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## How Many Pure Possibilities are There?

Independently or regardless of any actualization or actuality, possibilities are pure. Suppose that pure possibilities or *possibilia* are not possible worlds but individual, concrete possibilities. How many pure possibilities are there? As I would like to show in this paper, although no answer can be given to such a question, it does not mean that this non-answerability endangers or challenges realism of pure possibilities or any possibilist realism, notwithstanding Nicholas Rescher's critique (Rescher, 1999; Rescher, 2003).

To show that “the currently fashionable *realism* of possible worlds is deeply problematic and needs to be replaced by a suitable—and ontologically more modest—version of *conceptualism*” (Rescher, 1999, p. 403), Rescher raises the question of how many possible worlds are to be identified, individuated, and counted (*ibid.*). Since no answer can be given to such a question, Rescher suggests replacing a possibilism that is substantively oriented (*de re*) by one that is proportionately oriented (*de dicto*).

In spite of Rescher's report, apart from possible worlds realism (such as David Lewis's), possibilism is not at all currently fashionable and actualism is in vogue instead. Moreover, as the representative selections of the views taking part in the debate over actualism and possibilism clearly show,<sup>1</sup> although many actualists adopt the idea of possible worlds, all of them explicitly reject the existence of purely possible individuals or particulars. Hence, at the moment, possibilism needs a strong defense against various attacks, actualist and otherwise.

Rescher argues that ostensive confrontation as regards to *possibilia* is lost and that the purely descriptive individuation of nonexistent (that is, nonactual) individuals is an “altogether impractical project” (Rescher, 1999, pp. 403 and 411). In what follows, I will show that individuation and reference can be independent of description. If this indeed is the case, is the individuation of *possibilia* altogether impractical project?

What I termed “eka-fallacy” (Gilead, 2003, pp. 65–70) is sufficient to indicate overwhelming counterexamples, which would make Rescher's argument against possibilism groundless. The phenomenon of predictable,

yet nonactual, chemical elements enabled Mendeleev and others to fully identify and to exhaustively describe possible, though actually missing, chemical elements. The places of such eka-elements in the periodic table could or can, yet must not, be occupied by actual elements. Even today, chemists predict the existence of many possible chemical elements that so far we have no evidence of their actual existence. The list of eka-elements is not exhausted and it is still open, yet the identification and the description of any eka-element are practical, possibly useful, heuristic, and fully satisfy all we need from identification and description. The description under consideration is by no means schematic, and no person is entitled to describe it as a “mere scenario,” for it provides all the needed chemical details. This kind of possibilism thus obviously gains a scientific standing and yet is entirely incompatible with Rescher’s critique as above.

Even when the predictability of any eka-element is rendered actual, the identity, reference, and description of such an element are entirely independent of any such actualization. Having been found actual, the chemical properties of the element do not change; the only change lies in the name of the element. All eka-elements thus meet the requirement needed for possibilities to be pure. Indeed, eka-elements are pure chemical particular possibilities. Each of which has its particular place in the periodic table, however open and expandable; owing to that openness or expandability, radioactive elements, unknown at Mendeleev’s time, are arranged in rows later added to the table. This open nature of the table is entirely compatible with that of the realm of pure possibilities. By contrast, the particular, individual status of any eka-element as a pure possibility is clearly incompatible with Rescher’s view about the ontological furniture of the world, possible or actual (*ibid.*, p. 408). Eka-elements, particular fictions, or pure possibilities in general must not be abstract objects, mere schemata for possible individuals, or mere thought-instruments (to borrow from *ibid.*). They can supply some ontological furniture, for instance, in chemistry as a realist scientific theory. What they cannot provide is the actual ontological furniture, which only experience and observation can provide. In other words, the actual ontological furniture is empirically acquirable alone. Yet other, no less real, ontological furniture exists, consisting of pure possibilities. As I see it, each eka-element satisfies the condition that Rescher puts to particularity, namely, particularity demands identification (*ibid.*, p. 409). Any eka-element qualifies as an identified particular, and not a general schema for an element. Hence, arguing that “hypotheses enable

individuals to be discussed in the abstract but not to be identified in the concrete” (ibid.), Rescher commits what I have entitled “the eka-fallacy.”

Suppose that we accept Rescher’s stance according to which “only a description that is saturated and complete could possibly manage to specify or individuate a merely possible particular individual. For any genuinely particular individual must be property-decisive, and a nonexistent possible individual can obtain this decisiveness only through the route of descriptive saturation” (Rescher, 2003, p. 378). Eka-elements precisely meet even such a demand for their decisive physical and chemical properties are entirely sufficient to secure identification as well as endlessly recurrent re-identification. If the demand from any possible individual “cannot be vague or schematic but must issue a committal yea or nay with respect to every property whatsoever” (ibid.), each eka-element has perfectly met that demand. We have all the descriptive saturation we need from the periodic table to secure perfect identification of an element as purely possible or actual. From the epistemological point of view, at least, such identification should not raise real problems. After all, identification and re-identification are epistemological issues.

As for the ontological-metaphysical background, chemical elements, as participating in the periodic table, are chemical pure possibilities, like notes on a musical scale, which are independent of actualization. If you assume that the periodic table is merely a picture or representation of the actual chemical reality, you are missing the whole point, especially as far as eka-elements are concerned. Like any natural science, chemistry has its own theoretical basis, which consists of pure possibilities and their relationality. As much as the mathematical foundations of any natural science are pure possibilities and not actualities, so are the chemical possibilities arranged in the periodic order. The possibilities-identities and their relationality are there, completely, in the table. As such, they are clearly existents, they are obviously real, by no means Rescher’s nonexistents. They are not just “verbally or mentally intended referents” but real referents. They are not merely “de dicto” possibilia, but possibilia de re. Our thought and language do not invent or create them, but rather capture them as discoveries of chemical pure possibilities. No eka-element has been invented or created; it has been merely discovered as a pure possibility.

We are not entitled to compare any eka-element to, for instance, the philosopher’s stone, which is a “putative item” or a “suppositional being ... the [linguistically engendered] artifact of an interpersonally projected supposition or assumption,” “a pseudo-object that is no object at all” (ibid.,

p. 379). The metaphysical-ontological status of any chemical element as a particular, concrete pure possibility is well established. These pure possibilities constitute a part of the ontological furniture of the world of chemistry as a scientific theory. Whether the chemical elements in the periodic table are merely eka-elements or actual elements, their well-established identification is beyond any doubt. At least for the time being, their chemical and physical description is complete or saturated enough, quite sufficient for all the theoretical and practical needs of chemistry as a scientific theory and absolutely sufficient for any chemical identification. The qualifications “enough” and “for the time being” are needed because the future of chemistry, like that of any other science, is beyond our present knowledge.

Yet at this point a serious, one might say unsolvable, problem arises for a possibilist view that excludes multiple actualization of any pure possibility, for each chemical element (eka or not) has innumerable actualities or “tokens.” Is an eka-element a pure possibility singly actualizable? The case appears to be just the contrary, and, if so, we cannot meet, as it were, Rescher’s demand of uniqueness: “where only a single unique realization is possible” (1999, p. 413; I would prefer “unique actualization”). To solve this problem, we should distinguish between the particular chemical possibility-identity of an element (eka or not) and the chemical *name*, as a part of the *language* or *terms* of chemistry. Name and identity are by no means identical. Any name, as taking part in a language, is general, as no language is private. As much as the proper name “James” is general, serving as a common name for all persons named “James,” so Germanium is the common name of all existing atoms or pieces of Germanium, each of which has a single, unique possibility-identity. Under such a nominalist view, every genus, species, kind, or type is merely a name, which is general. Thus, the element of Germanium in the periodic table serves as a double meaning or significance: as a name and as an assemblage of possibilities-identities sharing an intrinsic similarity that all the atoms of Germanium have. Each actual atom of Germanium shares the same name with any other atom of Germanium, each of which has an exclusive pure possibility-identity. The periodic table secures for each of these pure possibilities-identities the common locus, serving as a general name, in the table. To recognize a piece of matter as Germanium is to entitle it with a general name, shared by all the Germanium atoms, but the identification, like any identification, is particular: *This* piece of matter, *here and now*, is a piece of Germanium.

As for eka-elements, the distinction between name and possibility-identity is even simpler or more manifest. As long as chemists use eka-elements in the periodic table, no evidence appears to the actual existence of any of these elements, and hence only a single representative possibility-identity in each case of those eka-elements has to be referred to (or mentioned in the table), whereas the name in each case is general (even though no single actual case is known yet). Thus, prior to the actual discovery of Germanium, its pure possibility-identity was named as eka-silicium. This name, like any other, was general, yet the possibility-identity mentioned was individual, indicating the locus of each identity-possibility of each atom of Germanium, all of which are intrinsically similar. And this locus has been secured since the advent of Mendeleev's periodic table. In this way, each pure possibility-identity has only "a single unique" actualization ("realization" in Rescher's actualist term). The pure possibility-identity of Germanium, known before its actual discovery by the name "eka-Silicium," satisfies all of what Rescher demands of identification or individuation although, under that name or independently of actualization, it is merely a pure possibility! In any event, no eka-element can be considered as abstractly general, for it could not be abstracted from anything actual.

Finally, no eka-element can be considered *ens rationis*, a mere thought-object or thought-entity, such as the equator or the north pole (which Rescher mentions on p. 414). Since the reality of each eka-element is necessitated by the periodic law, which excludes possible gaps or vacancies in the periodic order or system, no eka-element is treated as *ens rationis*, which is the ontological standing of mere fictions or conventions, none of which is treated as real, let alone as necessary. The reality of any eka-element as a pure possibility is necessitated, whereas no *ens rationis* is ontologically necessitated.

Arguing that "the actual identification and introduction of ... *possibilia* is effectively impossible" (ibid., p. 403), Rescher appears to commit a fallacy, especially concerning the introduction of pure particular possibilities. I would like to name that fallacy after Jules Verne—the Verne fallacy. In *Paris in the Twentieth Century* (written in 1863 yet published in 1994), many years before the advent of any actual fax machine, Verne introduces a possible fax apparatus, explicitly naming it "facsimile," without relying on anything actual (except for electricity and electric conductivity). He thus most effectively introduces, identifies, and describes the pure possibility of such a device in full detail, without relying upon any actual

device, for no such invention, in fact, existed at that time. As it is well known, in *Twenty Thousand Leagues Under the Sea*, Verne introduces another novel pure possibility—that of a submarine. He introduces, identifies, and describes such a possibility quite independently of any related actuality. Such counterexamples, I believe, are quite sufficient to render Rescher's arguments against possibilism *de re* invalid or groundless. Many similar examples exist of the introduction and identification of pure possibilities, *possibilia* in Rescher's term, which are quite practical and effective for various purposes.

Could Rescher argue that such counterexamples are fictions? First, if not misleading, fictions can do great service for us in searching for new discoveries, many of which are strictly scientific. Second, no matter how we discover novel possibilities, what is decisive at this point is that prior to their actual existence and quite independently of it or of anything actual, as pure possibilities alone, they were discovered by scientists, thinkers, writers, and the like. Thus, Verne introduced, identified, and described a fax device and a submarine many years before their actual appearance. He referred then to these objects as pure possibilities; he substantively oriented toward them. To characterize such a reference (or "orientation") adequately, we certainly need a possibilism *de re*, very much contrary to Rescher's view.

Another counterexample of Rescher's view is the numerical series. Allegedly following Plato's *Republic* VII, Rescher mistakenly considers numbers abstract things (*ibid.*, p. 404, note 1; cf. 2003, p. 376: "*abstracta* such as numbers"). First, Plato does not consider Ideas, mathematical or metaphysical-dialectical, as abstract entities, although it is quite true that they are exempt from processuality and, hence, from dispositional character. On the contrary, for Plato, sensible entities are *abstracta*, which are copies or mere reflections-participants of more real, substantial, concrete beings—Ideas. Sensible or actual entities thus depend upon their Ideas, and not the other way round, which is the case of anything abstract. In Plato's philosophy, numbers clearly belong to the realm of the mathematical Ideas, which manifestly makes them non-abstract. Second, altogether independently of Plato's philosophy, as pure possibilities, numbers are not *abstracta* at all. Instead, they are concrete beings. To argue that numbers are *abstracta*, as if numbers were abstracted out of actual things, Rescher takes an actualist stance, despite his manifest efforts not to do so.

Since we regard numbers independently of any actualization or actual entities, and since their existence is exempt from any spatiotemporal and causal conditions, we should consider numbers as pure possibilities and not

actual entities. Yet the identity, reference, and description of numbers is undoubtedly altogether practical. Though no end exists to the number of numbers, no philosopher is entitled to argue on the basis of this indisputable truth that numbers are not real enough. No realism about numbers is endangered by the argument that the question—How many numbers are there?—is unanswerable. Numbers can be considered quite real, although they are not actual beings but merely pure possibilities and there is no end to their number. As pure possibilities, numbers are substantively oriented, practically referable, fully individuated, satisfactorily describable, and subsumable to ostensive confrontation. Contrary to Rescher's view, possibilism concerning numbers is both quite meaningful and committed to substantively oriented (*de re*) pure possibilities. No need exists to replace it with any "more modest" version of conceptualism.

As for the more recent version of Rescher's view (2003), the crucial problem that he confronts is: what does fix the identity of an individual? Is this an actual factor or not? What appears to be Rescher's answer is that it must be an actual factor that fixes the identity of an individual (*ibid.*, p. 368). For instance, "the Hubert Humphrey we know and love" is an actual individual, whose identity has been fixed or settled "irrespective of what worlds or what descriptions may be involved" (*ibid.*, p. 367). Indeed, such is the case: Humphrey's identity is independent of all these. The problem remains: what does determine his identity? What secures its persistence or survival of various contingencies and changes in his life? As I see it, the identity of an individual has not to do with possible worlds, transworld identity, or actual reality. We have to face the same problem whether we identify a pure possibility, say, an eka-element, or an actuality: what alterations or modifications can  $x$ , purely possible or actual, undergo and still retain its (or his or her) identity? To identify a member in a symmetrical mathematical group, which is altogether purely possible and not actual, or to identify the actuality of the subatomic particle omega-minus, requires no recourse to anything actual. Rather the contrary: in both cases, the purely mathematical and the physical-actual, we rely upon theoretical criteria, which are purely mathematical or purely physical possibilities and not actualities.

We have to face the same problem: the problem of reference and identification, while referring to a pure possibility and identifying it or to an actuality and identifying it. An ostensive identification is equally applicable to a pure possibility ("this member of this mathematical group") or to actuality ("this is the trajectory of omega-minus" or "this is the mark of

omega-minus”). Contrary to Rescher’s view (*ibid.*, p. 374), spatiotemporal positioning is not a necessary condition for ostensive identification. Hence, we can ostensibly identify pure possibilities, although they are exempt from any spatiotemporality and causality and are not actualities subject to experience, experiment, and observation. We can point to them as much as we can point to actualities. To identify or to refer to something, we can do without reference to actualities or to the actual world, just as we do while identifying numbers, members of mathematical groups, eka-elements, and so on.

Similarly with numbers, Rescher treats fictional objects as mere *abstracta*: “Fictional ‘objects’ are abstractions and not concrete *possibilia*” (Rescher, 1999, p. 408). Again, we are not entitled to consider Verne’s fictions as *abstracta*, for they are quite independent of actual reality and by no means abstracted from it. Second, they are not schematic but quite concrete *possibilia* within Verne’s texts. As for literary fictional characters, Rescher is also wrong. Hamlet, Madame Bovary, Anna Karenina, Swann, and many other fictional figures in fine literature are by no means abstract objects, schemata, pseudo-individuals, and the like. Such are the mark of literary failures or bad literature. Although we do not normally treat any of these characters as actual, we certainly relate to them as concrete, as individuals bearing the mark of singularity and genuineness. Their ontological status is not in short of that of actual individuals, although it is quite different. Fictional characters may affect us no less than actual beings, sometimes even more. They can be very real, especially for us, and by no means as abstract but, rather the contrary, as concrete and particular as much as possible. There is a necessity about real fictional figures in literary works of art, which no actual being can have. Aristotle points out such a necessity in artistic tragedies, contrary to an actual history that may be contingent.<sup>2</sup> Supposedly, Rescher would not agree with such an Aristotelian idea, which enables us to realize what is the special nature of great works of literary art and especially what is meaningful and significant about them. Rescher does not ignore meaningful discussions and reasoning of “merely possible states of affairs and scenarios” or stories (2003, p. 380). Yet he leaves them to “abstract generality” alone (*ibid.*). Such is not the case as I see it. Literary masterpieces deal with concrete, particular pure possibilities as well as with the necessity for them. I will discuss below the necessity of pure possibilities in literary works of art.

But worse is yet to come. Rescher leaves “merely possible individuals and worlds viewed as particulars” without the “disposal of our latter-day

modal realists” (ibid.). Instead, the infinite depth of the requisite details of such possibilities “confines them to the province of God alone” (ibid., p. 381). Thus, “only God can realize the idea of nonexistent particularism” (ibid.). Such is not the case at all. Literary artists, theoretical scientists, mathematicians, and the like have discovered particular pure possibilities over the years, because no infinite depth of a complete description has been needed at all for this purpose. All they have needed has been their capability of discovering new particular pure possibilities, which are within the reach of human beings who are imaginative enough, who are not enslaved to the actual. However confined or limited, the freedom from the actual is in our nature and at our disposal. Equally, the capability of relating to pure possibilities as existents, although obviously nonactual, is very much in our nature as conscious psychical beings. Possibilia are undoubtedly within the reach of our psychical and intersubjective or interpersonal life, moreover, such life consists of them. Unless we confine all there is to the actual alone, but then nothing would be left of psychical or intersubjective reality.

As I see it, Rescher appears to miss the point of the identification of fictional characters. He asks whether the mysterious stranger in the first chapter of a novel is the same person whose corpse is mentioned in the fifth chapter. They are one and the same person, he answers, “only if the author says so—there are no facts of the matter apart from those our novelist specifies. In the absence of such specification all that can be said about the issue of identity is—absolutely nothing” (ibid., p. 370). Indeed, no actualities, no facts of the matter exist to provide us with an answer. Nevertheless, and this is the point that has been missed, if the novel has been written in a masterly way, everything relevant is necessarily there and the relations between the specific details are as necessary as they are. Thus, even if the narrator says absolutely nothing about such identification, the reader, following the inner necessity of the novel, may find the answer by herself. Nothing is arbitrary about such identification, and no recourse to contingent actualities is needed to realize it. Readers can supply the missing parts for themselves.

Contrary to Rescher’s view, we do not arbitrarily assume, postulate, or suppose pure possibilities as “objects that are projected in discussion” (ibid.). Although no facts of the matter determine the existence or reality of pure possibilities, they are not arbitrarily postulated or assumed. Just as in pure mathematics, in logic, in fine literature, nothing is arbitrary about pure possibilities. Contrary to Rescher’s view (ibid.), they have independent characteristics that we have to discover, as much as eka-elements have had

them. The modal metaphysics that I have introduced (Gilead, 1999 and 2003) attempts to show precisely this. It is an actualist fallacy to assume that only given facts are discoverable and that “nonexistent [i.e., non-actual] possible ... individuals are never given to us” (ibid., p. 376); pure possibilities are as discoverable and as given as actualities. They are given in a different way from the way that actualities or facts of the matter are given. For we discover actualities by empirical means; and these cannot capture pure possibilities.

In the final account, Rescher relies on the prominent manifesto of actualism, namely, Quine’s “On What There Is” (Rescher, 1999, p. 413, note 9; cf. Rescher, 2003, p. 376). Undoubtedly, the following is an actualist view: “Thought and language move off in their way, and existence and reality go off on their way, and only where there is actual *adequatio ad rem* do they come together” (Rescher, 2003, p. 379). Actual reality or existence does not exhaust reality as a whole. Thought and language have realities of their own and they exist as much as actual reality exists, although in different senses. Thought exists psychically, subjectively, or privately; language exists intersubjectively or interpersonally; and actual reality exists objectively or publicly. To ascribe reality only to the latter is what actualism is all about. To consider pure possibilities as nonexistents or to state that there is “no way to identify and individuate nonexistent [nonactual] possible individuals” (ibid., p. 376) is a manifest actualism.

Rescher leaves us one choice: “all or nothing: either a (distinctly problematic) metaphysical realism of self-subsistent possibilities or else a (somewhat unappealing) nominalism of mere verbal possibility talk, of possibility not as a matter of genuine fact but merely the product of an imaginative fictionalizing by linguistic manipulations” (ibid., p. 381). I entirely accept the first alternative, yet my view is a nominalist realism of pure particular possibilities in the following sense: what is general about pure possibilities is only their relationality. Furthermore, our imagination is capable of utilizing various illuminating fictions (“real fictions”) to *discover* new pure possibilities, which are as real as actualities, although in a different sense. Real fictions thus do for us what no telescope can (to allude to Kripke’s metaphor that is mentioned ibid., p. 377 and mistakenly ascribed to David Lewis). Verne’s literary fictions provide us with one kind of example; eka-elements—with another. Let us leave linguistic manipulations to rhetoricians, copywriters, propagandists, preachers, and the like. Owing to an insightful metaphysics, philosophers can be realistically possibilists without being linguistically manipulated.

To limit or reduce possibilism to conceptualism or conceivability is to limit and confine the realm of pure possibilities unnecessarily. Possibilities, such as a round circle and  $\sqrt{2}$  that is not a fraction, may exist beyond our current conceivability. To the extent that our current conceivability is concerned, they are deemed “impossibilities.” Yet although we cannot conceive, at least at the moment, such possibilities, which are incompatible with our current logico-mathematical knowledge, we can nevertheless relate to them. We should not accept any restriction of the realm of pure possibilities to the limits of our current conceivability or to those of our current logico-mathematical knowledge. For this reason, I do not accept the idea that metaphysical possibility is “less expansive than narrow logical possibility” (Gendler and Hawthorne, 2002, p. 5). Nor can I accept the view that conceivability or conception and possibility are coextensive or congruent. As I see it, conceivability, conception, imagination, employing fictions, and the like are the ways in which we discover pure possibilities, which are new for us. These possibilities are ontologically or metaphysically independent of the ways in which we discover them. Hence, the conceivable (or the like) and the possible are not identical.

Rescher is quite right in arguing that the description of any real thing is in principle inexhaustible (*ibid.*, p. 405), but this is all the more valid for pure possibilities. Dispositional characterization aside, the infinitude and inexhaustibility of the relationality of any pure possibility to all the others must be beyond any doubt. Each pure possibility is different from any other pure possibility, for no two identical pure possibilities can exist. The law of the identity of the indiscernibles is especially valid for pure possibilities. Since each pure possibility is different from all the others, each pure possibility necessarily relates to all the others. Hence, its relationality is infinite and inexhaustible. This holds particularly for numbers. The open nature of the realm of pure possibilities as a whole is strictly compatible with infinitude and inexhaustibility concerning such possibilities. As Rescher states, “Endlessly many true descriptive remarks can be made about any actual physical object” (*ibid.*), but this also holds for Verne’s facsimile or submarine. The readers of Verne’s works of fiction in the 19<sup>th</sup> century, much before the advent of actual facsimiles or submarines, could inexhaustibly imagine, describe, and refer to these purely possible objects. Moreover, each of Verne’s readers could imagine them under different conditions and circumstances, in the same way as the observers of the actual objects mentioned by Rescher. In both cases, of

pure possibilities and of actual things, no end exists to “the perspectives of consideration that we can bring to bear on things” (ibid.).

The trouble is that stating this, Rescher has only actual things in mind. Yet an endless variety of cognitive viewpoints equally holds for pure possibilities and actual things. Pure possibilities enjoy descriptive perspectives as much as actual things do. Hence, Rescher’s assumption that “*fictional* particulars ... are of finite cognitive depth” (ibid., p. 407) is simply groundless. Rescher’s precommitment to description-transcending features, essential to our conception of any real, concrete object (ibid., p. 406), is certainly valid not only for actual objects but equally for pure possibilities. Owing to the infinite relationality of any pure possibility to all the others, its description is never exhaustive. However fictional a figure in a novel may be, there is an infinity of ways of relationality to it, and, hence, an infinity of possible descriptions. The more artistically rich and profound a novel, the more classic its nature, and we can realize more clearly that it is subject to more various interpretations or descriptions, the number of which has no end. Any fictional figure means or signifies different things for different readers, the numbers of which is indefinite. Novelties always wait for interpreting and describing the fictional as much as for the actual.

Rescher rests identification on the basis of description, and, given that no complete description of any particular is possible—the descriptive incompleteness or inexhaustibility—he concludes that we cannot distinguish any individual from all other possible or imaginable individuals (ibid., p. 410). As I see it, this is not the case at all. In principle, we can distinguish any individual, as a pure possibility, from all the others independently of description or relationality. No matter how we conceive them, no two pure possibilities can be identical, which means that we, as a matter of course, distinguish between any pure possibility and all the others. We do not need any description or relationality to distinguish any pure possibility, but the other way round. Distinguishing pure possibilities one from the other is the most primary or primitive act of the mind. Such is the mind’s accessibility to any pure possibility. The reference to pure possibilities is direct as much as the reference to actualities is direct, and both kinds of direct reference are independent of description (Gilead, 2003, pp. 56–58). Finally, since the identification of pure possibilities can be independent of any world, possible or actual, I do not accept Rescher’s postulate that the “only feasible way to identify a possible individual would be with reference to the world to which it belongs” (ibid., p. 412).

We can do without the dispensable idea of possible worlds. Instead, we are entitled to postulate the open realm of all pure possibilities, in which no two possibilities can be identical. As a prior or primary mental act, identification of, or reference to, pure possibilities is independent even of this realm too.

Direct reference—reference independent of description, interpretation, or narrative—is possible not only for actual referents but also, and even primarily, for purely possible referents, each of which is an individual, whether particular or singular. Ostension to pure possibilities is possible and practical like ostension to actualities, given that pure possibilities are discoverable as are actualities. As necessarily atemporal, pure possibilities are discoverable and, in the last account, cannot be created, contrived, or invented (contrary to Rescher, 2003, p. 364). Each individual pure possibility exists independently of its discovery, descriptions, narratives, interpretations, or significance, but obviously not the other way round. We can point out pure possibilities, as much as actual referents, independently of any description. Literary works of fiction may begin with direct reference to, or with introduction of, pure possibilities that the reader can easily follow.

At the very beginning of *Anna Karenina*, Tolstoy writes, “Everything had gone wrong in the Oblonsky household. The wife had found out about her husband’s relationship with their former French governess and had announced that she could not go on living in the same house with him” (Tolstoy, 1969, p. 13). In these two opening sentences, three direct referents are introduced and pointed out for the first time, all of which belong or relate to the same household: Oblonsky, his wife, and the governess. Given that the relations existing between the referents must not be confounded with descriptions of any sort, no description whatsoever is needed to refer to those fictional referents, which are not actualities but merely pure possibilities, entirely independent of their description and of any actualization as well.

Equally direct or independent is the reference or the ostension at the very beginning of Kafka’s “Before the Law”: “Before the Law stands a doorkeeper on guard. To this doorkeeper there comes a man from the country who begs for admittance to the Law” (Kafka, 1961, p. 61). You can easily think of many other examples, not necessarily literary or fictional, including mathematical or theoretical examples. Writers can introduce, directly refer to, or point out fictional persons or objects and fix their names, independently of description whatsoever. Nothing should be

schematic or hypothetical about these fictional figures; they can be particular or concrete. Nothing of contingency is left about them in a genuinely literary piece of art. All we have to know about them is necessarily there. All other questions that have nothing to do with such a necessity should not be asked about them. They are quite different from actualities, the basis for answering questions about which is necessarily empirical.

We can introduce or directly refer to fictional characters or objects, not only independently of any description but also of any narrative. Narrative may be the means to capture or discover these possibilities. Literary fiction serves us well in touring the land of pure possibilities, existing independently of our discovering them by narratives or by other means. Narrative, like description, may help us discover, capture, or find out pure possibilities, to which we may directly refer, on the ground that each of them is an individual possibility, different from any other possibility in the entire realm of pure possibilities. Furthermore, you can directly refer to or point out any of your personal, private, subjective possibilities, with or without naming them. While naming them, you intersubjectively refer to your personal pure possibilities. In this case, you utilize language and other means of communication, which does not render this reference indirect, given that it remains strictly independent of any description, interpretation, or narrative and directly accessible to you.

Asking with Rescher, how many lumps of coal lay in Sherlock Holmes's grate, we appear to have no fact-of-the-matter answer (Rescher, 1999, p. 407). Indeed, relying on the text alone, the reader cannot answer such a question, for these lumps are not subject to his or her observation or experience. But this fact of uncountability does not render their reality less real, although they are real in a non-actual sense. As fiction, they are as real as actual things, otherwise they are senseless, meaningless, or insignificant for the readers. If Sherlock Holmes lights his pipe by means of a lump of coal, at least one such lump exists in his grate. If he says, "Not even a lump of coal remains in my grate, how can I light my pipe then?"—this would mean or signify something different for the reader, yet it would make sense as regards this text. As for property-decisiveness (*ibid.*, p. 408), it depends on the significance or meanings that the particular item has in the text, in the interpretation, or under the description that the reader has in mind. Second, do no actual, concrete, or particular things exist that are not property-decisive? For instance, the spatiotemporal properties of

electrons are clearly indecisive, and yet the existence of electrons is beyond any doubt.

But the most significant flaw in this argument by Rescher is of not distinguishing between two kinds of description: that of actualities and that of pure possibilities. Description or interpretation of actualities decisively meets such questions that Rescher suggests, owing to the contingent nature of actualities. Because of this nature, we must rely upon experience and observation to answer such questions. The case of pure possibilities is quite different. Describing or interpreting them, we should relate to the necessity about them. In a good “piece” of pure possibilities, for instance, in a literary work of art, in a scientific system such as the periodic table of elements, or in a mathematical system, a necessity determines each detail that makes a difference. If the question about the number of the lumps of coal lying in Sherlock Holmes’s grate makes any difference as regards the text, if it has meaning and significance in the context of the story, we are entitled to ask it, and a decisive answer should be found in the text, if and only if it is artistically well made. If not, the question in this context is about an “external” contingent fact that is entirely irrelevant as regards this text, since it does not make a difference or bear significance in it, since no necessity about it can be found within this text.

Consider Kafka’s “Before the Law” again. This concise fable is entirely free from any superfluous detail and it does not give rise to any distinction that does not make a difference. Suppose that the reader may ask, nevertheless, for distinctions and details that the fable does not mention at all. For instance, it mentions the fleas in the doorkeeper’s fur collar, which the man from the country asked for helping him persuade the doorkeeper to change his mind and to allow him admittance to the Law (Kafka, 1961, p. 63). Does it make sense to ask how many fleas are there? Or, how many fleas the man has asked for help? The answer to these questions must be negative, for such questions do not make any sense, insofar as such a literary piece of art is concerned. To raise such questions means to ask for a distinction that makes no difference, at least insofar as the fable is concerned. That is, such a distinction is not necessary at all and, insofar as the fable goes, this distinction or detail is merely contingent, playing no role or bearing no meaning and significance within it. The number of the fleas makes no difference to the fable’s significance and meanings. The reality that the fable depicts is not actual, whereas such questions make sense and are valid or legitimate only when we address them to actual reality, in which contingencies naturally occur.

Necessity about pure possibilities is what I have entitled “determinism of pure possibilities” (Gilead, 2003, pp. 137–141, 146–147), which means that nothing about such possibilities remains undeterminable or contingent, provided that we deal with their significantly relevant relationality. Hence, within the context of a literary work of art or within a psychical reality each pure possibility and its relationality are necessarily determined. As a result, contrary to Rescher, no “ontology of schematically fuzzy, descriptively undetermined possible worlds and individuals” (Rescher, 1999, p. 417) should have any room within such contexts. Within them, each pure possibility, which is a real, concrete individual, is necessary, determined, and descriptively decisive.<sup>3</sup> My view of fine stories or illuminating fictions is quite different from Rescher’s or other actualists’ views of fictions and stories. Questions about actualities are quite different from questions about pure possibilities, for the first deal with contingencies and the second with necessities.

As for practical innumerability, the number of all existing atoms, say, hydrogen atoms, is not practically countable, the same holds for the number of all existing electrons, subatomic particles, and the like. They are not practically numerable as much as the lumps of coal in Holmes’s grate, although for different reasons. Moreover, we cannot meaningfully discuss their numbers. Indeed, Rescher himself mentions meaningful discussion concerning unanswerable questions about the number of individuals who lived thousands of years ago (*ibid.*, p. 415). Though unanswerable in practice, such questions concern significant facts in the history of human evolution (*ibid.*). By contrast, the number of all existing atoms or that of the lumps of coal as above makes no significance, sense, or meaning at all, for it makes no difference at least insofar as our knowledge or understanding is concerned. Such questions are unresolved as well as meaningless.<sup>4</sup>

Like many other actualists (to begin with Quine), declared or in fact, Rescher has one kind of existence in mind—actual existence. Against this background, he wrongly employs the distinction between possibility *de dicto* (“it is possible for individuals”) and possibility *de re* (“there are possible individuals”). Discussing the proposition, “it is possible for spiders to weigh 80 lbs.,” Rescher writes, “this does not mean that there is somewhere—in the ‘realm of possibility’—some there-actual spider that has achieved this weight” (*ibid.*, 417). Of course, in the realm of possibilities no such *actual* spider exists, but there certainly is a pure possibility of such a spider, since it is not identical with any other

possibility, which is all we need to individuate it practicably. Unlike Rescher's view, the concept of reality bears two senses—actual and possible. Equally, *de re* too bears two different senses—actual and possible but Rescher, like any actualist, does not make such differences at all, on the contrary—he reduces them to the actualist alternative.<sup>5</sup>

As a pure possibility, such a spider exists *de re*, although obviously not in the actual sense. *Possibilia* are as real as actualities, and certainly, contrary to Rescher (*ibid.*, p. 418), we have practicable ways of identifying or individuating particular pure possibilities, as long as they are not identical one with the other. Contrary to Rescher (*ibid.*, p. 417), possible individuals are not “just like” actual individuals “in nature but merely different in content,” for pure possibilities are ontologically and epistemologically independent of actualities. The case of eka-elements clearly demonstrates this.

We are absolutely entitled to commit ourselves to ontological realism of pure possibilities, *possibilia*, or possible beings, to possibilism *de re*, which Rescher explicitly excludes (*ibid.*, p. 420). Such possibilism is not conceptualism, which reduces possibility to conceivability. Pure possibilities are independent even of our conceivability of them. We discover them; we do not invent them. Insofar as pure possibilities are concerned, “invention” is indeed a personal discovery. As a result, I do not accept Rescher's *de dicto* possibilism or conceptualism—the “ontology” of conceptualizable possibilities (*ibid.*)—for it reduces or limits possibilism to mere conceptualism.

In sum, Rescher's ironic question—How many *possibilia* are there?—is as senseless as the question: How many numbers are there? This inescapable uncountability of numbers by no means renders them unreal or lacking individuality or identification, and the same holds for other *possibilia* or pure possibilities. Indeed, what we cannot individuate we cannot count (and Rescher is right on this point), but not everything that we can individuate can we count.

**ABSTRACT**

Independently or regardless of any actualization, possibilities are pure. Are such possibilities real? I attempt to defend a realism of individual pure possibilities challenging Nicholas Rescher's and other actualist views. For this purpose, I suggest some counterexamples that appear to render such views groundless. Indeed, no answer can be given to the question: How many pure possibilities are there? Yet, notwithstanding Rescher's critique, such non-answerability does not endanger or challenge realism of pure possibilities or any possibilist realism. Non-answerability is also valid for genuine literary works of art, in which only what makes a difference is necessarily there and subject to our questions. Such works of art maintain a sort of necessity, exclusively pertaining to pure possibilities and their relationality, all we have to know about which is necessarily there. Pure possibilities are as real as actualities, although in a different sense.

**NOTES**

1. See Loux, 1979; Fitch, 1996; Tomberlin, 1998; and Gendler & Hawthorne, 2002. In a more recent paper, Rescher states that "the metaphysics of possibility has been a growth industry in recent years" (Rescher, 2003, p. 363).
2. *Poetics* 1451a25–b11, b34–35, and 1454a34–38.
3. Contrary to Rescher's "pseudo-individuals," putative individuals, or fictional particulars.
4. Contrary to Rescher's idea of perfectly meaningful, yet unresolved, questions (Rescher, 1999, p. 415).
5. The same holds for the distinction between the possible/contingent and the purely possible/necessary and for that between realization/actualization as well.

## References

- Fitch, G.W. (ed.) (1996). "Possibilism and Actualism," *Philosophical Studies*, 84, pp. 107–320.
- Gendler-Szabó, Tamar & John Hawthorne (eds.). (2002). *Conceivability and Possibility* (Oxford: Clarendon Press).
- Gilead, Amihud. (1999). *Saving Possibilities: A Study in Philosophical Psychology* (Amsterdam and New York: Rodopi—Value Inquiry Book Series, vol. 80).
- \_\_\_\_\_. (2003). *Singularity and Other Possibilities* (Amsterdam and New York: Rodopi—Value Inquiry Book Series, vol. 139).
- Kafka, Franz. (1961). *Parables and Paradoxes* (New York: Schocken Books).
- Loux, Michael J. (ed.). (1979). *The Possible and the Actual: Readings in the Metaphysics of Modality* (Ithaca: Cornell University Press).
- Rescher, Nicholas. (1999). "How Many Possible Worlds Are There?," *Philosophy and Phenomenological Research* 59, pp. 403–421.
- \_\_\_\_\_. (2003). "Nonexistents Then and Now," *The Review of Metaphysics* 57, pp. 359–81.
- Tolstoy, Lev N. (1969). *Anna Karenin*. Tr. Rosemary Edmonds (Harmondsworth, Eng.: Penguin).
- Tomberlin, James E. (ed.). (1998). *Language, Mind, and Ontology: Philosophical Perspectives*, 12 (A Supplement to *Noûs*) (Boston and Oxford: Blackwell), pp. 489–509.