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Dear Mario

I have just finished reading your book "Intuition and Science". The criticism of intuitionism is excellent. Perhaps intuitionism is a modern form of an old friend Plato's notions. Plato had the eternal ideas and perfect forms, to be grasped or seen by the philosopher. Now, the intuitionist "constructs" his world at will by manipulating ~~with~~ the contents of his mind, so that he can do without the external reality. He has something "better" - his own ability to "construct" reality by his playing with the mathematical forms of ideas. At least Plato had the modesty to ascribe these forms to some God. But the intuitionist has even taken over the role of the latter.

Although the intuitionist is so very confused, he is trying to express a mixed up glimpse of something that we all "sense" in some way or other - that logic and routine modes of perception ^{and discernment} are not the whole story. You did go into creativity in your third chapter. However, I think that it may be important to go deeper into this question, as it is rather an important one.

To clarify the problem, let me call attention to a distinction between recognition and realization. As I walk home, I

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recognizing it wrong (i.e., I "know it again") But if I make a mistake, I suddenly realize that I have gone wrong. I submit that there is a big difference in what happens in these two cases (e.g., to recognizing that I have made a mistake would be very different, and ~~to~~ when to recognize since I would then merely be "knowing again" that which I suddenly realized.)

I suggest that realization is the essence of creative perception. I would place the perception of what is true and false as the most fundamental creative realization. Without the capacity to do this, man's life and work would be worthless and meaningless. Only in routine cases do you ever "recognize" truths or falsity. What is generally relevant is its realization.

Now, I further suggest that all perception is creative. Thus, an insane, drunken, or drugged man can "create" ^{seemingly "real"} every manner of illusion that is not ~~actually~~. It takes a clear mind to perceive what is illusory and what is not. So the ~~an~~ most essential function of intelligence is to throw out false "creations". If we all know that ~~we~~ ^{even normal, some people} can consciously see as real that which is not there, but which ~~we~~ ^{they just} expect. Then, creation is reduced to ~~the~~ creative re-creation of what. One expects from memory, an alert mind is one that does not re-create its perceptions, but creates them fresh, and then checks them ruthlessly by every

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means available (logical, experimental, etc) to see what in his perceptions is true and what is false

In creative perception of reality, the part plays a big part. But it is important also to see the part ^{unity} ~~as false~~, inadequate ^{aspects}. In doing this, you get a hint as to what is true (As in seeing the non-existence of "the man behind the mirror", you learn that the mirror provides a reflection of yourself)

So a man is always "creativity" and "no-creativity" his perceptions, in response to experiencing. A very broad perception that integrates a whole field, I shall call an understanding. No interchange the words "I see" and "I understand". The reason is that the eye perceives the whole picture. Similarly, the "inner eye" can realize a fresh understanding. In this connection, there is the story of the man who was blind from birth, and then was operated on to give him vision. After a while, he saw a little. When asked whether a given figure was a triangle, he counted the corners. But in real vision, you see the triangle as a whole first, and then, you come to its corners. Similarly, in an understanding, you grasp a broad field as a whole, and then come down to the partial aspects. Of course, you can understand wrongly. This is where perception of what is true

and what is folk comes into play.

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The word "invention" is a confused, vague, and inadequate word, to deal with a whole complex of as yet poorly understood processes. I myself think that invention is quite a different ability from understanding. Understanding is like the artist's perception that suddenly "sees" the picture. The fundamental creativity in the artist is in the act of seeing. He needs techniques, instruments, inventions, etc. to "express" what he sees in paint and stone. Similarly, in science, the basic act of creativity is in the act of understanding. Invention comes into play in finding new technical methods for expressing or ~~or~~ developing an understanding. Of course, invention is also creative. But it seems to be a lower order of creativity than the basic act of understanding — of grasping the whole, and then coming to all the aspects, ruthlessly to test in the aspects the truth of the vision of the whole.

About you the possibility of your coming to England, I missed seeing Popper before he was off to America again. In any case, your chance of survival may be better in Argentina. Best regards from me and from my wife, to you and to your family.

Yours sincerely,

Dave