

# What Perry doesn't know about Mary

Maria Clara Dias

Wilson Mendonça

Centro de Ética e Filosofia da Mente/UFRJ

## Abstract

The paper takes issue with Perry's defense of physicalism against the thread posed by the so called knowledge argument ("Mary's case"). His defense is based on a distinction between the "subject matter content" and the "reflexive content" of knowledge-states. It is argued that, while this distinction can illuminate many cases of newly acquired knowledge, its application to Mary's case presupposes that knowledge of what it is like to have an experience *E* is a case of *factual, propositional* knowledge. In arguing for this presupposition Perry needs to reject the Ability Hypothesis (Lewis and Nemirow), according to which knowledge of what it is like to have an experience *E* is an instance of knowing-how as opposed to knowing-that. The paper claims that Perry's argument for generally subsuming knowing-how under knowing-that fails.

As the legend goes, Mary finally leaves the black-and-white room and sees for the first time, without the intermediary of black-and-white monitors, a red thing, say, a ripe tomato. Mary already knew a lot before she went through the new experience. Indeed, according to the legend, she already had acquired all the knowledge that can be acquired in matters physical. To many spectators of Mary's tale, however, it is plausible to assume that she acquired a new bit of knowledge at the very moment she had the visual experience of the ripe tomato. This new bit of knowledge is usually dubbed "knowledge of what it is like to see red." It gives the physicalist a problem, for its content (the fact that makes Mary's new belief true) is not included in the set of physical facts already within Mary's grasp. Remember that this is supposed to be the *complete* set of *all* physical facts. There would then be at least one non-physical fact; and the claim that physical theory is able to describe at least in principle the whole real world would turn out to be false. Another way of putting the problem is by saying that by having the new experience Mary acquires *phenomenal* information. This has to do with some phenomenal property being

instantiated in a certain part of the real world. The phenomenal property cannot be physical, otherwise phenomenal information wouldn't be new to Mary.

Of course it is only under the assumption that “knowledge of what it is like” is a *bona fide* case of propositional knowledge that Mary's tale poses a problem for the physicalist. Under this interpretation Mary's tale becomes a “knowledge argument” against physicalism. Either by denying that Mary's new experience is a case of knowledge at all or by construing knowledge of what it is like as a species of non-propositional knowledge (for instance as a species of “knowledge how” *as opposed* to “knowledge that”), one can avoid, at least tentatively, the anti-physicalist thrust of the knowledge argument. Under this alternative interpretation, the problem posed by Mary's tale would be dissolved. Many physicalists, however, accept the initial terms of the problem and try instead to solve it.

John Perry is a case in point. In his recently published book *Knowledge, Possibility and Consciousness*<sup>1</sup> he defends what he calls “*prima facie* physicalism” against three famous arguments aiming to show the physical irreducibility of phenomenal consciousness: the zombie argument, the knowledge argument and the modal argument, due respectively to David Chalmers, Frank Jackson and Saul Kripke. (*Prima facie* physicalism—or “antecedent physicalism”—is the claim that we should accept physicalism as true until someone proves the contrary.) Perry's general claim is that the real targets of these arguments are doctrines that physicalism need not and should not include. Perry tries to isolate in each case the offending doctrine and to show that a suitably conceived physicalism deprived of them, but still responsive to our common sense views about the reality and importance of the phenomenal aspects of experience, remains intact. Concerning the knowledge argument—the only one to be considered here—the offending doctrine is the “subject matter assumption,” a certain view on the content of belief-states underlying knowledge. We will return presently to this point.

Concerning the nature of the state of knowing what it is like, Perry lays his cards quite clearly on the table:

... when [Mary] exits the room and sees a ripe tomato or a fire hydrant, she will learn something. She will learn what it is like to see red. And this is something new, something she didn't know, and couldn't have predicted, in spite of knowing all the relevant physical facts. She learns a *proposition* about what it is like to have a certain experience, the experience of seeing red. This *fact* or *proposition* seems to involve a property, the subjective character, that she has never associated with the experience of seeing a fire plug or a tomato or a red thing. She learns an *additional fact* about that experience, a fact that involves this what it is like property. (76) (Our emphasis.)

---

<sup>1</sup>Perry, J. (2001). Numbers in parentheses refer to the pages of this book.

Perry's account of Mary's new bit of propositional knowledge depends crucially on two assumptions. The first assumption says that simply by having the new experience (and while the new experience lasts) Mary is able to attend to the subjective character of her experience, in a way that is only possible when she is having the experience. Mary is confronted only with her own experience. The first assumption implies, therefore, that Mary uses this experience as an exemplar of a certain type, to which she can point with the "inner demonstrative"  $this_i$ . As Perry puts it, "when we are attending to a subjective character in the subjective way, and wish to communicate what we are feeling or noticing, we use our flexible demonstrative" (116). The adequate expression of Mary's newly acquired belief would therefore be, according to Perry: "This<sub>i</sub> is what it is like to see red."  $This_i$  is a new concept which can only be acquired by someone who is having the experience. Thus the experience is the source of a new concept and *at the same time* the privileged occasion for the application of the new concept to this very same experience.

The second assumption says that, despite being different from the concepts Mary already had, the newly acquired concept picks up the same property referred to by the old concepts. Before leaving the room, Mary had a concept of the subjective character of the experience of seeing red. This concept is  $Q_R$  and has been acquired by Mary by reading books on the physico-functional aspects of experiences by normal human beings. This concept points to a physical property. Now Mary is able to pick up this property with the inner demonstrative  $this_i$ . We have, therefore, two beliefs, one old and the other new. They are expressed respectively by " $Q_R$  is what it is like to see red" and " $Q_R$  is  $this_i$  subjective character." Their informational contents are, in a relevant sense, identical. In another sense, the pieces of information picked up by these beliefs are different. The second assumption is tantamount to the claim that it would be wrong, when specifying the content of Mary's new knowledge, to consider only the first sense. Perry's move here is analogous to a distinction made by Fregeans who associate a certain "fact" to the sentence "Hesperus has a certain property P" and a different "fact" to the sentence "Phosphorus has a certain property P," in spite of the identity of the referents of "Hesperus" and "Phosphorus."

From our point of view, the first assumption is more problematic than the second one. Before turning to it, however, we will make some comments on Perry's justification of the second assumption.

In a relevant sense, Perry's case against the knowledge argument just is the case for an alternative way of individuating contents of knowledge-states. The usual way of individuation is termed by Perry "the subject matter assumption." This is the claim that the content of thoughts is to be specified exclusively in terms of the referents of the (non-logical) elements of the thoughts in question: the objects, properties, places and dates referred to by the non-logical elements of

thoughts. This notion of content does not provide for a finer-grained distinction, as it is needed to account for Mary's new belief. Anyway, the insufficiency of this notion of content can be, according to Perry, independently demonstrated by considering other cases of suddenly acquired knowledge. To this effect Perry tells us the stories of Terry, Larry and Gary.

An enthusiast of everything having to do with the American Philosophical Association (APA), Larry lives in isolation at Claremont Hotel and spends his time reading and memorizing the information about past and future meetings of APA. He simply knows everything about dates, schedules and speakers of APA meetings. In particular, he knows that a Symposium on the philosophy of Mellor is scheduled for April 2, 1999 in the very same hotel where he is living. What he does not know—because he is not allowed to know—is what day it is or even what year he is living in. This information he finally gets when he leaves his room and sees for the first time an up-to-date calendar. The calendar states: Today is April 1, 1999. Larry concludes with satisfaction that the next day there will be a Symposium on Mellor. This has of course all sorts of effects on his behavior. The beliefs expressed by “The Symposium on the Philosophy of Mellor is on April 2, 1999” and “The Symposium on the Philosophy of Mellor is tomorrow” have of course the same subject matter content. But to depict the difference in these beliefs as well as to understand their practical effects on Larry's behavior, one must take recourse to a different notion of knowledge-content.

Larry's was the case of someone in possession of all relevant temporal relations, but unable to get an effective orientation until his belief system is anchored in time by an act of identification. Gary, on the other hand, is similarly lost, not in time but in space. He knows all the facts “about the locations of things along Interstate 80—the order of states, cities, towns and villages as one progresses east to west or west to east along Interstate 80” (87). He is actually in one of those locations, in a windowless hut across a gas station called Little America. But that is unknown to him. One day he escapes and comes to learn that “this place is Little America.” He immediately infers that “Salt Lake City is southwest of this place.” Again the novelty of this belief can be accounted for only if in the individuation of its content we go beyond the truth conditions imposed by the belief on its subject matter. For if in the specification of truth conditions we take into consideration only the subject matter, the belief is undistinguishable from the belief expressed by “Salt Lake City is southwest of Little America.” And this belief was already part of Gary's belief system.

The point of these stories is that real understanding of the nature of the newly acquired information, as well as of its consequences on rational behavior, requires that we go beyond the subject matter content. Larry and Gary already knew “everything” about the “external” referents of their respective intentional states, including the relational properties connecting those referents. What we need in

order to describe and explain what is going on when Larry and Gary acquire the new bits of information is another notion of content: “reflexive content.” This is still a matter of truth conditions. But the conditions are imposed *also* on some “internal” elements of the representational vehicle of the beliefs in question. For instance, the reflexive content of the belief expressed by the utterance of

(LA) This place is Little America.

can be specified as follows:

(LA) is true iff the place the speaker of (LA) is attending to and drawing attention to with the use of “this” is Little America.

The fact that the belief’s expression (LA) is mentioned in both sides of this equivalence, as well as the occurrence of “this” on the right side, show that the reflexive content is *not* a subject matter content. The latter may be specified by stating that

(LA) is true iff a certain place along Interstate 80 is Little America.

The next step in Perry’s proposal is the application of the distinction between subject matter content and reflexive content to Mary’s case. This should be the key to undo the trap of the knowledge argument. To this effect, Perry affirms that it is compatible with *prima facie* physicalism to assume that Mary can point to the subjective character of her experience with the inner demonstrative “this<sub>i</sub>.” The subjective character is also presumably a physical property, to which Mary was able to “point,” even before leaving the room, with the use of  $Q_R$ —or even with an “outer” demonstrative. The beliefs expressed by

- (1)  $Q_R$  is what it is like to see red.
- (2) This<sub>i</sub> is what it is like to see red.
- (3)  $Q_R$  is this<sub>i</sub> subjective character.

are indistinguishable if we consider only the subject matter content. The difference made by (2) and (3) can only be captured at the level of reflexive contents. Thus the reflexive contents of (2) and (3) are:

- (2) is true iff the act of inner attention to which it is attached is of the subjective character of the experience of seeing red.
- (3) is true iff the act of inner attention to which it is attached is of the physical referent of  $Q_R$ .

The upshot of all this is that Mary's new knowledge of what it is like to see red is a case of "recognitional" or "identificational" knowledge, as in the previous mentioned stories of Larry and Gary. In Perry's own words:

As in the cases of Larry, Gary and Terry, the change in Mary's beliefs does not result in any new conditions on the truth of her beliefs *given* what they refer to. But it does impose new conditions on the truth of her beliefs, *abstracting* from what they refer to: the condition that the subjective character which is the origin of her old concept is the very one to which she is attending.

That's my account of what Mary learned. (117)

This ingenious solution presupposes, however, the first assumption of Perry's general account, namely that knowledge of what it is like is really a case of propositional knowledge. Perry only provides this purported knowledge with a reflexive content, after having assumed that it *has* a subject matter content. But is the first assumption acceptable? Doubts about it can be suggested by the case of the just invoked Terry. His is also, for Perry, the case of someone acquiring "recognitional" knowledge:

Terry: You know I've really enjoyed talking to you. I'd like to see you again. Can I have your number?

Fran: It's in the book.

Terry: And what's your name?

Fran: It's in the book too. (83)

Even the most complete book is of course of no use to Terry. He would like to know the number of *this* person and, as Perry puts it, "that's a hard piece of information for the phone company to print in the book" (83). Now, if this "piece of information," which would have practical effects on Terry's behaviour, cannot be registered in the book at all, why suppose that acquiring it is an experiential state of propositional character? Terry has to acquire some representation that will afterwards change substantially his belief system and his dispositional attitudes. But for all that, the crucial representation can be non-propositional. From the fact that this representation can be invoked in the explanation of the later occurrence of propositional attitudes and knowledge-states in Terry one cannot infer that it is essentially propositional—or that acquiring it must be some sort of belief-like attitude.

Thus, Perry's intention notwithstanding, the analogy between Mary and Terry does not lend support to the contention that knowing what it is like to have an experience is a clear case of knowing-that. We agree that in Mary as in Terry an

“epistemically relevant change” (125) can be found. What is not obvious is that this change should be seen as the apprehension of “an old fact in a new way,” which requires from us the specification of “a new bit of knowledge and a new fact at the level of reflexive content” (125).

With Larry and Gary, the case *seems* to be different. In Larry’s utterance “The Symposium on the Philosophy of Mellor is tomorrow” the word “tomorrow” refers to the day identified on the calendar as April 2, 1999. Someone could equally have said to Larry: “The Symposium on the Philosophy of Mellor is on April 2, 1999.” Here we have a propositional content as the relevant part of the change in him. It is the same with Gary: “Salt Lake City is southwest of this place” is extensionally equivalent to “Salt Lake City is southwest of Little America” as written on a road map. Here we can plausibly talk of identification, that is, of knowledge in a full-fledged, propositional sense. And the distinction proposed by Perry can be in these cases, which involve the use of spatial and temporal demonstratives, personal pronouns and similar devices, really illuminating. What is at stake here is the generalization of this strategy to the description of all sorts of epistemically relevant changes. The beliefs expressed by “The Symposium on the Philosophy of Mellor is tomorrow” and “Salt Lake City is southwest of this place” occur, as it were, further down the line *after recognition*. What Larry would like to know in the first place is what day *today* is, whereas Gary needs first of all to know the name of *this* place. But these are again hard pieces of information for someone to write in any book. After the acquisition of these pieces of information, that is, after recognition proper takes place, Larry and Gary are able to do all sorts of inferences. The crucial point is that the later occurrence of propositional attitudes as a consequence of recognition proper is no proof that the state leading to them is also propositional. Anyway, refusal to apply Perry’s strategy to Mary’s case is *not* based on terminological scruples. One can still call Mary’s new acquisition “knowledge of what it is like.” The important point is that this knowledge is not obviously knowledge-that.

We cannot, therefore, simply assume with Perry that “This<sub>*i*</sub> is what it is like to see red” is an adequate expression of Mary’s new state. What is this “this<sub>*i*</sub>” pointing to? What is identified by it? Perry’s answer is: a definite type common to many experiences, “a subjective character that can be the character of many experiences of many people” (78). This means that Mary is supposed to be acquiring general knowledge on the way human experiences are, not simply knowledge that something is now occurring “in her mind” that has never occurred before. Remember, however, that the only source of this general knowledge is her private experience. Mary has nothing else to compare with it. From Perry’s point of view, it is a matter of attending to the experience and recognizing *in it*, in abstraction from all relations to contextual features, the kind of experience that it is. After all, knowledge of what it like to see red is supposed to be something that Mary

acquires “in a flash,” without making any sort of relations with other aspects of the world or even of her inner life. The experience must somehow discriminate and identify itself. This makes the what-it-is-like property supposedly identified by Mary a radically intrinsic property. Indeed, Perry states

... that the subjective character of a mental state is not an historical or contextual property of it. It is a property of it that is determined by current inner events. The phenomenal event will typically have external causes and effects, and it may have many current properties that are determined by such external factors. But the subjective character of the event will not be one of these properties. The subjective character is a matter of what it’s like to be in the state, not its typical causes, nor its causes on a given occasion. (35)

Thus, in order to decide exactly which property of her experience the inner demonstrative should be pointed to, Perry’s Mary has no other resources than the particular experience itself. For if she goes *beyond* this experience and undertakes some sort of triangulation of it in a network of external relations, she will be pointing the internal device to the wrong *contextual* property, *not* to the what-it-is-like property. At this point, Perry’s account seems to run afoul of Ludwig Wittgenstein’s private language argument. Indeed, as conceived by Perry, Mary seems to be in the same predicament as the man who tries to fix the meaning of a sensation-word “S” by concentrating his attention on the connection between the sign and the sensation as it first occurs (Wittgenstein 1953, § 258)—or of the man who “peeks” only at his memory images of the timetable in order to make sure that he remembers rightly when the train departs (Wittgenstein 1953, § 265). And if we suppose that Mary’s purported cognitive performance does not have to occur “in a flash” but can be the result of the extended, repeated attending to the lasting experience, then we will fall into the trap of the man who buys many exemplars of the same newspaper to verify the veracity of something he reads there (Wittgenstein 1953, § 265).

If the remarks so far are convincing, knowledge of what it is like is *not* knowledge in a full-fledged, propositional sense; it is *not* know-that. But what is it then? How can we account for the epistemically relevant change in Mary? To be sure, as a consequence of her new experience, all sorts of dynamical relations and abilities emerge in Mary. With the new experience, Mary acquires certain abilities, e.g., the ability to recognize red things by sight alone, the ability to recognize the experience when it comes again, to remember the experience in question, to imagine a red expanse. If the reasoning above is OK, the explanation of these relations and abilities, which constitute know-how, cannot ultimately appeal to a form of know-that. An alternative explanation is the so called Ability Hypothesis proposed by Laurence Nemirow and David Lewis. “The Ability Hypothesis,” as Lewis (1990, p. 516) puts it, “says that knowing what an experience is like just is the possession of these abilities to remember, imagine, and recognize. ... It isn’t knowing-that.

It's knowing-how." And according to Nemirow (1990, p. 495), "knowing what an experience is like is the same as knowing how to imagine having the experience." The alternative explanation—as in Churchland (1989)—would, therefore, start with non-propositional representations acquired by having experiences. Perry denies this. In his view, Mary's is only a particular case of a more general dependence relation between know-how and know-that. He definitely regards "knowing how to do something as a species of factual knowledge" (122). "Know-how is a special kind of knowledge of facts about 'way-of' relations" (121). This implies that the "way-of" relations—the method by which something can be achieved—are represented in such a way as to be the internal object of a propositional attitude. As Perry puts it: "Know-how is a positive doxastic attitude—i.e. something belief-like, if not paradigmatically belief" (122).

Again, Perry offers no direct support for these bold claims. And again, some of the examples offered by him seem to tell against them. Thus he distinguishes between his wife's rather "theoretical" knowledge of the movements which are a way of moving the bike in the direction one wants to go without falling and his granddaughter's "practical" knowledge of how to ride a bike. Involved in both cases is an internal representation "that a certain type of execution will in certain circumstances be a way of bringing about a certain result" (122). As this description blurs the distinction just mentioned, Perry introduces the notion of an *executable* schema/representation, to account for his granddaughter's abilities, and the notion of an "Humean" idea/representation, as the source of his wife's knowledge. But then it is not clear that these distinct representations can be interestingly described in the neutral terms of "way-of relations." Also it is not clear why the access to these very dissimilar representations should be subsumed under the type "belief-like." It seems more plausible to assume that his granddaughter's know-how is something inarticulable, something *non-truth-valuable*. Of course, she could *also* acquire articulable knowledge of the correct movements someone should make while riding a bike. This is properly a propositional attitude; and it is an *extra* knowledge-item. The fact that both forms of knowledge can go together, but do not have to go together, is evidence that we are dealing with forms of knowledge independent of each other.

Although Perry states that, in general, the conception of knowledge developed by him "exalts knowing-how" and also that, in particular, he would agree "with Nemirow and Lewis that Mary's new knowledge is a case of knowing-how" (124), he has a very restricted view of the relation between both forms of knowledge. Thus he affirms confidently that "knowing what it is like to have an experience, and knowing how to do something, are both special cases of knowing-that" (124). It is our concluding contention that Perry's account here simply goes astray. What Mary learns when she enters the color-world is not akin to a propositional content. This is what Perry doesn't know about Mary.

## References

- [1] Churchland, Paul M. (1989). "Knowing Qualia: A Reply to Jackson." In Paul M. Churchland. *A Neurocomputational Perspective*. Cambridge, Mass.: MIT Press, 1989, pp. 67-76.
- [2] Jackson, Frank (1982). "Epiphenomenal Qualia." *Philosophical Quarterly*, 32, pp. 127-136.
- [3] ——— (1986). "What Mary didn't Know." *Journal of Philosophy*, 83, pp. 291-295.
- [4] Lewis, David (1990). "What Experience Teaches." In Lycan, W. (ed.) *Mind and Cognition*. Oxford: Blackwell, 1990, pp. 499-519.
- [5] Nemirow, Laurence (1990). "Physicalism and the Cognitive Role of Acquaintance." In Lycan, W. (ed.) *Mind and Cognition*. Oxford: Blackwell, 1990, pp. 490-499.
- [6] Perry, John (2001). *Knowledge, Possibility and Consciousness*. Cambridge, Mass.: MIT Press.
- [7] Wittgenstein, Ludwig (1953). *Philosophical Investigations*. Oxford: Blackwell.