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C. I. Lewis's Theory of Ideas: Royce's Problem and Lewis's Solution

ABSTRACT: *Implicit in C. I. Lewis's conceptual pragmatism is an account of how our ideas undergo a process of social development. Lewis's account of that process resolves a problem with Josiah Royce's theory of ideas. Royce holds that there are both sensuous and symbolic ideas. It is, however, possible for someone to have only a sensuous idea of how middle C sounds and for another person to have only the symbolic idea that middle C is 261.63 Hz. In what sense, if at all, can these two persons have the same idea, namely, the idea of middle C? On Lewis's account, while ideas in individual minds are typically constituted of both sensory correlates and pure concepts, ideas are also social products that individuals inherit through education and language acquisition. For two people to have the same idea is for them both to be heirs to the social development of the idea.*

KEYWORDS: Lewis, Royce, idea, concept, pragmatism

Josiah Royce distinguishes between sensuous ideas and symbolic ideas. Sensuous ideas are ideas constituted of sensory images or other sense qualities, such as the idea of how the color blue appears or the idea of how middle C sounds. Symbolic ideas are ideas expressed in language, whether natural, logical, or mathematical. Since one person may have the sensuous idea of, for example, middle C but another person may have the symbolic idea of middle C as a vibration of 261.63 Hz, the question arises as to whether these two persons have the same idea. On the one hand, it would seem as though they do, for they both have the idea of middle C. A person who knows both how middle C sounds and that middle C is a vibration of 261.63 Hz has one idea of middle C understood in two different respects, in its sensuous quality and its underlying physics. On the other hand, it would seem as though they do not have the same idea. For a person born deaf but who has studied acoustics may know that middle C is a vibration of 261.63 Hz, while a person who has learned music using the Suzuki method (i.e., learned to play by ear) may know nothing about the underlying physics and yet be perfectly capable of identifying middle C. The former has the symbolic idea of middle C, and the latter has the sensuous idea of middle C, but they do not have the idea of middle C in the same way. How is it that two people may each have an idea of middle C in different ways and yet have the same idea?

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The aim of this essay is to show how C. I. Lewis's theory of ideas and of how ideas undergo social development can be used to resolve this philosophical problem. Implicit in Lewis's *Mind and the World Order: Outline of a Theory of Knowledge* (1929, hereinafter *MWO*) is a theory of ideas. On Lewis's account, an idea is not identical to a pure concept; rather, a pure concept is an abstraction or ideality developed in the social process of making our ideas more definite. While much good philosophical work has been done on Lewis's conceptual pragmatism and his theories of the given and the a priori, decidedly less has been written on his theory of ideas. We find hints in *MWO* that Lewis, who wrote his dissertation under Royce, recognizes the problem that arises for Royce's theory of ideas. Once we extract Lewis's theory of ideas from *MWO*, we find that Lewis has the resources to address Royce's problem. Lewis holds that ideas undergo a process of social development and that the identification of a pure concept is the culmination of the social process of making ideas more definite. The pure concept is implicit in the idea of the person who knows only how middle C sounds, such that the pure concept is common to the minds of the person who knows only how middle C sounds and the person who knows only that middle C is 261.63 Hz.

In what follows, I first explain Royce's theory of ideas and how the problem just articulated arises. Second, I argue that Lewis's implicit account of ideas in *MWO* resolves the problem. I suggest reading Lewis as proposing an account of the social development of ideas such that we can understand how a person born deaf may have the idea of middle C as a vibration of 261.63 Hz and a person who has learned of middle C using the Suzuki method alone with no knowledge of the underlying physics may nevertheless have the same idea.

One additional point bears mentioning before proceeding. The underlying issue being raised here bears affinities to Frank Jackson's (1982) argument against physicalism, in which Mary is raised in a black-and-white room and learns everything there is to learn about the physics of color but does not know what red looks like. Although I doubt the thought experiment can be cogently formulated as an objection to physicalism and so I shall not engage the argument here, it is a direct consequence of Lewis's theory that Mary learns nothing new about the physical world, but she does learn something new about our shared idea of red.

1. Royce's Theory of Ideas

Royce's *The World and the Individual* ([1899] 1959, hereinafter: *WI1*) published in two volumes, proposes a novel theory of ideas. His motivation for presenting a theory of ideas is intimately tied to his idealistic metaphysics. As he writes:

> I am one of those who hold that when you ask the question: What is an Idea? and: How can Ideas stand in any true relation to Reality? you attack the world-knot in the way that promises the most for the untying of its meshes. (*WI1*: 16–17)

But Royce's theory of ideas comes apart from its idealist motivations. Whatever we may think of Royce's metaphysics, his theory of ideas is interesting in its own right.

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On Royce's account, an idea is 'any state of consciousness, whether simple or complex, which, when present, is then and there viewed as at least the partial expression or embodiment of a single conscious purpose' (*WI1*: 22–23). As indicated in the quotation, Royce distinguishes between simple and complex ideas. He also distinguishes between sensuous and symbolic ideas. 'Many admirable ideas', Royce notes, 'are, indeed, of the type of mental pictures. That is not only obvious, but worth remembering. There is no reason why such images should not be both valid and important' (*WI1*: 309). Although Royce here mentions mental pictures, he would also include melodies one hears in one's mind as sensuous ideas: A 'melody, when sung, a picture, when in its wholeness actively appreciated, or the inner memory of your friend now in your mind, is an idea' (*WI1*: 24).

Although Royce allows that we have sensuous ideas and these are mental pictures, melodies in one's mind, and the like, he denies that mere sensations are ideas. He states, 'according to my present usage of the word "idea", a color, when merely seen, is in so far, for consciousness, no idea' (*WI1*: 24). The reason that a color when seen is not an idea is that it is not 'the embodiment of a single conscious purpose'. Although the mere sensation of a color is not an idea, the imagining of a color can be an idea, provided it is imagined for some purpose. For instance, if a person plans to paint her room some color, she may have an idea of what color she would like her room to be. She will go to the paint store and seek out a color swatch that matches the idea she has in mind. That color she imagines is an example of a simple sensuous idea. Similarly, when tuning an instrument, one may have an idea of how middle C sounds. This idea of middle C is a simple sensuous idea.

Other sensuous ideas are complex. Such complex sensuous ideas might be ideas of how something looks, such as the layout of one's childhood home. Imagined maps of one's neighborhood are also complex sensuous ideas. Whereas simple sensuous ideas consist of simple qualities, complex sensuous ideas will involve many qualities. While a color one imagines as the color to paint one's room is a simple sensuous idea, the idea of the Mona Lisa in its qualitative totality (so far as one can imagine it) is a complex sensuous idea. While the idea of middle C as it sounds is a simple sensuous idea, the idea of a melody is a complex sensuous idea.

In addition to sensuous ideas, there are also symbolic or mathematical ideas. The equation $F=ma$ (force equals mass times acceleration) is not a sensuous idea but a symbolic idea of the relations among force, mass, and acceleration. This idea implies that as mass increases, if acceleration remains constant, force increases. (Whether or not reality conforms to this idea is a separate question.) Similarly, Royce claims, 'algebraic symbols are, for precisely the purposes of algebra, actually superior, as representations of objects, to any pictures of these objects' (*WI1*: 309). That is, while one might have sensuous ideas of numbered things, for some purposes the use of symbolic ideas is preferable. He notes:

> When you count, it is symbols that you want, not pictures. Hence, the numbers are for your purpose superior to photographs; and the entries in the ledger give a better record of their own aspect of the

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> commercial transactions than a legion of phonographs and kinetoscopes set up in a shop to record transactions, could, by any perfection of literal reproductions, retain. (*WI1*: 310)

If one wants to keep track of a store's inventory, one could keep a video record of every transaction. A better way to track inventory, however, is to maintain a ledger. The shopkeeper's ideas of her inventory, which the ledger records, are complex symbolic ideas.

Mathematical equations and one's tally of the inventory are complex symbolic ideas. We also have simple symbolic ideas. These are our predicates, such as 'blue' or 'middle C'. Of course, these simple symbolic ideas are ordinarily associated with sensuous ideas. When I think of the word 'blue', I often call up various shades of blue as well. When thinking of middle C, a musician will call up how middle C sounds. The association of predicates with sense imagery is also common with respect to mathematical ideas, such as the idea of a square or of a triangle. My symbolic idea of a square is associated with images of squares as well, and the same is true for other geometric figures.

This ordinary association of predicate terms with sense imagery, or sensuous ideas, is what leads empiricists such as Locke and Berkeley to question whether we have any abstract general ideas. Locke wonders:

> Does it not require some pains and skill to form the *general Idea* of a *Triangle*, (which is yet none of the most abstract, comprehensive, and difficult,) for it must be neither Oblique, nor Rectangle, neither Equilateral, Equicrural, nor Scalenon; but all and none of these at once. In effect, it is something imperfect, that cannot exist; an *Idea* wherein some parts of several different and inconsistent *Ideas* are put together. (1975: 596)

Locke seems to think it is possible but difficult to form the idea of a triangle that is not equilateral, isosceles, or scalene. Berkeley takes the bolder position that it is impossible to have the abstract general idea of a triangle at all: 'I do not deny absolutely there are general ideas, but only that there are any abstract general ideas' (2008: 74). If Berkeley were to deny that we have general ideas, he would be committed to the implausible conclusion that it is impossible to prove anything about triangles in general, including that their area is given by the formula (base × height)/2. Instead, what he denies is that we have an abstract general idea of a triangle, one that is not equilateral, isosceles, or scalene but is at the same time all three at once. On Berkeley's account, whenever we have an idea of a triangle, we must be thinking of a triangle that is equilateral or one that is isosceles or one that is scalene.

Such a position is untenable. The mistake Berkeley made is assuming that just because as a fact of human psychology we ordinarily associate sense imagery with our symbolic ideas, we must do so. There are two arguments against such a conclusion. First, we can prove statements about objects we could not possibly imagine. We can prove statements about ten-dimensional objects though we

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cannot imagine them. We can prove that square circles do not exist, but plainly we cannot imagine square circles. Second, we can have symbolic ideas of qualities without corresponding mental imagery. At the start of this essay, I already gave an example: A person born deaf can know that middle C is a vibration of 261.63 Hz without ever having heard middle C. A similar point can be made about colors: A person born blind can know that the color blue is the color one sees when objects absorb and reemit light with a wavelength between 450 and 495 nanometers. A person can know this without knowing what any shades of blue look like. In these cases, a person knows the scientific definitions of middle C and of blue, but she does not have any sense imagery associated with those scientific definitions.

At this juncture, however, we find that Royce's theory of ideas faces a problem. Simple symbolic ideas, such as of blue or of middle C, lack any definite significance or meaning unless they are made definite in reference to sense imagery or a definition. In the former case, one has a sensuous idea; in the latter case, one has a symbolic idea. Here a problem arises: If one person's idea of middle C is made definite in reference to sense imagery alone and if another person's idea of middle C is made definite in reference to its scientific definition alone, why should we think that these are both ideas of middle C? That is, how is the sensuous idea of how middle C sounds related to the symbolic idea of what middle C is? The problem is made sharper if we consider it in reference to communication: If one person merely has as her idea of middle C the sensuous idea of middle C and if another person merely has as her idea of middle C the symbolic idea of middle C, then how is it that two persons can communicate about middle C successfully, if they can at all? How can they both have an idea of middle C?

2. Lewis's Theory of Ideas

As noted earlier, C. I. Lewis wrote his dissertation under Royce's direction, defending it in 1910. Murray Murphey (2005) has rightly argued that Royce deeply influenced Lewis. Murphey reports that the young Lewis 'thought of himself as a Roycean idealist. . . . The description of ideas as purposive acts of the will that intend a transcendent object is, of course, Royce's' (2005: 48). There is little room for doubt that Lewis had read and appreciated Royce's *The World and the Individual*; this influence is evident in Lewis's dissertation, as Murphey argues (see also Kegley 2016; Molina 1983; and Wagner 2021). By the time *Mind and the World Order* was published in 1929, however, Lewis must have recognized a serious problem with Royce's account of ideas. In what follows, I first discuss three cases in Lewis's book that bring Royce's problem into sharp focus. Second, I explain Lewis's three-stage process of making our ideas definite, an account that involves the social development of ideas. Lastly, I shall show that this account resolves the problem Royce's theory of ideas faces.

Lewis is known for his conceptual pragmatism, but as noted earlier, pure concepts are not identical to ideas. Lewis holds that an 'infant acquires his social inheritance of ideas' (*MWO*: 96) and that conversation involves the 'conveying of ideas' (*MWO*: 75). Although my focus here shall be on *MWO*, Lewis's theory of the social inheritance of ideas would play a central role in his late work *Our Social Inheritance* (1957,

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hereinafter: *SI*). In that work, Lewis argues that 'the hope for further moral progress is tied to that same working of the critical processes and of learning, and to the social inheritance of ideas, which likewise make for progress in science and technology and in our political and other social institutions' (*SI*: 104–5). As we shall see later, Lewis holds that a pure concept is an abstraction and ideality that is identified in our social efforts to make our ideas definite. On Lewis's account, an idea is not a pure concept; rather, a pure concept is a part of an idea's meaning. An idea can be made definite by being associated with a sensory correlate (as when I hear the word 'red' and call up various shades of red) or it can be made definite by defining it (as 'red' might be defined as wavelengths of light between 620 and 750 nanometers). But this process of making an idea definite is a social process whereby an idea is made more definite over several stages. The problem we have been facing is how these ideas can be definite in different ways and yet be the same idea.

Before turning to Lewis in more detail, some terminology must be set in place. First, we have *words* or *terms* that are our ordinary language predicates such as 'red' and 'middle C'. Second, these words or terms are associated with a *sensory correlate* through language acquisition. A sensory correlate may be sense qualities, such as 'red' is associated with a range of colors or 'middle C' with a certain pitch. Alternatively, a sensory correlate might be sense imagery, as 'triangle' is associated with various triangular shapes or 'helium' with a diagram of the arrangements of its subatomic particles. What is, in fact, important to Lewis is not the sensory correlate itself but the language and patterns of behavior that become associated with various sensory correlates, as shall be explained momentarily. In addition to sensory correlates, there are *pure concepts*. A pure concept is of the nature of an explicative definition, as 'red' might be defined as light with a wavelength between 620 and 750 nanometers. As I shall ultimately argue, in individual minds, an idea typically consists of both a sensory correlate and a pure concept even when the latter is only implicit. But ideas are best understood not as mental episodes but as social products. Having an idea, on Lewis's account, does not consist merely in having some mental episode but in being a beneficiary of the social development of an idea. To get to this point, however, we need to understand better how Lewis sharpens and deepens the problem posed by Royce's theory of ideas.

3. Three Problematic Cases

To bring the problem into sharper focus and show how deeply it runs, I turn to three different cases Lewis discusses. These cases highlight that the ways in which ideas have been made definite can differ such that questions as to whether two people have the same idea arise.

Case One: Differing Sense Qualities. Appendix C in *MWO*, titled 'Concepts and Ideas', is an attack on regarding sense qualities as sufficing for knowledge of objects. Lewis identifies a dilemma: Either knowledge requires an 'identity of quality between subjective knowing state and objective thing' or it does not (*MWO*: 411). But that there is any such identity of quality between knower and known Lewis regards as at best a 'postulate' (*MWO*: 411). Moreover, if my sense quality of red should 'by

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some idiosyncrasy of sense' consist in 'immediately given qualia peculiar to me', there is no assurance that anyone else has the same immediately given sense quality (*MWO*: 408).

Lewis's comments suggest the familiar thought that when two people look at the same red object under the same conditions, there is no assurance that the red quality one person sees is identical to the red quality another person sees. In the more extreme case, is it not possible that one person's visual spectrum is inverted? Lewis considers this possibility: 'Suppose it should be a fact that I get the sensation you signalize by saying "red" whenever I look at what you call "green" and vice versa' (*MWO*: 74–75). In a less extreme case, perhaps another person's vision is affected such that the colors she sees are duller or more chromatic or less luminous. Lewis encourages us to 'take it for granted (it seems fairly sensible) that the sense-data of one are seldom precisely those of the other when we address ourselves to the same object' (*MWO*: 75). Furthermore, Lewis thinks it is plain that in many cases there is not an identity of sensory images between persons. When two persons think of a foot and imagine a 'visual so-long-ness', these will not likely coincide exactly: 'In acuity of perception and power to discriminate, there is almost always some small difference between the senses of two individuals, and frequently those discrepancies are marked' (*MWO*: 74). Lewis regards it as a 'frightful scandal' that theories of knowledge have ignored differences in 'sensory images' or 'have proceeded as if our common and supposedly veridical knowledge depended on coincidence of such sensory content' (*MWO*: 74).

Case Two: Sense Qualities and Definitions. I just discussed Lewis's concerns that two persons may have sense qualities of something—say, the red color of a book—without the sense qualities of those ideas being identical. But Lewis draws our attention to two other cases in which a similar problem arises. In the second case, one person associates the term 'red' with sense qualities and knows nothing of the color spectrum, whereas another person associates the term 'red' with 'the first band in the sun's spectrum' (*MWO*: 76). As I have just noted, Lewis recognizes that persons may have differences in sense qualities, but he also realizes that this does not impede communication. Even if there are such differences, 'that, by itself, will in no way impede our common knowledge or the conveying of ideas. Why? Because we shall still agree that there are three feet to the yard; that yellow is lighter than blue; and that middle C means a vibration of [261.63 cycles] per second' (*MWO*: 75; Lewis's text reads '256 per second', he omitted 'cycles', and the scientific nomenclature for pitches now puts middle C at 261.63 cycles per second, i.e., hertz).

Lewis's claim is rather surprising. First, not all shades of yellow are lighter than blue. But second and more important, while all parties will surely agree there are three feet to a yard, how many are likely to know that middle C is a vibration of 261.63 Hz? While one person may very well know how middle C sounds, she may not know that middle C is 261.63 Hz. Likewise, we may wonder whether a person who associates 'red' with sense qualities and another who defines it as a band in the sun's spectrum have the same idea of red.

Case Three: Verbal Definitions and Explicative Definitions. Notice that while Lewis provides an exact definition of middle C as 261.63 Hz, he only

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characterizes red as the first band in the sun's spectrum. Why did he not define red in reference to the range of wavelengths of light that produce those sensations we call red? Lewis could have remarked that we define red as those wavelengths of light that are between 620 and 750 nanometers, rather than more loosely as the first part of the spectrum (visible by human eyes) of sunlight.

These considerations bring us to Lewis's third case. In the third case, a person has a verbal, or dictionary, definition of a term while another person can state its explicative definition. Lewis does not provide a thorough discussion of the distinction between verbal definitions and explicative definitions in *MWO*. In *An Analysis of Knowledge and Valuation* (1946, hereinafter: *AKV*), he distinguishes among (a) definitive statements of symbolic convention, (b) dictionary definitions, and (c) definitive statements that are 'intended to state what "*A*" means—in any and all of the four modes of meaning—is the same as what is meant by "*BC*"' (*AKV*: 99). I will here treat *MWO*'s mention of verbal definitions as equivalent to (b), and I will use 'explicative definition' to shorten the unwieldy phraseology of (c). Lewis holds that definitions of the sort (a) are typically used in mathematics.

A verbal (or dictionary) definition tells us that a given symbol 'is used (customarily used or correctly used or used in a given context) with' such-and-such a meaning (*AKV*: 99). It is in this vein that the *Oxford English Dictionary* defines water as 'the substance (most commonly encountered as a liquid) which is the principal constituent of seas, lakes, and rivers, and which falls as rain and other forms of precipitation' (OED). This definition does not provide necessary or sufficient conditions for something to be water, but it tells us how English speakers use the word 'water'. An explicative definition, in contrast, states that the meanings of the *definiendum* and the *definiens* are the same: 'An explicative statement is one of the form, "*A*" has the same meaning as "*BC*"' (*AKV*: 101). As Lewis notes, (a) and (b) are traditionally called nominal definitions, and (c) is traditionally called a real definition (see *AKV*: 105). He prefers his terminology in part because 'real definition' suggests we are cutting nature at its joints, whereas Lewis holds 'there can be nothing in the nature of an object which determines the *fundamentum divisionis* by reference to which it shall be classified' (*AKV*: 105).

Focusing now on *MWO*, Lewis distinguishes between 'verbal definitions' and 'laws which prescribe a certain behavior to whatever is thus named' (*MWO*: 256), and these latter are explicative definitions. The *OED* gives us a dictionary definition of water, quoted earlier, whereas the explicative definition of water is that it is H_2O. Lewis's example concerns helium. He notes that without recourse to a textbook, he could not define helium 'in a fashion which the specialist would' (*MWO*: 84). He does know that helium is 'a non-inflammable gas a little lighter than hydrogen (or a little heavier—I forget which), produced in the disintegration of alpha-particles and found in the sun' (*MWO*: 84). Lewis's statement suffices as a verbal definition of helium, but he is unable to 'specify either atomic-weight or spectrum characteristics' of helium, which a chemist would know (*MWO*: 84). That is, a chemist would know that the explicative definition of helium is that it is element number 2 on the periodic table, indicating it that it consists of two neutrons and two protons in the nucleus, surrounded by two electrons.

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Notice that a similar problem arises here as arises in relationship to having the idea of how middle C sounds and having the idea that middle C is a vibration of 261.63 Hz. Suppose a person knows only the verbal definition of the word 'water' and understands that definition based solely on her experiences of water flowing through rivers and from faucets, whereas another person knows only what the chemical structure of water is. How is it that both persons have the same idea, viz., the idea of water?

4. Lewis's Three-Stage Solution: The Social Development of Ideas

I have just discussed three different cases in which it seems individuals have the same idea, but they make these ideas definite in different ways. How, then, do they have the same idea rather than different ideas? Lewis maintains that there must be something common to the minds of these different language users in spite of the fact that they make the ideas definite in different ways. 'If language really conveys anything', Lewis writes, 'then there must be something which is identical in your mind and in mine when we understand each other' (*MWO*: 73). For this reason, Lewis focuses not on ideas but on pure concepts. He defines a pure concept as 'that meaning which must be common to two minds when they understand each other by the use of a substantive or its equivalent' (*MWO*: 70). As sense qualities may and likely do vary from person to person, sense qualities must not be pure concepts. The same point applies to sensory images in general. Whatever it is that is common to two minds when they understand each other—as when discussing the red of a book they have both seen— it must be different from a sensory correlate.

Lewis suggests a three-stage account of how ideas undergo a process of social development. I now turn to explaining that process. Ultimately, I shall argue that this process explains how it is possible that two persons can have the same idea even if there are differences between how the ideas in their individual minds are made definite.

Stage One: Patterns of Relation. As I have already shown, Lewis denies that persons have the same sensory correlates associated with terms. Whether it be the sensory quality of red or the visual so-long-ness of a foot, Lewis maintains it is at best a postulate that there is any qualitative identity between the sensory correlate one person brings to mind when she thinks of red and the sensory correlate another person brings to mind when thinking of the same thing.

On Lewis's account, it is not identity of sensory correlates that matters for having the same ideas; rather, the success of communication consists in the fact that 'on account of the social origins of language, [I] apply this term to the same objects as other persons' (*MWO*: 408). Even if each person associates the term 'red' with some peculiar quality, the idea of red does not consist merely in these sense qualities. Rather, that we have the same idea is evident from our similarity of 'patterns of relation' to objects and with other persons (*MWO*: 408). Provided two persons share a language and have been taught to use that language in the same way, they will successfully communicate in spite of having differing sensory correlates associated with those ideas. Provided that two persons do share and use a language in the same way, they will relate to each other and to objects in ways

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that facilitate coordinated action. What is essential for understanding and for communication, Lewis insists, 'is not the quale as such but that pattern of its stable relations in experience which is what is implicitly predicated when it is taken as the sign of an objective property' (*MWO*: 124–25).

Nevertheless, natural language is not perfectly precise. What one person classifies as a shade of red another person might classify as a shade of orange. Two points are in order. First, that two people may differ in exactly how they categorize colors does not imply that they are not for the most part in agreement in how they apply color categories. Second, when disagreements about the scope of the categories do arise, these can be identified and resolved by coming to an agreement about how to use a term more precisely. Lewis suggests it is because of difficulties that emerge from inconsistent uses of terms that consciousness of meanings arises at all:

> In fact, we may doubt whether any meaning would ever become conscious if it were not for the practical difficulties which arise when meanings are not thus explicit—the difficulties of hesitant or inconsistent behavior in border-line cases, and the social difficulty of misunderstanding, that is, of incongruous behavior when the same term has been used with apparently the same meaning. (*MWO*: 86)

Resolving these disagreements about the use of terms gives rise to the need and desire to clarify our terms. This brings us to stage two in Lewis's account.

Stage Two: Conceptual Development. In the second stage, two persons who disagree about how to use a term in some applications must endeavor to make their ideas even more definite than in reference to the associated sensory correlates of the terms. I shall refer to this as the stage of conceptual development. At this second stage, a pure concept common between two minds has not yet been defined, but the individuals who use the term begin to home in on a pure concept. As Sandra Rosenthal quite rightly insists, it is 'important to distinguish among the order of genesis of concepts, the order of logical analysis of concepts, and the order of evidential data for the applicability of concepts' (1971: 324). With this sentence Rosenthal defends Lewis's later account of sense meanings. As E. Paul Colella explains, Lewis's theory of sense meanings in *An Analysis of Knowledge and Valuation* functions to enrich and deepen his earlier account of ideas and concepts (see especially Colella 1981: 79–84). In Lewis's discussion of sense meanings, he explains both that a sense meaning is 'constituted by the criterion in the mind by which what is meant is to be recognized' (*AKV*: 37) but also that sense meaning 'cannot be vested directly and simply in imagery' (*AKV*: 134). Lewis situates his discussion of sense meanings in the context of worries about whether we can have the general idea of a dog independently of thinking of any particular dog, as I earlier recurred to Locke and Berkeley on our idea of triangles. In contrast to sense meanings, linguistic meanings are set off 'by abstraction from all connection with sense-application' (*AKV*: 142), and these can be, in Lewis's earlier terminology, pure concepts (a phrase that does not appear in *AKV*). (As my focus here is on *MWO* in relationship to a problem that arises in Royce's work, I shall not examine this connection to Lewis's later work in more detail.)

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At the stage of conceptual development, users of a language decide how they shall sort objects, especially with respect to borderline cases. Lewis approvingly remarks, 'as Royce was fond of insisting, the categories are our ways of acting' (*MWO*: 101–2); that is, we decide how we shall sort things. This may occur in at least three respects. First, discussants order the objects under consideration in some way. For example, they may set out an array of differently colored objects and arrange them by their admixtures of hues. Second, they can decide to pick out the core cases on which most people agree. For example, everyone agrees that *these* (some selected set of objects) are red, but there is disagreement about those (some other set of objects about which there is disagreement as to whether they are red or orange). Third, they can settle on a verbal definition of the term, for example, that all the red things shall be those in the lower part of the visible spectrum.

Most important among these three strategies for conceptual development is the search for order, and there can be little doubt that Lewis is here influenced by Royce's discussion in *The World and the Individual* ([1901] 1959, hereinafter: *WI2*; see, esp., *WI2*: 86–95). Order can be imposed by a manner of classification, or it can be determined by isolating what is invariant in an ordered series of changes. In the first case, Lewis maintains that all categorization involves a 'minimal uniformity' (*MWO*: 353). Classification is often by similarity, and 'the recognition of similarity is a kind of latent generalization' (*MWO*: 365). In the case of colors, we can take the continuous spectrum of colors and 'achiev[e] simplicity' by dividing it into 'classes by the use of names with a qualitative range of denotation' (*MWO*: 364). That is, we may decide that 'red' names colors in such-and-such range, 'orange' this other range, and so on. In the second case, what we regard as laws of nature are invariancies in spite of an ordered succession of events. Lewis maintains that 'in the process of our learning the nature of the real, what we do is to look for *some* order of a certain general type and, if we do not find that, to look for some *other*' (*MWO*: 352). Lewis's example is gravity: that 'sparks fly upward' and 'water runs down hill' suggests to the medieval schoolman that 'everything seeks its natural level' (*MWO*: 352). But 'balked in this', theorists eventually suggest that 'bodies fall in proportion to their weight' and then that '$v=g\ t$' (i.e., velocity equals the product of acceleration of gravity and time). The formula represents an invariancy in spite of variations in, say, gravitational force. Rosenthal puts the general point nicely when she writes, 'scientific advancement depends on the self-corrective method of science as individual creativity feeds into and modifies a collective intelligence that shares common interests and common history' (2007: 165). Lewis notes, 'The *names* of our categories may be very old and stable, but the *concepts*, the modes of classifying and interpreting which they represent, undergo progressive alteration with the advance of thought' (*MWO*: 235). That is, our concepts undergo development. Nevertheless, as we shall see later, a pure concept once identified is unalterable, akin to a Platonic form.

Lewis's examples suggest that in the course of sorting things, we will endeavor to find some criteria by which to categorize objects. We will want to be able to classify not only our objects of acquaintance but any object whatsoever. Lewis identifies 'three grades of clearness about the meanings of terms', attributing these to Royce.

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(Royce, in turn, was indebted to Peirce's account in 'How to Make Our Ideas Clear' ([1878] 1992), as Lewis acknowledges in a footnote. Lewis, however, remarks that 'Peirce's discussion . . . does not so precisely cover the point' [*MWO*: 86].) At the first grade of clearness, a person is able 'appropriately to accept or reject any object of our acquaintance as belonging or not belonging to the class in question' (*MWO*: 86). The key phrase is 'object of our acquaintance'. Those things one has seen before, one is able to categorize them appropriately as, for example, red or not red. At the second grade of clearness, one is able not merely to categorize those objects of acquaintance as red or not-red but any such object one might come across, even those that appear to be on the borderline between red and orange: 'The second grade of clearness involves, further, the preparedness . . . to make the dichotomy, *X* or not-*X*, not only for familiar but also for unfamiliar things, not only for all actual but also for all conceivable objects' (*MWO*: 86). The third grade of clearness is not merely the ability to categorize objects as belonging to classes but to define a pure concept used in classifying those objects. It is 'the ability to specify the criteria by which such classification is determined. This last, of course, is equivalent to definition, the explicit possession of the concept' (*MWO*: 86). Lewis would later distinguish between two sorts of criteria, those that constitute our sense meanings and those that constitute linguistic meanings. In my judgment, his account of definition in *MWO* conflates different kinds of definition and meaning that are more clearly distinguished in *AKV*. There remains significant disagreement in contemporary work on pragmatism over the kinds of definition there are and how these relate to the grades of clearness for ideas.

Although the way in which we decide to develop our ideas will be responsive to inquiry, it would not be correct to regard the process of deciding what our ideas shall mean to be itself a process of inquiry. Inquiry endeavors to ascertain how things are independently of what we may think about them. In contrast, when our ideas undergo social development, we decide what they shall mean, and we have significant latitude in deciding exactly to which natural cleavages our ideas shall correspond. That 'red' shall pick out wavelengths of light between 620 and 750 nanometers is a decision we made. We could have decided that 'red' shall correspond to a different natural cleavage, say 620 and 755 nanometers. It should be noted that while we do have some choice in the matter, we do not have total freedom. There is a history as to which colors 'red' picks out, and our making 'red' correspond to some natural cleavage should be faithful in the main to that history. It is our deciding on an explicative definition that leads us to a third stage in the social development of ideas.

Stage Three: Explicative Definition. Earlier I noted that Lewis holds that classification by similarity is a sort of latent generalization. We are able to make that latent generalization explicit by defining it so as to correspond to some underlying physical features of the objects so classified. When we explicatively define a term, we reach the highest grade (on Lewis's account) of clearness. In the case of 'red', we can define the term so that it corresponds to wavelengths of light absorbed and reemitted by objects. It is consistent with this account that, because the color spectrum is continuous, we also stipulate where the boundaries shall be.

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Although in ordinary usage of the term 'red' we may not always be so rigorous, for the purposes of scientific investigation we will want to fix our terminology. Lewis insists, 'much [note: not all!] of the basic uniformity of various areas of experience is not discovered but imposed by categorial procedures which argue nothing intrinsically orderly in what is given. Outstanding examples are the serial and dimensional orderings of qualitative variety' (*MWO*: 366–67).

Nevertheless, even these serial, continuous qualities can be defined. What we seek is to define them so as to correspond to some natural cleavage. 'If definition is unsuccessful, as early scientific definitions mostly have been', Lewis maintains, 'it is because the classification thus set up corresponds with no natural cleavage and does not correlate with sufficiently important uniformities of behavior' (*MWO*: 257). To illustrate his point, Lewis remarks that the alchemists defined the elements in ways that did not track any natural cleavage. In contrast, the periodic table does track the structural features of the elements.

Recurring now to some of the other examples we have considered, even if we have different visual so-long-nesses associated with a foot, we will nevertheless agree that there are 3 feet to a yard and 12 inches to a foot. Moreover, we can define these units in reference to invariant features of nature. As an inch is 2.54 centimeters, a meter is 100 centimeters, and a meter is the length traveled by light in a vacuum in $1/299{,}792{,}458^{th}$ of a second, an inch can be defined in terms of the distance light travels in a vacuum.

The analogous point applies to middle C, which is defined as a vibration of 261.63 Hz. Prior to well-tempering, musicians tuned instruments differently, but different ways of tuning instruments resulted in harmonies that sounded out of tune and made it difficult to move freely between different keys. Just as the color spectrum is continuous, so, too, are the auditory frequencies. Nonetheless, musicians have found it useful to classify frequencies in such a way that they can readily construct harmonies and transpose without the notes sounding out of tune. This process of developing the concept of middle C ultimately led to defining the pure concept of middle C as 261.63 Hz. (The story told here is overly simplified because the details would bring us too far afield. Technically, it is A_4 that is defined as 440Hz, and the other notes are defined in reference to it. Moreover, there are different temperament schemes besides the one most commonly used today.)

Lewis maintains that provided two people define a concept in the same way, 'idiosyncrasy in the correlated sense-feelings is entirely negligible' (*MWO*: 76). Although each of us may have different sense qualities associated with middle C, we can define middle C as 261.63 Hz regardless of how that pitch sounds to us. Lewis makes the same point he does regarding middle C with respect to red: 'You and I mean the same by "red" if we both define it as the first band in the sun's spectrum. . . . It does not matter if neither the red rug nor the first band of the spectrum give to the two of us identical sensations so long as we individually discover that same sense-quality in each thing which we agree in describing as "red"' (*MWO*: 76). Whereas one person may give a verbal definition of 'red' as the first band of the sun's spectrum and another may understand it only with respect to some sense qualities, the difference does not matter. Nonetheless,

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disagreement may arise as to how much of the first part of the sun's spectrum 'red' picks out. In such cases, 'red' can be explicatively defined strictly to correspond with a range of wavelengths of light.

Of course, it would be a mistake to conclude that we *discovered* middle C is 261.63 Hz or that red is some range of light wave frequencies. As noted earlier, Lewis avers that many basic uniformities are not discovered. Rather, as with our color terms and musical pitches, the uniformities are imposed. There are two other remarks to be made in this respect. First, while definition is logical analysis, Lewis denies that it is decompositional analysis into more basic concepts out of which other concepts are constructed. Lewis writes, '*Logical analysis is not dissection but relation*; the analysis of *A* into *B* and *C* does not divide A into constituents *B* and *C* but merely traces a pattern of relations connecting *A* with *B* and *C*' (*MWO*: 82). Second, it may be the case that not all of the terms we use can be defined by a pure concept. In this case, one of two things may occur: Discussion ends at the stage of conceptual development and verbal definition, or a pure concept is stipulated for the purposes of scientific investigation. Lewis, it must be conceded, does not countenance these cases in *MWO* though his later account of meaning and definition in *AKV* may be able to address some of these worries.

5. Lewis's Solution to Royce's Problem

Thus far, I have argued for three claims:

> First, Royce's distinction between sensuous and symbolic ideas poses a problem: How is it that two people, one of whom has only a sensuous idea of middle C and the other of whom has only a symbolic idea of middle C, nevertheless have the same idea, viz., an idea of middle C?
>
> Second, I have argued that Lewis recognizes three different ways in which the problem may arise: (a) when two persons' sensory correlates differ; (b) when one person has a sensory correlate associated with her use of a term but another person defines the term; and (c) when one person has a verbal definition of a term but another person knows the explicative definition of the term.
>
> Third, Lewis proposes an account of how ideas develop socially. On this account, individuals acquire language through instruction, associating sensory correlates with terms. This gives rise to behaviors that enable them to accomplish shared goals. Disagreement arises, however, in certain applications of these terms, compelling the discussants to make the application of their terms more definite. This leads to a period of conceptual development in which they endeavor to find or settle on a definite order among the objects of their interest. When they find or settle on that order, they are able to define a pure concept that was latent in their earlier practices.

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With these points in place, we are now able to see how Lewis's theory of ideas rises to the challenge that Royce's theory faced. Lewis holds that a pure concept is an abstraction, but the origins of that abstraction lie in the common usages of language and language acquisition. We abstract a pure concept from these patterns of relation and the associated sensory correlate. Lewis makes this point many times: 'Psychologically, this conceptual pattern of relations is, of course, an abstraction; no such concept ever existed, apart from imagery and sensory material, in any human mind' (*MWO*: 80); 'The purely conceptual element in knowledge is, psychologically, an abstraction. It is a pattern of relation which, in the individual mind, is conjoined with some definite complex of sense qualia which is the referent or denotation of this concept and the clue to its application in presented experience' (*MWO*: 115); 'whether "imageless thought" is psychologically possible at all or not, no human being has, or ever will have, logical powers sufficient to enable him to elaborate the analysis of concepts in systematic fashion without reliance upon imagery' (*MWO*: 428).

Here we come to the key point to address Royce's problem. Recall from the introduction that for individual minds, when a person both knows how middle C sounds and knows that middle C is 261.63 Hz, the person has just one idea of middle C. Lewis holds that in typical cases, an idea in an individual mind is constituted of both (a) a sensory correlate and (b) a pure concept or definition. 'These two together', he writes, 'the concept and its sensory correlate, constitute some total meaning *or idea* for the individual mind' (*MWO*: 115, emphasis added). In individual minds in typical cases, an idea consists of both a sensory correlate and a pure concept.

Yet, as noted earlier, ideas are not merely the ideas of individual minds; they are also our 'social inheritance' (*MWO*: 96). Two people can have the same idea; ideas are conveyed from one mind to another. Yet, talk about two persons having the same idea invites us to puzzle over how this is possible when (a) an idea consists of a sensory correlate, and yet, as Lewis argues, (b) sensory correlates may differ in particulars.

Our puzzlement arises because of an equivocation on the phrase 'have an idea'. In one sense, we are tempted to think of 'having an idea' as a mental episode. Regarded as a mental episode, it is unlikely any of us has the same idea of anything, for on Lewis's account we have differing sensory correlates. In another sense, a person has an idea just in case she is an heir to the social development of an idea. In this sense, two people can have the same idea. They have the same idea not because of any identity of sensory correlates but because through the process of language acquisition, they develop patterns of behavior that enable successful communication and coordinated action. Moreover, because of the way that our ideas as social products develop *from* sensory correlates associated with terms through the process of language acquisition *to* the identification of a pure concept, a pure concept is implicit in the patterns of relation of typical language users. 'The "common reality" projected by such understanding of each other', Lewis notes, 'is to an extent not usually remarked, a social achievement. It triumphs over a good deal of verifiable differences in the power of individuals to discriminate and relate in the presence of the same situation' (*MWO*: 111). To have an idea in this sense

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is to be a beneficiary of the social development of an idea. Understood in this way, two people who have the same idea have the same idea in two respects. First, they are both heirs to the social development of an idea through the process of language acquisition. Second, as heirs, their ideas have the same pure concept, even if the pure concept is present only implicitly in a sensory correlate via the process of language acquisition.

This puts us in a position to address the problem with which the essay began: How is it that a person who only knows of middle C how it sounds and a person who only knows of middle C that it is 261.63 Hz nevertheless both have the same idea? As just argued, a person born deaf has the idea of middle C just because she is an heir of the social development of the idea of middle C. Once a pure concept has been isolated, it can be understood apart from the sensory correlate and typical processes of language acquisition and treated as an ideality. This is why Lewis states, 'categories and *precise* concepts are logical structures, Platonic ideas; the implications of them are eternal and the empirical truth about anything given, expressed in terms of them, is likewise through all time unalterable' (*MWO*: 269, emphasis added). Once a pure concept is defined, it can be defined that way independently of the sensory correlate from which it originally emerged in the social development of the idea. It is defined to correspond with natural cleavages.

What is more, the person who only knows of middle C how it sounds also has the idea of middle C insofar as she is an heir of the process of its social development. She has learned to associate the term 'middle C' with a sensory correlate through the process of language acquisition. Moreover, from that sensory correlate, a musician who knows nothing of the underlying physics could nonetheless abstract the pure concept middle C as 261.63 Hz through further education. Accordingly, a person born deaf but who knows middle C is 261.63 Hz and a person who knows nothing of the underlying physics have the same idea of middle C insofar as their ideas both involve the pure concept of middle C (the first explicitly, the second implicitly) and both are heirs to the social development of the idea of middle C.

Lewis's treatment of pure concepts as idealities akin to Platonic forms does raise a problem. Lewis claims, 'the *names* of our categories may be very old and stable, but the *concepts*, the modes of classifying and interpreting which they represent, undergo progressive alteration with the advance of thought' (*MWO*: 235), and yet 'the old word is retained but the old concept is discarded as a poor intellectual instrument and replaced by a better one. Categories and precise concepts are logical structures, Platonic ideas' (*MWO*: 269). A consequence of this seems to be that two people, perhaps of different communities, who use language in similar but not precisely the same ways, do not have the same idea.

Lewis has at least three avenues of response to this worry. First, for many practical concerns, it may matter very little whether two persons explicitly explicatively define a pure concept in the same way provided their language and patterns of behavior are sufficiently similar to accomplish their shared aims. As noted earlier, Lewis suggests consciousness of meanings arises only when there are disagreements. Second, Lewis could deny that in all of these cases pure concepts have been explicatively defined such that they are akin to Platonic ideas As he maintains, it is only when our concepts are precise and the intensions of our language fixed that pure concepts

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become akin to Platonic ideas. Third, Lewis might hold that while there is conceptual change, we can provide a sort of natural history of concepts and names, explaining what has motivated the changes in underlying concepts in spite of retaining the same names. This could work for scientific terms such as 'gravity', in which we trace its use from medieval times through Newton's theory to Einstein's work. Lewis could then hold that while two persons may have different ideas (as Thomas Aquinas and Einstein have different ideas of gravity) but use the same word, those ideas are related through a well-motivated, inquiry-responsive process of change whereby the use of the term has undergone social development.

6. Conclusion

Pace Royce, Lewis denies that there are two kinds of ideas, sensuous ideas and symbolic ideas. Rather, Lewis maintains there is one idea, which is a social product consisting of both a sensory correlate (or, more exactly, patterns of behavior associated with sensory correlates in individual minds through a process of language acquisition) and a pure concept. Ideas undergo a process of social development. That process begins with language acquisition and the association of terms with sensory correlates. When disagreements arise, discussants are motivated to clarify their ideas. Those ideas go through a process of development. Eventually, those discussants aim to define their ideas in relationship to natural cleavages that are invariant in spite of changes. While we are apt to think of ideas as mental episodes, more importantly an idea is a social product we inherit through language acquisition. Our social inheritance is the way in which the idea has been developed. For two persons to have the same idea is for them both to be heirs of that social inheritance and thereby have a pure concept in common, even if only implicitly.

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References

Oxford English Dictionary, s.v. 'Water,' accessed January 29, 2023. https://www.oed.com/.
Berkeley, George. (2008) *Philosophical Writings*. Edited by Desmond M. Clarke. Cambridge: Cambridge University Press.
Colella, E. Paul. (1981) 'The Social Philosophy of C. I. Lewis'. PhD diss., Fordham University.
Jackson, Frank. (1982) 'Epiphenomenal Qualia'. *The Philosophical Quarterly*, 32, 127–36.
Kegley, Jacquelyn Ann K. (2016) 'Josiah Royce and C. I. Lewis: Teacher and Student with Many Shared Affinities'. *Transactions of the Charles S. Peirce Society*, 52, 220–38.
Lewis, C. I. (1929) *Mind and the World Order: Outline of a Theory of Knowledge*. New York: Dover Publications. Abbreviated as *MWO*.
Lewis, C. I. (1946) *An Analysis of Knowledge and Valuation*. La Salle: Open Court Press. Abbreviated as *AKV*.
Lewis, C. I. (1957) *Our Social Inheritance*. Bloomington: Indiana University Press. Abbreviated as *SI*.
Locke, John. (1975) *An Essay Concerning Human Understanding*. Edited by Peter H. Nidditch. Oxford: Clarendon Press.

https://doi.org/10.1017/apa.2023.15 Published online by Cambridge University Press

Molina, Fernando R. (1983) 'Notes by C. I. Lewis on Royce's Theory of Categories'. *Philosophy Research Archives*, 9, 174–85.
Murphey, Murray. (2005) *C. I. Lewis: The Last Great Pragmatist*. Albany: State University of New York Press.
Peirce, Charles S. ([1878] 1992) 'How to Make Our Ideas Clear'. In Nathan Houser and Christian Kloesel (eds.), *The Essential Peirce, vol. 1 (1867–1893)* (Bloomington, IN: Indiana University Press), 124–41.
Rosenthal, Sandra. (1971) 'C. I. Lewis and the Sense of Sense Meaning'. *Southern Journal of Philosophy*, 9, 313–26.
Rosenthal, Sandra. (2007) *C. I. Lewis in Focus: The Pulse of Pragmatism*. Bloomington: Indiana University Press.
Royce, Josiah. ([1899] 1959) *The World and the Individual: First Series: The Four Historical Conceptions of Being*. New York: Dover Publications. Abbreviated as *WI1*.
Royce, Josiah. ([1901] 1959) *The World and the Individual: Second Series: Nature, Mind, and the Moral Order*. New York: Dover Publications. Abbreviated as *WI2*.
Wagner, Henri. (2021) 'Aims and Claims of C. I. Lewis's Conceptual Pragmatism'. In Quentin Kammer, Jean-Philippe Narboux, and Henri Wagner (eds.), *C. I. Lewis: The A Priori and the Given* (New York, NY: Routledge), 132–66.

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