structures somewhat less counterintuitive. The first is the concept (structure) *the null set*. Within many everyday theoretical frameworks, only collections can qualify as sets; if Fred owns no stamps, then the set of Fred's stamps does not qualify as a collection. Within theoretical frameworks relying on set theory, however, the null set—the empty set, the set with no elements or members—is itself a set. One reason for this is that it is a subset of every other set; it is a subset of the set of all tables, for example, because it contains no elements not contained in that set, and containing elements not contained in another set is precisely what establishes any set as *not* being a subset of another set. To be noted, however, is that although there is only one null set, if there are simple structures, then there are presumably immensely many of them.

The second mathematical concept (structure) potentially illuminating with respect to the SSP's classification of simple factings as ontological structures is that of a second kind of set, the set with only one member (the singleton). Again, if sets are thought of as collections, it could appear that sets would have to contain multiple elements, but again, it is easily apparent that singletons can be subsets of other sets, and therefore themselves qualify as sets.

Within the SSP, simple ontological structures—simple components or constituents of being or of what is—would qualify as structures because, first, they would be

configured or structured at least by the relation of self-identity: each would be precisely what it is.¹² Moreover, simple structures would be structured by their relations of involvement in the complex structures of which they would be constituents—ultimately, indeed, all are constituents of the comprehensive complex structure, being as a whole.

Putting this point somewhat differently: anything that is in any way *structural* qualifies within the SSP as a *structure*. To revert to the automobile example, ball bearings might appear to be simple in a certain sense, that is, in that when they fail they cannot be repaired in the straightforward manner that carburetors and transmissions often can, but must instead be replaced. This does not prevent them from being *structures* in the sense of being structural components of machines, even independently of their internal structurations as configurations of physical constituents.

Determining what might qualify as simple ontological structures is not a task for systematic philosophy, which—as the opening sentence of 1.2 indicates—identifies, investigates, and presents only the universal or structures of the unrestricted universe of discourse. It is however essential that SSP indicate that and how simple ontological structures would qualify as factings, in order to stabilize the thesis that being as a whole contains no entities that are not factings. That ontology is thus, in a technical term,

¹² This relation is itself a facting expressible by the sentencing “It’s self-identically.” On how relations (and operations) are understood ontologically, see *SB* 3.2.3.1-3.2.3.3 (278–297).

unicategorical: it recognizes no entities other than factings (ontological structures), complex and (potentially) simple. These factings are however of a wide variety of kinds (including static, dynamic, processual, abstract, etc. factings) and in different ontological domains (physical, mental, valuative, aesthetic, etc., factings).

Complex factings are, then, configurations of factings—of constituent factings having, as the *OED* puts it, “a definite manner of arrangement.” The “manner of arrangement” of a given complex facting is a matter of relatings among factings, but the relatings themselves are nothing other than factings.

1.2.2.3 Unrestricted universe of discourse

As Section 1.2.1 indicates, all sciences save systematic philosophy have *restricted* universes of discourse, that is, they treat specific dimensions or domains of investigation, specific subject matters. Restrictions of their universes of discourse distinguish geometry from biology, physics from number theory, and so forth. From this it follows that no currently available science other than philosophy can investigate the unrestricted universe of discourse; this thesis is presumably relatively non-controversial. More controversial is the thesis that the unrestricted universe of discourse is coextensive with being as a whole, with all that is. This thesis is controversial in part because a thesis or even dogma widespread among modern and contemporary philosophy holds that every language is necessarily restricted or limited, and thus that the universe articulable by any language is necessarily restricted or limited to what the language can articulate. This thesis, along with the similar and related thesis that theories are importantly relative to

the theoreticians who develop and/or assimilate them, is considered and rejected in *SB* 2.2–2.3, which is summarized in *TAPTOE* 2.2.2.

1.2.2.4 Universal structures

According to *Structure and Being*, the term “universal structures” is the component of its preliminary characterization of the SSP—its quasi-definition of the SSP—that is most difficult to clarify. In elaborating on the term as it appears in the quasi-definition, *SB* introduces the example of the university, with its levels of structuration (*S.u.S.* uses the structuration of the Federal Republic of German). *TAPTOE* proceeds differently, by identifying some of the most important of those structures that qualify as universal in the relevant senses.

First, if the SSP, as a linguistic presentation, can thematize the unrestricted universe of discourse, then its language must be universal in the sense of being potentially able to express or articulate the entire unrestricted universe of discourse, or being as such and as a whole; language therefore belongs among the universal structures of the universe of discourse, and must therefore be thematized by the SSP. Because the accomplishment of theoreticity is knowledge, knowledge too, must be potentially coextensive with being as such and as a whole and, as universal in this sense, must be thematized by the SSP. Additional universal structures considered within the development of the abstract theoretical framework of the SSP are of course its theoretical framework itself, and with it the fundamental formal (logical and mathematical), semantic, and ontological structures, whose universality is clarified in 1.4.2.

If the theoretician, linguistically and cognitively, has access to being as such and as a whole, and thus is mentally or cognitively coextensive with being as such and as a whole, then theoreticians, as human beings, also belong among the universal structures of being as such and as a whole. Investigation of human beings reveals that they relate to being as such and as a whole not only theoretically, but also practically and aesthetically, so these domains are also among the universal structures of the unrestricted universe of discourse, and hence subject matters for the SSP. Being as such and as a whole, as the unrestricted universe of discourse, is itself structured, and so too must be a topic of investigation; the two domains or dimensions into which it is structured are the absolutely necessary dimension of being and the contingent dimension of being. The relevant structures of the absolutely necessary dimension of being are *absolutely* universal, whereas those of the contingent dimension of being are only *relatively* universal, in that their universality is relative to that dimension.

An additional question concerns the relation of these universal structures to the specific structures investigated by other sciences. The position of the SSP is that the borders between its investigations and those of the other relevant sciences are not fixed, both because the borders' locations change with time, as philosophy and the non-philosophical sciences develop, and because not all topics, even at a given time, can be definitively located on one or the other side of various disciplinary borders. That there are some topics that are not clearly within the domain solely of philosophy or of a specific non-philosophical science is in no way unusual or problematic; the situation is comparable to that presented by topics not clearly falling exclusively within the domains

(for example) of either physics or chemistry, or chemistry and biology, but instead treated by theories in both of the relevant fields.

1.3 The inadequacy for systematic philosophy of abstract theoretical frameworks relying on substance ontologies

Since the beginning of the scientific enterprise in ancient Greece, the vast majority of theoretical frameworks relied on by theoreticians and—at least in the West—by human beings in their everyday lives have included semantic components whose syntactic counterparts are subjects terms and predicates. The grammatical or syntactical subject most important to the semantics is the singular term taken to refer to an ontological item termed a substance (or object or thing, such as SOCRATES). The grammatical predicate is taken to designate an ontological item that is either a property of that substance or thing (such as BEING MORTAL), or a relation in which the substance stands to other substances or things (for example, BEING THE HUSBAND OF XANTHIPPE).

That frameworks of this sort have dominated is not surprising, given their everyday efficiency and convenience. In their everyday lives, human beings find themselves surrounded by—to choose items now common in at least much of the world, and ones that have obvious counterparts elsewhere—such THINGS as TABLES, RUGS, OAK TREES, SIAMESE CATS, and so forth, and it is non-problematic for them to think of those items as having properties and standing in relations. Tables, unlike rugs, generally have legs, and the two often relate such that tables are on rugs but far more rarely such that rugs are on tables.

Everyday efficiency and convenience are wholly reasonable criteria for rating everyday theoretical frameworks, and frameworks relying (generally tacitly) on substance or thing ontologies generally satisfy these criteria quite satisfactorily. Systematic philosophy, however, aims not at everyday efficiency and convenience, but instead at the maximal attainable coherence and intelligibility, and frameworks relying on substance or thing ontologies fail to satisfy those criteria. They fail because substances prove to be unintelligible. According to substance ontologies, substances have properties and stand in relations, but to have properties and stand in relations they must have an ontological status that is different from the status of properties or relations. One way to articulate that status would be to answer the question, what is a specific table, considered not as a table but instead as a substance? As a table, it has legs and is on the carpet, but those attributes characterize it as the table that it is, not as a substance. It might appear that it would become increasingly accessible, as a substance—indeed, it could in principle only become accessible, as a substance—by way of abstraction from the properties and relations that it has as a table, but the greater the abstraction, the less is left. Indeed, if the abstraction is complete, if no table-attributes remain, then there is no content whatsoever; tables and chimpanzees, stripped of their attributes, can be different in no way whatsoever, either from each other or from any other putative substance. The

concept of substance is therefore unintelligible, in that it is impossible to determine or articulate what substance are.¹³

1.4 The abstract theoretical framework of the SSRPP

1.4.1 Syntax, semantics, and ontology

For reasons presented summarily in 1.3, the ontology of the SSP cannot recognize substances (or objects, things, substrata) in any form, and therefore cannot accept subject and predicate terms as having semantic or ontological counterparts. Instead of relating its semantics and ontology to subject-predicate sentences, then, it relates them to the syntactic form of such ordinary-language sentences as “It’s raining” and “It’s morning,” taking the “it” in such sentences to be merely a syntactic placeholder required by English grammar.¹⁴ *SB* terms sentences of this form “primary sentences”; *TAPTOE* terms them “sentencings.” Semantically, every sentence or sentencing expresses a propositioning (in

¹³ *SB* 3.2.2.3 (pp. 249-261) articulates the inadequacy of philosophical frameworks relying on substance ontologies.

¹⁴ Italian and Spanish are among the languages that require no such placeholders; Spanish counterparts of “It’s raining” include both the single word “*Llueve*” (the third-person singular form of the verb *llover*, to rain), and “*Está lloviendo*,” “*está*” being the third-person singular form of *estar*, one of two verbs whose English counterpart is “to be,” and “*lloviendo*” being the present participle of “*llover*.”

SB, a primary proposition);¹⁵ ontologically, every true propositioning is identical to a facting within primary being, that is, to a genuine constituent of what is. The world (the universe, being as such and as a whole) thus appears veridically within this theoretical framework as the totality of factings, each of which is identical to a true propositioning expressible by a true sentence or, more precisely but often exceedingly awkwardly, a true sentencing.

¹⁵ An initial clarification of propositions, hence propositionings: ignoring semantics (colloquially, “meaning”), there is no significant relation between the sentences “It’s raining” and “*Llueve*.” Within everyday theoretical frameworks, however, it is generally accepted that the two sentences can mean the same thing and thus, if propositions are understood as meanings of sentences, to express the same proposition, the former expressing it in English, the latter, in Spanish. For reasons explained in *SB* (204–206), according to the semantics of the SSP, tokenings (instances —utterances or inscriptions) of these two sentence types —or indeed even distinct tokenings of either one of the types —express not the *same* proposition, but instead distinct propositions that resemble one another to such a degree that if either is true so too must be the other. The point important in the current context is that recognizing propositions as the informational contents expressed by indicative sentences makes possible the explanation of the tight semantic relation between, in the example, “It’s raining” and “*Llueve*.”

The facting (for example) IT'S SOCRATESING is an extremely complex one, a configuration including among its component factings IT'S HUMANING, IT'S PHILOSOPHIZING, IT'S FATHERING, etc., each of which is itself complex. Within the SSP's concretization of its abstract theoretical framework, additional complex factings constituting IT'S SOCRATESING would include IT'S MINDING, because the SSP accords full-fledged ontological status to the domain of the mental.

It is important to emphasize, to avoid possibly significant misunderstandings and/or irrelevant objections, that the SSP's rejection of the semantics ordinarily associated with subject-predicate sentences does not have the consequence that presentations of the SSP cannot include, and indeed rely primarily on, sentences with this syntactic form. If they were to attempt to do so, they would become extraordinarily cumbersome and indeed scarcely intelligible. What matters in this respect is however not syntax but only semantics: presentations of the SSP could include among their theses the sentence "All humans are mortal," but would understand the sentence not as doing anything like saying that every SUBSTANCE having the property BEING-HUMAN also has the property BEING-MORTAL, but instead as being a convenient abbreviation or paraphrase of the sentencing expressing the propositioning *If it's humaning then it's mortalling*, or *Every facting that includes an It's humaning also includes an It's mortalling*.

1.4.2 The SSRPP's methodology

Relying on theses introduced in 1.2.1.3 concerning the SSP's structuration as a network and on SB's presentation of its method (SB 1.4, summarized in TAPTOE 2.2.1),

this subsection sketches the method for developing subtheories of the SSP that are not developed in *SB*, taking as an example the theory of human freedom.

The first step toward developing subtheories of the SSP that are not presented in *SB* involves assembling data, which are truth candidates provided by available theories, including, most importantly, the SSP as presented in *SB*, and not excluding the quasi-theories that develop within everyday theoretical frameworks. Given *SB*'s rejection both of theories denying that humans are free and of those according to which human freedom is compatible with determinism (see *SB* 304, 304n37, 344–345), deterministic theories, including compatibilist theories, need not be considered at this initial stage.¹⁶ The immensity of the literature even on so-called libertarian theories makes surveying it in its entirety a daunting task, but the *SB* identifies full execution of that task as a regulative ideal, not as a requirement (see *SB* 50 and 2.4.3.3). Moreover, even if that task could be fully accomplished, the theory that emerged from it would be at most the best available concretization of the SSP with respect to the topic of human freedom, and would be subject to improvement as new theories became available, in philosophy as well as in other relevant sciences.

¹⁶ Such theories could be considered on metasystematic levels. There, of central importance would be the SSP's argument stabilizing the thesis that there can be no adequate physicalistic or materialistic explanation of human being (for that argument, see *SB* 4.3.1.2.3.2, pp. 287–290, or the brief summary in *TAPTOE* 2.2.4).

Once a collection of truth candidates deemed adequately extensive had been assembled, the next task would be that of identifying maximally consistent subsets of them (*SB* 43–44). The one of those subsets whose elements appeared to be incorporable into the theory that would be most coherent and intelligible relative to the SSP’s theoretical framework would be selected, its elements transformed so as to be incorporable into that framework—for example, all entities involved would be transformed into factings—and the theory formulated, in all likelihood in reliance on additional terms and theses contributing to the theory’s stabilization. Depending on the degrees of coherence and intelligibility that theory attained, it would either be presented as a component of the SSP or held in abeyance while alternative theories were developed using others of the available subsets of truth candidates. Once the best of the theories—again, the one providing maximal coherence and intelligibility within the SSP’s framework, and thus to be maximally stabilized relative to that framework—had been identified, it would be presented as a provisional component of the SSP.

2 The Purely Systematic Presentation of the SSP in *Structure and Being*

2.1 Presystematic, Purely Systematic, and Metasystematic Levels of Presentation of the SSP in *SB*

The tasks of this chapter are (1) to indicate concisely what is done in each of *SB*’s many subsections, (2) in doing so to clarify *SB*’s purely systematic presentation of the SSP, and (3) to identify several important topics that *SB* treats in diverse sections but for which *TAPTOE* provides unified accounts.

Clarifying the second of this chapter's tasks requires distinguishing among the levels named in this subsection's title. In a broader sense of "systematic," all three levels are systematic in that all are required by the SSP's method. In a narrower sense of "systematic"—"purely systematic"—the presystematic and metasystematic levels are not (purely) systematic because they are, in an important sense clarified below, historical.

SB identifies the three levels named in the title of this subsection in its account of the SSP's four-staged method (although *SB* does not use the term "presystematic"). Applications of the first stage of the SSP's method begin on what *TAPTOE* terms the presystematic level of the SSP's development. The first step of that first methodic stage requires the collection of data, which are truth candidates available within both everyday theoretical frameworks and scientific (including philosophical) frameworks. This first step is in one important sense historical rather than purely systematic because what truth candidates are available changes over time.

Presentations of the SSP that were purely systematic would not articulate any applications of this first step in the method's first stage; they would instead simply present the theories that result in significant part from the SSP's transformation and integration of some of those truth candidates. In many cases, *SB*'s presentation of the SSP is not purely systematic, in that it identifies some truth candidates that, having been assembled when the first step of the method's first stage is applied to a given subject matter, are rejected from rather than incorporated into the SSP. An example: *SB* 3.2.2.3.2.3 introduces as truth candidates two theses from Quine 1953/1980, Quine 1960, Quine 1981, and Quine 1985; the theses are (1) that singular terms can be eliminated—

that, in an example from Quine 1985 (29), “A white cat is facing a dog and bristling” can be transformatively rephrased as “It’s catting whitely, bristlingly, and dogwardly”—and (2) that the elimination of these terms has no ontological consequences. *SB* incorporates a version of (1), but rejects (2). Alternative presentations of the SSP could—and *TAPTOE*’s Chapter 1 indeed does—dispense with references to the Quine texts, presenting the SSP’s semantics and ontology purely systematically.

The second important sort of historical accounts included in *SB* comprises those that enter with the application of the fourth stage of the method. This stage is that of the metasystematic stabilization of the SSP, which includes demonstrations of its superiority to other available theories (and thus to other available theoretical frameworks).¹⁷ Examples include the critiques in 5.2.2 of theories according to which talk of being as such and as a whole cannot be meaningful because talk of totalities of truths involves self-referential paradoxes (comparable to the paradox arising from designating the sentence “This sentence is false” either as true or as false). Because prior to consideration of these theories the thesis that the SSP requires a theory of being as such and as a whole is already securely stabilized, the conflicting theories enter the account not as candidates for incorporation within the SSP, but instead as alternatives to the relevant components

¹⁷ The metasystematics in question is, more specifically, intertheoretical intraphilosophical metasystematics. The various metasystematic levels of the SSP are clarified in *SB*’s Chapter 6, and in the summary of that chapter in 2.3.6, below.

of the SSP, and thus, to some degree, to the SSP itself. Because alternatives to the SSP will continue to arise, metasystematic accounts of this sort are historical in the sense specified above.

The purely systematic level of the SSP would unfold most clearly if it did so without the intrusion of any presystematic or metasystematic accounts—if the metasystematic accounts required by its method were presented only following a purely systematic presentation—but *SB* includes the metasystematic thesis that as of the time of its initial presentation of the SSP, the philosophical milieu—the status quo of academic philosophy—required it to interrupt its purely systematic presentation with both presystematic and metasystematic passages. To put the thesis colloquially: if the book did not indicate, as its subtheories developed, why (in at least many cases) some available truth candidates were not incorporated into them or (in various other cases) why those subtheories were superior to available alternatives, then the book's presentations of its subtheories, and hence the book itself, would not qualify as accounts to be taken seriously (see 73/98, 626–627/471).¹⁸

¹⁸ This thesis concerning the philosophical milieu is of course an empirical one whose status, within the SSP, is peripheral; its rejection would have no significant effect on the thesis that the SSP's theoretical framework is the best currently available for systematic philosophy.

The distinctions introduced in the preceding paragraphs among the presystematic, systematic, and metasystematic levels of *SB*'s presentation of the SSP reveal that there is a tension between the first two of the three tasks identified for this chapter in its opening paragraph. One way—arguably, the best way—to clarify *SB*'s *purely systematic* presentation of the SSP (task 2) would be to ignore *SB*'s presystematic and metasystematic passages, but if this chapter did that, it would not accomplish the first of its tasks, because it would not concisely indicate what is done in each of *SB*'s subsections. The chapter attempts to accomplish both tasks by using a smaller font for many (although not all) of its summaries of presystematic and metasystematic passages.¹⁹

2.2 A section-by-section summary of *Structure and Being*

2.2.0 *SB*'s Introduction

SB's Introduction consists of an opening paragraph followed by seven numbered subsections. The opening paragraph introduces two theses that led, historically, to the development of the SSRPP. These are, first, that throughout most of the history of philosophy, one central philosophical task has been that of developing a universal science (see *TAPTOE* 1.2.1), and second, that during the period in which the SSRPP developed to the point of its presentation in *SB*, that task had been abandoned.

¹⁹ Technically: the status of most of this chapter's summary of *SB* is immanently metasystematic; its summary of *SB* passages that are immanently metasystematic are often printed in normal type.

Introduction [1] distinguishes between two senses in which philosophies can be termed “systematic”: in one sense, “systematic” philosophical accounts are non-historical, in the other sense, they are comprehensive (or, again, universal). To clarify the former sense: “non-historical” philosophies—philosophies that are systematic in the first sense—are ones whose presentations do not relate them to alternative philosophies (the former sense, then, is *TAPTOE*’s “purely systematic”).

Introduction [2] briefly distinguishes between so-called continental and analytic philosophy²⁰, and considers how systematic philosophy has fared in each. The treatment of the former is briefer, noting only that since World War II, work in the continental mode on universal philosophy has been virtually exclusively restricted to reinterpretations of historical texts (especially those of Kant and Hegel). The consideration of analytic philosophy is more extensive, and focuses on (Michael)

²⁰ Readers unfamiliar with this distinction need know of it, for the purposes of this book, only the following: among contemporary philosophers, there is widespread agreement concerning the major philosophers from the fifth century BC through the eighteenth century AD; many top-ten lists would begin with Socrates and end with Kant. For the period following Kant, there is no comparable consensus. Lists of major post-Kantian continental philosophers typically include Hegel, Nietzsche, and Heidegger but not Frege, Russell, or Quine, and counterpart lists of analytic philosophers typically include the latter three but not the former.

Dummett 1977/1978, “Can Analytic Philosophy Be Systematic, and Ought It to Be?” It rejects three theses central to Dummett 1977/1978, i.e., (1) that analytic philosophy is systematic (in the sense of universal or comprehensive), (2) that “the analysis of language” is an adequate philosophical method, and (3) that the analysis of language is a method that is widely accepted within analytic philosophy.

In the course of its consideration of Dummett 1977/1978, Introduction [2] presents several theses that are centrally important to the SSRPP. The first is that philosophy should reject ordinary languages, relying instead on artificial or technical languages. The second is that philosophical treatments of language, to be complete, must include treatments of ontology (of what kind or kinds of entities there are). The third is that any adequate philosophical methodology—including the four-stage method of the SSRPP—must involve much more than merely the analysis of language. The section closes by emphasizing the extreme fragmentation of contemporary analytic philosophy.

Introduction [3] presents the first of the Introduction’s two overviews of *SB*. It begins by emphasizing the SSRPP’s understanding of philosophy as a strictly theoretical enterprise, and then introduces several theses concerning theoretical frameworks. These theses are centrally important because *theoretical framework* is one of the two core ideas of the SSRPP (see 483). The section then presents the following quasi-definition (Q-Def) of the SSP: it is “a *theory of the most general or universal structures of the unrestricted universe of discourse*” (12/10). The individual terms used by the Q-Def are clarified in Chapter 1 (1.2.2–1.2.5) and, as Chapter 6 notes (623/468), the remainder of Chapter 1 and Chapters 2–5 explicate the Q-Def in detail.

Introduction [4] broaches the centrally important question concerning how the SSP as the *universal* science—the science whose subject matter or universe of discourse is *unrestricted*, thus absolutely comprehensive—relates to other sciences, each of which has a *restricted* universe of discourse.

Introduction [5] presents a second overview of *SB*, identifying the central topics treated in each of its six chapters. Its overview of Chapter 2 first introduces the centrally important SSP theses that the subject, as knower and as speaker, is of only secondary and derivative importance for the development and presentation of theories, and that, consequently, theorization must be disengaged from the standpoint of the subject as theoretician. Among the central points noted in the overview of Chapter 3 is that the semantics of the SSP is contextual rather than compositional, that is, that it accords semantic primacy to sentences rather than to words. The SSP's semantics thus is not directly linked to subject-predicate sentences; it is linked instead to sentences of the form "It's F-ing"—such as the ordinary-language sentence "It's raining"—and interprets the "It" in every such sentence as a syntactic placeholder with no semantic value. *SB* terms sentences of this form "primary sentences"; *TAPTOE* terms them "sentencings."

Introduction [6] describes *SB*'s careful use of the term "system," and emphasizes that *SB* presents only a partial, not a complete, concretization of the theoretical framework of the SSP.

Introduction [7], finally, notes that because the SSP as a whole is a theoretical network whose theses and subtheories are grounded (*SB*) or stabilized (*TAPTOE*) by being interlinked, the SSP's (partial) presentation in *SB* contains numerous cross-

references, some repetition, and lengthy treatments of relatively central components of the theory.

2.2.1 *SB's* Chapter 1: Global Systematics

Chapter 1 presents a global determination of the standpoint of the SSP. 1.1 focuses on the complexity of the concept (structure) *theoretical framework* and of its presentation. 1.1[1] notes the historical importance of Carnap 1950/1956's introduction of the concept *linguistic framework*, but also emphasizes that the qualifier "linguistic" is not optimal, because the frameworks required for theorization have non-linguistic as well as linguistic components. 1.1[2] preliminarily distinguishes between what it terms the abstract or underdetermined and the concrete or fully determined concept of the theoretical framework. 1.1[3] sharpens the distinction, noting in [i] that as the presentation of the SSP develops, the meanings of "framework" and "content" change, in [ii] that of particular significance are the changes in their meanings when the transition is made from Chapters 1–3 to Chapters 4–6, in part because the data considered in the first three chapters differ importantly from those considered in the last three, and in [iii] that the network structure of the SSP requires that its presentation rely, in some cases from the outset, on subtheories that are explicitly considered only later in the account (perhaps most clearly: its presentation relies from the outset on meaningful language, hence on semantics, but its semantic theory is not presented until Chapter 3). 1.1[4] notes an additional consequence of the network structure: it requires that the presentation be at times redundant and at times pedantic.

1.2 as a whole presents (1.2.1) and then clarifies the central terms of its quasi-definition of the SSP as "the theory of the most general or universal structures of the

unrestricted universe of discourse.” Its clarification of “theory” (1.2.2) introduces the centrally important distinction among theoreticity, practicality, and aestheticity. That distinction is elaborated in 2.2.3.1, 4.3.2.1.2, and 4.4.1; *TAPTOE* 3.1 of this book contains a single, extended account of this distinction, drawing from all relevant sections of *SB* as well as enhancing the account provided in *SB*.

1.2.3 clarifies “structure,” and 1.2.4, “unrestricted universe of discourse.” 1.2.4[1][i] reiterates the controversial but vital thesis, first presented in the Introduction’s summary of Chapter 5, that the universe of discourse for systematic philosophy can be unrestricted because being is universally expressible, adding an argument against the thesis that all languages have limits that they cannot surpass. 1.2.4[1][ii] introduces and rejects the five most widely defended theses specifying restrictions on the universe of philosophical discourse (hence, denying that the universe of philosophical discourse is the *unrestricted* universe of discourse). 1.2.4[2], finally, briefly considers the status of the data available to the theoretician whose domain of investigation is the unrestricted universe of discourse.

1.2.5 clarifies “most general or universal structures” by identifying such structures for universities. 1.2.6 considers the terms “systematic philosophy” and “philosophical system,” noting that *SB* relies more heavily on the former, but does so only for historical reasons involving problematic connotations of the latter.

1.3 considers the dichotomy announced in the book’s title: structure and being. 1.3[1] introduces six particularly important comparable dichotomies that are identified in various ways both in the philosophical tradition and at present. 1.3[2] notes that the SPP deems all of those dichotomies, as generally understood, to be inadequate with respect to what *SB* terms “unrestricted universe of discourse” and “being”; the section also briefly indicates how the dichotomy *structure and being* relates to the other

dichotomies. 1.3[3] emphasizes that being, although distinguished in the dichotomy from structure, is not unstructured. Instead, it is initially available to the theoretician in the articulations of its structuration available within everyday theoretical frameworks and within the frameworks of extant theories; the task for the SSP is that of articulating its structuration more coherently and intelligibly. 1.3[4] is a brief reminder: the theoretical framework of the SSP can be at most the best currently available for systematic philosophy.

1.4 preliminarily describes the methodological component of the SSP's theoretical framework. 1.4.1 briefly notes that throughout the history of philosophy and still at present, there has never been any widely accepted philosophical methodology, and then lists the four stages of the SSP's method. 1.4.2 summarizes the method's first stage, which involves assembling relevant data (truth candidates) and arranging those that satisfy conditions of consistency and plausibility into informal theories. 1.4.3 presents the second stage as involving putting the informal theories developed at the first methodic stage into proper theoretical form. Anticipating the extensive treatment in 2.4, 1.4.3[1] notes that a complete presentation of the SSP as a whole would include all of the items within the two components *structure* and *unrestricted universe of discourse (or being)*, and the totality of the relations among them. For that theory as a whole, as well as for its subtheories, the two theory forms that are in principle available are the axiomatic form and the network form. 1.4.3[2] presents five types of axiomatic theory forms, and 1.4.3[3] indicates how the network form differs from the axiomatic form. 1.4.3[4] presents the network form as the globally appropriate one for systematic philosophy, noting that reliance on that form does

not exclude the inclusion of axiomatic subtheories. 1.4.3[5] notes that although all component theories of the SSP—as well as, in principle, the SSP as a whole—can be made precise formally, the SSP’s method does not require that formalizations be presented in all or even in many cases.

1.4.4 briefly sketches the third methodic stage, which involves interrelating the theories developed at the second (or often, as a matter of convenience, at the first) stage into a comprehensive network. 1.4.5, finally, briefly introduces the fourth stage, which involves the assessment of the adequacy of the theory as a whole. This stage is elaborated extensively in 1.5.2.2–1.5.2.3 and in Chapter 6.

1.5 is *SB*’s initial treatment of what it terms the issue of the (self-)grounding of the SSP. For reasons articulated in 1.2.1.3, *TAPTOE* avoids primary reliance on the language of grounding and self-grounding, using instead the language of stabilization (which *SB* uses only in conjunction with what it terms innersystematic grounding; see 67); the following summary uses *TAPTOE*’s terminology rather than *SB*’s. 1.5.1 first distinguishes strongly between stabilization, as purely theoretical, and justification, as pragmatic (in that justification is always justification to or for one or more subjects). Justification is subordinate to stabilization in that the adequate stabilization of any thesis or (sub)theory within a given theoretical framework is adequate justification for any subject who accepts that theoretical framework. 1.5.1 also notes the widespread assumption that theses can be adequately stabilized only by being conclusions of sound deductive arguments, noting that that assumption itself cannot be adequately stabilized.

1.5.2 addresses the issue of stabilization in philosophy. 1.5.2.1 examines the non-systematic concept, generally articulated as that of justification, noting at the outset that demands for justification are usually themselves unstable in that they are not situated within frameworks that make clear what would satisfy them. The section then turns to arguments that adequate philosophical stabilization is impossible in principle. 1.5.2.1[1] introduces (Hans) Albert 1968's "Münchhausen trilemma" and (Karl-Otto) Apel 1973/1980's attempt to avoid it, noting that the accounts in both of those texts suffer from their failures to recognize the relativity of stabilizations (including groundings and justifications) to theoretical frameworks. 1.5.2.1[2.1] summarizes (Leonard) Nelson 1908's argument that stabilization is epistemologically impossible, then notes that that text's argument presupposes an idiosyncratic and rejectable understanding of epistemology. The lengthy 1.5.2.1[2.2] presents the variant of Nelson's argument articulated in (Richard J.) Ketchum 1991 ([2.2.1]), and the inadequate response to Ketchum formulated in (Robert) Almeder 1994 ([2.2.2]). 1.5.2.1[3] shows that Almeder 1994's skeptical conclusion arbitrarily presupposes that stabilizations are all of a single type and on a single level, and that Almeder 1994 itself relies on a framework within which there are multiple types of stabilizations, on distinct levels. The section notes as well that extreme skeptical denials of the possibility of adequate theoretical stabilization are intelligible only if they themselves are adequately stabilized—or, differently stated, that they themselves presuppose theoretical frameworks within which they are adequately stabilized, and are therefore self-destabilizing.

1.5.2.2 describes the SSP's process of stabilization. 1.5.2.2[1] reiterates the senselessness of demands for stabilizations (or justifications) of isolated sentences. 1.5.2.2[2][i] emphasizes that the first stage of the process—the incipiently systematic—is in no way definitive because the SSP as a whole is structured holistically rather than foundationally. 1.5.2.2[2][ii] corrects an error in Carnap 1950/1956 that has led to widespread confusion: although that text asserts that framework-selection is a practical rather than a theoretical matter, the criteria it presents for such selections are theoretical ones. For anyone who makes the *practical* decision to

proceed as a theoretician, the question of which theoretical framework to use is wholly *theoretical*: the framework that is the best currently available for the relevant subject matter is the one that must be accepted.

1.5.2.2[3] describes the innersystematic process of stabilization as multifaceted but nonetheless straightforward; it involves all of the inferential interlinkings of sentences and subtheories within the SSP. 1.5.2.2[4], finally, sketches the metasystematic process of stabilization, emphasizing in 1.5.2.2[4][i] that because the theory is coherentist rather than foundationalist, the strictly proper location of metasystematic stabilizations would come after the systematic presentation of the theory, and in 1.5.2.2[4][ii] that the SSP, in requiring ongoing metasystematic stabilization over the course of time as alternative theoretical frameworks develop, is in a position on a par with those of natural-scientific theories, which are also subject to alteration and abandonment as the historical process of theorization continues. The subsection then introduces coherence and intelligibility as criteria centrally relevant to the evaluation of theoretical frameworks for systematic philosophies. 1.5.2.2[4][a] notes that frameworks involving unintelligible components reveal themselves to be inadequate, and 1.5.2.2[4][b] adds that when there are multiple frameworks not including unintelligible components, the frameworks can be ranked in accordance with the degrees of intelligibility that they exhibit. The section closes by emphasizing that the comparisons must occur within metaframeworks, and noting four possible outcomes for such comparisons.

1.5.2.3 makes explicit that 1.5.2.2's description of the stabilization process is an idealization, noting in 1.5.2.3[1] that the innersystematic process is the least problematic, and in 1.5.2.3[2] that *SB* includes incipiently systematic and metasystematic accounts in

various places and that although the fully appropriate systematic location for the latter would follow the presentation of the SSP, the current philosophical milieu is such that including some metasytematic arguments within the body of *SB* is appropriate.

2.2.2 *SB*'s Chapter 2: Systematics of Theoreticity

Chapter 2 treats the systematics of theoreticity. 2.1 briefly introduces the three dimensions of presentation (or, in *TAPTOE*'s terminology, arenas of engagement) theoreticity, practicality, and aestheticity, anticipatorily linking the three, respectively, with truth, goodness, and beauty. The section then briefly considers theory forms (the topic of 2.4), and closes with an overview of the remainder of the chapter.

2.2 and 2.3, together, begin the tackling of a task that is resumed and completed in the extensive 5.1; this is the task of deposing the subject, as speaker and as knower, from the position it has held virtually throughout modernity of being a (or in some cases indeed the) factor of decisive importance to the project of theorization. The task, in other words, is that of showing that theorization has no unavoidable relativity to languages human beings happen to speak or to human cognitive capacities. 2.2 focuses on language, 2.3, on knowledge.

2.2.1 distinguishes artificial, theoretical languages from ordinary languages, emphasizing that the former require only indicative sentences (thus no imperatives, interrogatives, etc.). It introduces an important thesis that is stabilized in 5.1, i.e., that artificial, theoretical languages can be semiotic systems with uncountably many expressions.