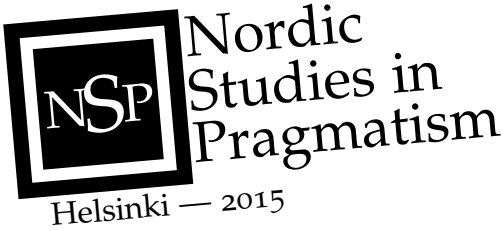

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Margolis and Popper on Cultural Entities

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In spite of different philosophical backgrounds, Joseph Margolis and Karl Popper share an important insight: they both use nonreductive materialism to give an account of persons and other cultural entities. In this paper, I give a critical survey of some interesting points of convergence and divergence between these two remarkable thinkers. Their main agreement concerns human persons: Margolis compares them to cultural artifacts, and Popper also concludes (or at least should conclude) that self-conscious persons are World 3 entities. Even though Margolis has worked more systematically on art and aesthetics, I will argue that Popper's notion of World 3 offers better resources for understanding the ontological status of human-made abstract entities, among them some works of art, social institutions, and mathematical objects.

Two philosophers of culture

Joseph Margolis (b. 1924) is a prolific author who has discussed a wide range of topics both in Anglo-American and Continental philosophy. His approach in epistemology and philosophy of mind is pragmatist, historicist, and relativist. In *Art and Philosophy* (1980) he deals with conceptual issues in aesthetics. Already in *Persons and Minds* (1978) Margolis explores the prospects of nonreductive materialism in his cultural treatment of human persons. The same theme is developed more generally in *Culture and*

Cultural Entities (1984), which outlines an ontological theory of culture, and in the recent essay "Toward a Metaphysics of Culture" (2015).

Karl Popper (1902–94) is primarily known as a philosopher of science with contributions to political philosophy. Popper emphasized his realist and unorthodox Kantianism against the Viennese positivists (see Popper, 1974). His ontology of "three worlds", first announced in the lectures "Epistemology without a Knowing Subject" in 1967 and "On the Theory the Objective Mind" in 1968 (see Popper, 1972, Chs. 3–4), is based on emergent materialism. It led to a book in the philosophy of mind, *The Self and Its Brain* (1977), written jointly with the neurophysiologist John Eccles, and somewhat scattered remarks on cultural human-made entities in World 3 (see Popper, 1974, 1980, 1994).

Popper would never have called himself a pragmatist—even though he shared many views with Charles S. Peirce: the method of hypothesis, fallibilism, evolutionary growth of knowledge, and probability as propensity (see Niiniluoto, 1978). In his *The Truth about Relativism* (1991), Margolis took issue with Popper's criticism of relativism. So Margolis and Popper have quite distinct philosophical backgrounds and profiles. But both are nonreductive materialists—and in this respect criticized by reductive materialists like Mario Bunge (1979, 1981). Further, both agree that philosophical accounts of human persons and cultural entities go together. This similarity is acknowledged by Margolis (1978), 245-246, in his references to Popper's *Objective Knowledge* (1972).[1]

Popper's three worlds

According to Karl Popper's classification of three worlds (see Popper, 1972, 1974, 1980), *World 1* consists of physical things, events, and processes in space and time, including lawlike relations between such entities. This is

[1] To give a report of my own views, I became interested in Popper's thesis about World 3 via my critical assessment of his rejection of induction (cf. Niiniluoto, 1978). I wrote about World 3 entities in Finnish and English in Niiniluoto (1984a, 1984b), and in the expanded version of the former paper (in Niiniluoto, 1990) I referred to Margolis (1984). In Niiniluoto (1988), I appealed to Margolis (1978) to argue that the human self is a World 3 entity. Other attempts to relate Popper and Margolis are not known to me. I discussed mathematical objects in World 3 in Niiniluoto (1992), and used Popperian terminology in my *Critical Scientific Realism* (1999). Popper's exposition of his ideas is suggestive but not always systematic. My interpretation and critical defense of Popper's nonreductive materialist theory of culture was presented in the Popper centennial conference in Vienna in 2004 (see Niiniluoto, 2006). I hope this paper shows how these two great philosophers—Joe and Sir Karl—have influenced my own thinking.

the domain of inorganic and organic nature, studied by physics and biology. *World 2* includes subjective mental states and events (e.g., beliefs, emotions, and volitions) in individual human minds. This is the domain of human psyche, studied by psychology and cognitive science. *World 3* contains the public products of human social action, such as languages, cultural objects, social institutions, and abstract entities like propositions, arguments, theories, problems, and numbers. This domain is studied by the cultural and social sciences, logic and mathematics.[2]

With this classification in place, three monistic metaphysical doctrines can now be identified (cf. Broad, 1925; Niiniluoto, 1999). *Materialism* in its radical eliminative form claims that everything real belongs to World 1. Reductive materialism states that reality is reducible to World 1 entities and their complexes. For example, eliminativism claims that there are no beliefs or feelings, while reductionism takes them to be identical to some kinds of material brain states. Eliminative and reductive materialism are forms of *physicalism*. Emergent or nonreductive materialism takes World 1 as primary, but admits that sufficiently complex material systems may have "emergent" non-physical properties. *Subjective idealism* makes parallel claims about World 2. Its eliminative and reductive forms constitute the doctrine of *spiritualism*, but emergent idealism is also a possible view.[3] *Objective idealism* in its classical versions has taken some non-material and non-subjective entities (such as Plato's forms, thoughts of supernatural gods, and Hegel's objective spirit) as the ultimate source of all being, but more mundane variations could replace them by some abstract World 3 entities. Idealist views (e.g. phenomenalism, social constructivism) are ontologically anti-realist, as they treat the material reality in World 1 as mind-dependent or human-made.

Besides such monistic views, *dualist* ontology may accept World 1 and World 2 as two independently existing domains of reality. In the Cartesian tradition initiated by Descartes, matter and mind are two substances which can be in causal interaction, while parallelist dualists deny the possibility of such interactions. Another kind of dualism could accept Worlds 1 and 3 without World 2 (e.g. some anti-humanist post-structur-

[2] Popper's three worlds are all included in *one* reality, but his choice of terminology reflects two assumptions: three kinds of entities can be conceptually distinguished from each other (even though they can causally interact), and the respective domains or "worlds" are irreducible to each other.

[3] Rudolf Carnap's "auto-psychological" phenomenalist constitution system in his *Aufbau* in 1928 formulates subjective idealism on the level of language (see Carnap, 1967).

alists urge that the subjective ego or consciousness is only an illusion). *Trialist* doctrines accept the reality of all three worlds.

The traditional mind-body -problem concerns the relation between World 2 and World 1. Unlike Eccles, who as an ontic dualist supported the independent existence of a spiritual self, Popper declared to be agnostic about such religious questions. At the same time, he criticized sharply reductionist approaches which identify mental states with brain states (Popper and Eccles, 1977). His views thus clearly belong to the tradition of *emergent materialism* (see Niiniluoto, 1994): in his evolutionary account Popper sees World 2 as a historical product of World 1 (Popper, 1994). It could not exist without the material World 1, but it has achieved a relatively independent status by being able to influence material entities by a causal "feedback mechanism". Here Popper appeals to our everyday experience (we can influence our bodily movements by our decisions), theory of evolution (human mind has given advantage to our species in the struggle for existence), and cognitive psychology (holistic mental states can influence brain processes and behavior by "downward causation").[4] Popper's interactionist philosophy of mind thereby accepts "property dualism" (cf. Margolis, 1984, 17) and the idea of mental causation (cf. Kim, 1996).

Similarly, Margolis (1978) advocates nonreductive materialism: mental states are emergent, causally efficient properties of sufficiently complex material systems (like the brain). He rejects radical materialism and behaviorism, the identity thesis, and Cartesian dualism, and is committed to the reality of mental phenomena. His treatment of the interaction between the mental and physical is cautious: there are psychophysical laws, but, granting the irreducibility of the intentional, such laws cannot be nomic universals (*ibid*., 223).

For Popper World 3 is a product of biological and cultural evolution from World 1 and World 2. It is a natural, often unintended creation of human beings using language, real or relatively independently existing because of its causal feedback mechanism upon us. Similarly, Margolis (2015) emphasizes the "Darwinian effect" in the biological and cultural construction of the collectively possessed emergent domain of Intentionality.

When Popper introduced his theory of the third world, Mario Bunge was shocked that in 1967 Popper had a sudden "conversion to objective

[4] The psychologist R W. Sperry, who defends "monistic interactionism", is cited both by Popper and Margolis.

idealism" (Bunge, 1981, 138). However, while Popper admitted the existence of abstract entities, like propositions and numbers, his position is a kind of "poor man's Platonism", since these abstractions are created or constructed by human action (see Niiniluoto, 2006).

As World 3 entities are human constructions, they have a historical origin in time. Popper noted that his World 3 resembles more Hegel's historically developing objective spirit than Plato's eternally unchanging domain of ideas (Popper, 1972, 125). In Hegel's dynamic system, the objective spirit is spiritual from the beginning, but it does not know this before it is first alienated to nature and then developed toward the self-conscious absolute spirit by the activity of individual minds and the cultural stages of law, morality, economy, family, civil society, state, history, art, religion, and philosophy (see Taylor, 1975). Popper and Eccles (1977) describe a journey to self-consciousness which is comparable to Hegel's "phenomenology of the spirit". Popper's World 3 contains all the elements that Hegel included in his account of objective and absolute spirit. The important difference is that Popper's theory of culture is based on emergent materialism, so that cultural World 3 entities could not emerge and exist without causal links to Worlds 1 and 2, while Hegel was an objective idealist.

In his Autobiography Popper tells that his distinction between World 2 and World 3 was influenced by his early discovery between "subjective and objective music", between Beethoven and Bach (Popper, 1974, 47–53). While Popper later admits that his interpretation of the two composers was exaggerated, he felt that music is "an instrument of self-expression" for Beethoven, but Bach "forgets himself in his works". This discovery was inspired by the young Popper's studies in classical music and composition. Even though Margolis (1980) mentions musical works in his aesthetics, he is more interested in the fine arts and literature. We shall see in Section 4 that this different emphasis leads to some interesting consequences in the ontology of art works.

Margolis (1984) briefly mentions Popper's "speculations" regarding World 3, but does not elsewhere use this term in his nonreductive materialist treatment of culture. For example, he speaks about Intentionality with capital "I" and the "second-natured hybrid artifactuality" of the independent but non-noumenal domain of culture (see Margolis, 2015). So one might think that the two philosophers are in fact expressing the same view in their own vocabularies. Yet, a more detailed comparison with the Popperian view is feasible and instructive, since they share some important

paradigmatic examples: human persons, works of art, and material artifacts.[5] As we shall see in the next sections, the main differences between these two theories of culture can be found their respective accounts of human-made abstract artifacts.

Human persons

We have seen that both Popper and Margolis defend emergent materialism in their philosophy of mind. But their similarity goes even deeper: when Margolis (1984) compares persons to cultural artifacts, his claim can be expressed by saying that persons are World 3 entities (see Niiniluoto, 1988; 1990, 113; 1994). Popper agrees (or at least should agree) with this thesis.

While for David Hume the human mind is just a bundle of sensations without a centre (see Broad, 1925), Immanuel Kant stressed the unity of consciousness. This idea of unity is often expressed by saying that the human Ego or the Self is a *person*. The dualists and idealists explain this personhood by the independent existence of the Ego as a spiritual substance, but for other philosophers the criteria of personal identity include the brain where the person is embodied or the continuous memories of a human individual (see Shoemaker and Swinburne, 1984).

For Popper it is important that World 3 can have causal influence on the level of World 2. This allows us to explain the constitution of the self without supernatural or metaphysical factors. The historical evolution of sentient and conscious animals is followed by the emergence of self-consciousness in human beings which presupposes such World 3 entities like language and a theory of time (see Popper, 1980, 167). A parallel process can be found in the development of individual members of our species. According to the "social theory of mind", the ego of a child is constituted by her cultural and social interaction: the psychological birth of a person becomes possible through the learning of a first language (Popper and Eccles, 1977, 111). In this sense, the child is "to some extent a World 3 product" (*ibid*., 49).

While Popper repeats that human beings are "World 3 products", his writings are somewhat ambiguous about the question whether the human self belongs to World 2 or World 3. According to Popper, animals

[5] Margolis' (2015) thesis about the artifactual nature of normativity translates to the view that values and norms belong to World 3 (see Popper, 1974, 155; Niiniluoto, 2009). The reality of values as World 3 entities implies that human beings as morally responsible agents are ontologically more than merely physical things. This supports Margolis' (1978) criticism of Wilfrid Sellars' reductionism.

are conscious but they do not have selves, while the self-conscious human mind constitutes "the human second world" (Popper, 1974, 151). Also Popper and Eccles (1977) use many formulations which suggest that self-consciousness is a higher-level phenomenon in World 2, even though its emergence requires causal interaction with "thought contents" and other cultural and linguistic World 3 entities. But they also state that "the self is anchored in World 3" (*ibid*., 144). Maybe Popper's tendency of associating the subjective—objective divide to the distinction between World 2 and World 3 has encouraged the view that the human self belongs to World 2. But Popper also stated that "the self or the ego is the result of achieving a view of ourselves from outside, and thus placing ourselves into an objective structure" (see Popper, 1994, 115). Thus, in my view, it is more consistent with the Popperian account to contend that as a cultural construction a human person *is* a World 3 entity (Niiniluoto, 1988). Indeed, at least sometimes Popper admitted that "we ourselves may be included" in the third world (Popper, 1974, 155).

For Margolis (1978) persons are sentient beings capable of the use of language and self-reference. They are culturally emergent entities which exist only in cultural contexts. The invention of language plays a crucial role in "the artifactual transformation of the human primate that yields the functional self or person",[6] and there is "a very strong analogy between the creation of an artwork and the *Bildung* of a person" (Margolis, 2015). Thus, persons can be compared to works of art, artifacts, words, and sentences: they are embodied in physical bodies but have also emergent cultural properties. This account of persons has been accused of unnecessary reification by Bunge (1979), 184, who states that "there are no disembodied (or even embodied) minds, but only *minding bodies*". For Bunge, only material bodies exist as entities, but these bodies have "minding" activities.[7] In my view, it is indeed correct to emphasize that the human mind is a process so that a person or a self is not a substantial or thing-like "pure ego". Rather, it is a temporary, fragile, and ever changing construction of mental events with cultural and social relations.[8] Still this construction sustains something which is able to be conscious of itself.

[6] As a philosopher and cognitive scientist, Peter Gärdenfors (2006) gives a careful analysis of the evolution of *Homo sapiens* with a rich inner world, imagination, memory, intentionality, ability to read other people's mind, self-consciousness, and symbolic language.

[7] Popper gives a similar treatment of physical objects in his preferred process ontology of World 1 (see Popper and Eccles, 1977, 7).

[8] We shall see in Section 4 that Bunge (1981) repeats this argument against reification in his materialist theory of culture.

This nature of individual personhood is captured by saying in Popperian terms that persons are World 3 entities (together with a material body in World 1 and subjective experiences in World 2) or with Margolis (2015) that they are "hybrid artifacts".

Margolis on works of art

For Margolis persons and works of art are similar as they are both culturally emergent hybrid entities: Churchill is embodied in his body in the same way as Michelangelo's *Pietà* in its marble. The same relation of *embodiment* holds between the word 'good' and printed ink marks. More generally, if A is embodied in B, then A and B are not identical, A could not exist without B, both share some properties, but A has also some intentional or functional properties (Margolis, 1978, 234; 1984, 13).

Again there is close agreement between the two philosophers: Popper would not accept unembodied spirits in his ontology, and his World 3 includes *material artifacts* such as furniture, clothes, books, sculptures, and painting. Such artifacts have as their kernel or core a physical object with perceptible and measurable physical properties together with non-physical relational properties involving relations to human practices. For example, *Pietà* as a physical World 1 entity has a spatio-temporal location, material, form, weight, and color, but as a World 3 entity it is a work of art with a function and esthetical and economical value due to its relations to the sculptor, owner, users, and audience. Written and spoken sentences are physical objects, but through their relations to the linguistic community they have propositional content and meaning in World 3 which can be grasped by experiences in World 2. This means that artifacts with cultural properties do not supervene on their material properties in Kim's (1996) sense, since two materially identical objects may have different cultural properties (cf. Margolis, 2015).[9] Popper and Margolis also agree that the causal powers of World 3 entities depend on their cultural properties: an utterance has a special causal force to those who grasp its propositional import (see Margolis, 1984, 9; cf. Niiniluoto, 2006, 66).

Margolis argues further that cultural entities are *tokens-of-a-type* that exist embodied in physical objects (Margolis, 1980, 20–24). In Margolis (1978), 231, he associates this thesis with embodiment: physical particulars (tokens) instantiate abstract particulars (types), which is different

[9] For example, the word 'aura' (as a written World 1 entity) has different meanings in English and Finnish.

from the instantiation of universals. Unlike universals, types are created and destroyed, and they are heuristically used for individuating tokens as instances of the same kind (e.g. alternative performances of Beethoven's sonata). There are no types of art without some token-instances, and insofar as an artist creates a type, she must make a token (*ibid*., 232–233).[10] But, properly speaking, "there *are* no types" (Margolis, 1984, 14).

Here a clear divergence between Margolis and Popper emerges, since the Popperian framework applies to a much larger domain of cultural objects. Margolis claims that his treatment covers *all* cultural entities, but it seems to work well only for those artifacts which have a unique physical object as their embodiment. This is the case with paintings and sculptures: da Vinci's original *Mona Lisa* is located in Louvre, and any perceptually similar entities are simply copies or forgeries without the same cultural status. But it does not apply to musical and literary works: Beethoven's symphony *Eroica* or Tolstoy's novel *Anna Karenina* are works of art which can be copied, recorded, and reproduced, and distributed in various forms. Using terms introduced by Rudolf Carnap already in 1928 (see Carnap, 1967), these works of art can be *documented* by physical objects in World 1 (prints on a paper, notes on a score, recordings on a tape or disc, acoustic waves in the air) and *manifested* by psychological objects in World 2 (author's intentions, reader's memories, listener's experiences). Similarly, great artistic works of design, such as Alvar Aalto's chair or Tapio Wirkkala's glass *Ultima Thule*, are prototypes which can be reproduced, copies, and sold as many industrial replicas.[11]

One might say that such works of art have multiple "embodiments". But it would be completely arbitrary to identify these abstract objects with any of their documentations in World 1 or manifestations in World 2, or any set of them (see Niiniluoto, 2006, 63). Therefore, instead of saying that they are tokens-of-a-type, it seems more natural to contend that they are *types-with-multiple-tokens* (Niiniluoto, 1990, 33). This explains why there is only one *Eroica* symphony, in spite of the multitude of its recordings and presentations. But such types in World 3 are not Platonic entities, since they can be created and annihilated: if all documentations and manifestations ofa cultural object disappear, the entity in World 3 is destroyed (cf. Margolis, 1980, 75).

[10] Popper agrees that authors create World 3 objects by writing them as texts in World 1: we have no reason to think that *Hamlet* was in the mind of Shakespeare before it was actually written down (see Popper, 1994, 22).

[11] This aspect of modern art was emphasized by Walter Benjamin in his 1935 essay "Das Kunstwerk in Zeitalter seiner technischen Reproduzierbarkeit".

Bunge also emphasizes that cultural objects exist only relative to their creators and users. But his materialist account differs radically from Popper and Margolis, since for him cultural objects do not include poems as such but only the activities of writing, reading, and citing poems (Bunge, 1981, 135). This gives a theory of cultural *activity* but not of the outcomes or *products* of such activity. Poems can be repeatedly produced, reproduced, and performed, but there is *one and only one* entity which is T. S. Eliot's *The Waste Land*.

Even more complex structures are exhibited by *social institutions*, such as the University of Helsinki (established in 1640) and the Philosophical Society of Finland (founded in 1873). They have a continuous existence as particular World 3 entities, but the associated physical objects (such as written statutes, facilities, staff, and members) are not tokens of the society in any interesting sense. The analysis in terms of types and tokens is not relevant here at all. Reductive materialism also fails here. As these physical elements are always changing without altering the identity of the institution, Bunge's (1981) attempt to reduce such social entities to merely material systems is inadequate. For example, if a society would be a set or a system of its members together with their activities, all changes in the membership would bring about a new different society. Again, the World 3 account allows us to say that there is, and has been, only one Philosophical Society of Finland.

Unembodied abstract objects

This brings me to the final difference between Margolis and Popper. Besides embodied World 3 objects, Popper accepted "unembodied" ones (see Popper and Eccles, 1977, 41). For his philosophy of mathematics, with emphasis on open problems, it is important that there are not yet examined natural numbers which no one so far has written down on a paper (in World 1) or thought about in her mind (in World 2) (see Popper, 1972, 116). An example would be the next prime number to be found by mathematicians (see Niiniluoto, 1992), which has the property of being prime already before it has been found and examined. Donald Gillies (2010), who accepts constructive realism in mathematics, calls Popper's position "constructive Platonism", while his own "constructive Aristotelianism" requires that mathematical objects are embodied by physical instances. In my view, Gillies' requirement is too strong, since the set of

natural numbers is infinite but there can be only finitely many of embodied natural numbers.

But of course one should avoid the danger of including in World 3 all elements that *can* be thought, since that would lead us back to Platonism. Popper is not very clear about this point, but we should accept in World 3 only actually composed symphonies, not all possible or conceivable ones. My proposal is that we may include in World 3 human-made well-defined totalities, such as the infiniteset of natural numbers, whose all elements or parts have not been studied yet (see Niiniluoto, 2006, 65). Such so far unexamined elements are real by Peirce's "scholastic" criterion of reality: their characters are "independent of what anybody may think them to be" (CP *5.311, 5.405) (cf. Niiniluoto, 1999, 33).*[12] A similar treatment can be given to well-defined but not yet completely known totalities like a scientific theory (i.e. a deductive closed set of theorems derivable from a set of axioms) or legal order (i.e. all consequences or commitments of basic legal principles accepted in a community).

Even though World 3 entities are human creations, they are not completely transparent to us: no one can have complete maker's knowledge about them (see Niiniluoto, 1984b, 219). "We can get more out of World 3 than we ourselves put into it" (Popper, 1994, 31). This is why the world of culture and society—from material artifacts to works of art, from historical institutions to mathematical structures—is so fascinating domain of investigation and interpretation.

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[12] Peirce used his criterion to distinguish real things from fictions (or "figments of imagination"). So the realist account of World 3 entities can be combined with the view that fictional entities (such as Donald Duck or Santa Claus) are not real (see Niiniluoto, 2006).

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