ON THE LOGIC OF PICTURE - WORLDS

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Consider Manet's Olympia. It depicts a fictional courtesan being presented with flowers from an admirer by a Negro maid. We might say, following Kendall Walton,[1] that the picture gives rise to the fictional truth that there exists a certain courtesan who is being presented with flowers, etc. Now some fictional truths which arise from pictures are disjunctive in form. For instance, it is fictionally true in relation to Olympia that either the courtesan is lying down or she is standing up. (This is a boring consequence of the fictional truth that she is lying down). The question I wish to discuss is, roughly speaking, whether there can arise from pictures disjunctive fictional truths whose disjuncts have no fictional truth - values. In other words, can pictures generate fictional states of affairs which are both disjunctive and unitary? If so, this would seem to constitute a radical difference between «picture worlds» and reality – radical in the sense of being a matter not simply of content but of logical structure. In answering our question we shall have to compare the epistemology of «picture worlds» with that of the real world; and we shall have occasion also to contrast the logical character of «picture worlds» with that ascribed by one theory to the future.

Before we turn to a more exact statement of the problem, a point of clarification. The fictional state of affairs generated by a picture, as I shall use that phrase, is what it would be said to depict if it were considered apart from any actual state of affairs it depicts or any independent fiction it illustrates; and in the case of a picture that does not depict an actual state of affairs or illustrate an independent fiction, such as Olympia, the fictional state of affairs which is generated is simply whatever is depicted. In short, the fictional state of affairs generated by a picture is what holds «in the picture itself». Thus Reynolds's portrait of Lady Delmé is an idealized picture of an actual person; but the fictional state of affairs generated is the existence of a woman with flawless skin, hair, etc. Again, Tenniel's illustration of Alice attending the Mad Hatter's tea party depicts that fictional state of affairs; but the fictional state of affairs it generates is only that of a girl at a table with a collection of odd characters.

I

We need to begin a more careful formulation of our question by stating two principles and introducing an analogue of each.

Let us give the label Q to the idea that a sentence has a truth - value only if it is theoretically possible for some mind to know that it is true or that it is false. Adherents of Q include logical empiricists, who divide the totality of sentences having truth - values into those sentences that are knowable as true or false by experience and those that are knowable as true or false by meanings alone. But philosophers who depart from logical empiricism in recognizing other sources of knowledge besides these two may, of course, hold Q as well. Next, let us give the label Q' to the analogous idea that a sentence derives a fictional truth - value from a picture only if it is at least theoretically possible for some mind to know from the picture that it is fictionally true or that it is fictionally false.

Let us give the label R to the idea that a disjunction in ordinary language is true only if at least one of its disjuncts has a truth - value. R is accepted by classical logicians, inasmuch as the equivalent which they propose for the ordinary - language connective (either)... or..., namely the symbol 'V', is defined in terms of the following truth - table:

p	q	p V q
T	T	T
F	T	T
T	F	T
F	F	F

Thus by their definition whenever "p V q" is true at least one of the disjuncts has a truth - value; indeed, both do. But commitment to R is not confined to classical logicians. For instance, both Lukasiewicz and Kleene, who depart from classical logic in counting "p or q" as true if one disjuct is true and the other lacks a truth - value, nevertheless count the disjunction of two sentences, each of which lacks a truth - value, as having no truth - value.[2] The intuitive appeal of R to classical and non - classical logicians alike is easily appreciated. For where there is no known or unknown state of affairs to render "p" true or false and none to render "q" true or false, it is difficult to see how there can be a state of affairs to render "p or q" true.[3] Finally, let us give the label R' to the analogous thesis that a disjunction is made fictionally true by a picture only if at least one of its disjuncts derives a fictional truth - value from the picture.

Taken individually, Q and R are clearly plausible. Moreaver, they are, on the surface at least, compatible – as is evident from the fact that many logical empiricists accept the classical truth - tables for the connectives. Taken indivifually, Q' and R' are likewise plausible. But are they compati-

ble? I will argue that an adherent of Q and R must either grant that the fictional worlds generated by pictures are metaphysically unlike the real world, by giving up Q', or grant that these worlds are logically unlike the real world, by giving up R'. Where picture - worlds are concerned, one must accept either unknowable facts or what Russell called single disjunctive facts.[4]

II

The first step we need to take in determining whether Q' and R' are compatible is to find a way to decide just which sentences have fictional truth - values according to Q'.

This means we need to list the ways that there are of learning from a picture the fictional truths that are generated by it.

One way is simply by looking at the canvas carefully, having 'internalized' a knowledge of the representational conventions proper to the stylistc category in which the picture belongs.[5] By itself this can not yield knowledge of what is really the case in the fictional world generated by the picture. What it can yield is knowledge of the way what is really the case in the fictional world of the picture visually appears from one point of view.[6] Thus someone who has 'internalized' the representational conventions proper to Manet's style can learn simly by looking at Olympia that the depicted state of affairs looks from one point of view exactly as it would if it consisted of a courtesan being presented with flowers by a Negro maid, etc. It should be noted that claims about fictional visual appearances have a quality which claims about non - fictional visual appearances are often said to lack: corrigibility. These claims are corrigible because fictional visual appearances are a function of non - fictional, public facts – the way the pigment is arranged on the canvas and the relevant representational conventions. So, for example, suppose someone claimed the following in regard to Olympia: that it is fictionally true that the state of affairs looks from one point of view exactly as it would if it consisted of a courtesan being presented with flowers as she reclines on a bed on which there are no animals, bathed in a harsh light. This claim would be subject to correction. As may be demonstrated with reference to a patch of black pigment at the right of the canvas, it is fictionally true that it looks just as it would if there were a cat at the courtesan's feet, whether is literally noticed by a given spectator or not. Similarly, to those unacquainted with Manet's stylistic habit of eliminating middle tones, the picture may literally appear to be of a scene bathed in harsh light, but it is not fictionally true that the scene appears to be bathed in harsh light.

A second way to learn fictional truths from a picture may be introduced by considering something quite obvious. We do not know only that

the fictional state of affairs generated by Olympia looks from one standpoint exactly as it would if it consisted of one woman being presented with flowers by another. We know also that it actually does consist of this – and not of, say, two perfectly realistic mannequins posed to give this impression. The fact that we can not know from the picture whether the actual models from which it was painted were people or realistic mannequins is beside the point: the fictional subject matters are assuredly people. But now given that we do know this, how do we? Clearly a process like everyday inference from non - fictional visual appearance to non - fictional reality is involved. Had it actually appeared to us exactly as though we were confronted by either two women or two perfectly realistic mannequins or something else with the same visual appearance, we would have inferred the inference about Olympia clearly runs along the same lines. But while the analogy to everyday inference accounts for the content of our conclusion about Olympia, it does not explain the confidence with which we hold it. For the spectator knows from the picture that what he sees in it are women and not mannequins, whereas a perceiver in the corresponding non - fictional epistemic situation would not be entitled to rule out completely the situation would not be entitled to rule out completely the mannequin hypothesis – or various others. If it seemed to him that he was confronting women, but for some reason he could not move or wait or open a second eye, some caution would be called for in concluding that there really were women before him. The reason why the spectator of the picture need not be similarly cautious is simply that, given these fictional sense - data and these probabitities, uncertainty is out of place. This is not to say that uncertainty about the fictional conclusion is out of place altogether. After all, the discovery of hitherto unnoticed details in Olympia could conceivably prove that the conclusion was mistaken. What is out of place is uncertainty about a particular step in reaching the conclusion, roughly the step from fictional appearance to fictional reality.

The fact that uncertainty is inappropriate here suggests that such inferences from fictional visual appearances are sucject to a probability - hardening rule. This rule may be spelled out as follows. Suppose that the set of fictional sense - data generated by the picture in question were nonfictional. This hypothetical set of real data might have arisen from any one of an indefinitely large class of real states of affairs. Now, of this class of possible states of affairs, one would be the most probable. (It should be noted that the most probable state of affairs would not necessarily be complete in every respect, since in some respects the possible states of affairs might all be equally probable. For instance, the possible states of

affairs from which the real sense - data corresponding to those generated by Olympia could have arisen would be equally probable with respect to the day of the month of the Negro woman 's birth). Further, some elements of this most probable state of affairs would be highly probable. These highly likely elements of the likeliest non - fictional state of affairsfictionally obtain. They are definitely, and not just very probably, elements of the fictional state of affairs which is depicted. The rule is in force because of a sort of implicit agreement that it should be in force berween painters and spectators of pictures in the Western tradition – and doubtless in other traditions as well. It is an agreement with the obvious rational that it allows artists to characterize fictional states of affairs in a definite way.

It should be emphasized that both being highly likely and being an element of a pre - eminently likely state of affairs are necessary for being 'hardened'. If high likelihood by itself were enough, paradoxes would arise. Thus it would be highly likely, if the fictionla sense - data generated by Olympia were real, that there was a Negro woman who had hot been born on the first day of any month, and it would be highly also that there was a Negro woman present who had not been born on the second day of any month, and so on through all the days. Clearly if each of these inferences 'herdened' we would be left with the result that it was fictionally true that there was a Negro woman present who had not been on any day of the month! But again, being an element of the state of affairs which is, in relation to the corresponding non - fictional sense - data, the likeliest is not sufficient for being 'herdened' either. Thus if we know that three out of four women are right - handed, the rule does not entitle us to say that we know that the courtesan in Olympia is right - handed; nor, of course, does it entitle us to say we know she is not. But, to take another example of what the rule does permit, we know that if matters non - fictionally appeared as they fictionally appear in Olympia, it would be a highly likely part of the likeliest explanation that some genuine flowers were being presented; and so by the rule the flowers in the picture are definitely real and not artificial.

Two further points about the rule. First, there is a problem about its application where the set of non - fictional inferences that would have been considered highly and pre - eminently likely by the painter 's society differs from the set that would be highly and pre - eminently likely in fact.[7] Thus suppose we are confronted by a picture of a pregnant woman painted by a member of a primitive society which lacks a theory of the causes of pregnancy. May we say by probability - hardening that it is fictionally true that the woman in the picture has had intercourse within

the previous nine months, or does the rule entitle us neither to call this fictionally true nor to call it fictionally false? For our purposes, fortunately, the answer to this puzzle does not really matter. Even on the view that scientific progress can bring to light fictional facts unknown to the painters society, such as the depicted woman's recent intercourse, one must grant that for some sentences in relation to some pictures it will be forever impossible to determine fictional truth - values by probability - hardening. This, as will become clearer, is what matters from our standpoint. The second point concerns the meaning of «highly likely» in the context of the rule. Just how likely an element of a pre - eminently likely explanation has to be before the corresponding fictional element becomes definite varies with such factors as genre. For example, the threshold above which an element 'hardens' is lower for pictures in a naturalistic genre than for pictures in a surrealistic genre – in whose fictional worlds, we are meant to assume, almost anything is possible.

Besides the methods of direct inspection and probability - hardening inference, there are at least two more ways to learn fictional truths from a picture. The first is like deduction. From any fictional truth generated by a picture one may infer to be fictionally true whatever would follow logically from the corresponding non - fictionla proposition. For instance, if one has learned from a picture the fictional truth that all the stones in a certain facade are grey, then one may infer it to be fictionally true that all the things in the things in the facade that are not grey are not stones, and if one has learned the fictional truth that there are four rows of fourteen windows in the facade, then one may infer it to be fictionally true that there are fifty - six windows in the facade. The second method is also a kind of inferring from fictional truths already known. With regard to various genres of Western painting there exists an implicit understanding between artists and spectators that the depicted scene is to be assumed to have a special kind of coherence. In one way or another, it is to be assumed, every element of the depicted scene reflects the character of the picture's main subject - matter. Where this convention is in force, one is entitled to draw conclusions about that subject - matter which would be neither highly likely nor logically certain in the corresponding non - fictional epistemic situation. Thus where the convention holds one may infer from the fictional truth that a man is standing before an impressive array of books the fictional truth that he is erudite; or one may go from the fictional truth that a cat is playing with a dead bird at the feet of a human couple who are positioned analogously to the fictional truth that the man has captured and ruined the woman. (This is the situation in William Holman Hunt's pre-Raphaelite masterpiece, The Awakening Con-

science). Drawing such inferences is obviously not a mechanical procedure like applying the probability - hardening rule. Rather it requires a skill comparable to that of construing metaphors.

Finally, it might be said that the title of a picture is a part of it, and that therefore reading the title constitutes still another way to learn fictional truths generated by a picture. I will not discuss this interesting claim, but nothing in the remaining discussion turns on whether it is tenable.

III

To the extent that this list of ways of discovering from a picture the fictional truths that it generates is a complete list, it will be impossible to discover fictional truth - values for certain sentences in relation to certain pictures. For instance, the sentence that there is a coin in the maid's pocket can not be known to be fictionally true or to be fictionally false from Olympia. But suppose that Q' is correct – that a sentence can not derive a fictional truth - value from a picture unless it is possible to know from the picture that it is fuctionally true or that it is fictionally false. Then such sentences simply do not derive fictional truth - values from the pictures in question. Figuratively speaking, there are holes in the worlds of these pictures where the facts that would determine the truth - values of these sentences would be. Yet consider, in regard to Olympia, the sentence that either there is a coin in the maid's pocket or there is not. By the rule permitting dtional truth - value despite the fact that neither of its disjuncts possesses a fictional truth - value.

This result parallels a view of the future that has been ascribed to Aristotle.[8] He is supposed to have held, from a desire to avoid fatalism, that atomic predictions of contingent events were neither true nor false in advance, but also that compound predictions having the form "p V -p" were true in advance, since they would necessarily be borne out however matters developed. Thus, to take his familiar example, neither the claim that there will be a sea - battle tomorrow nor the claim that there will not be one is true today; but the claim that either there will be a sea - battle tomorrow or there will not be one is true today. On the 'Aristotelian' view of it, then, the future is like 'picture worlds' in being truly describable by disjunctions whose disjuncts lack truth - values. It is tempting to thing, therefore, that a logical system adequate to the future on this view might be adequate to 'picture worlds' as well. A system adequate to the future on this view does exist, in the shape of B. van Fraassen's logic of supervaluations.[9] Instead of denying truth - values to all disjunctions of truth - valueless disjuncts, as do Kneele and Lukasiewicz, van Fraassen proposes, in the words of one expositor, that a sentence whose compo-

nents lack truth - values should be assigned «that value which all classical valuations would assign to it, if there is a unique such value, and otherwise no value».[10] Thus, given the 'Aristotelian' view that both the prediction that there will be a sea - battle tomorrow and the prediction that there will not be one lack truth - values, van Fraassen's system will assign to the prediction that either there will be a sea - battle tomorrow or there will not be one the value 'true', in accord with the 'Aristotelian' view of that disjunction, since it would come out true on all classical valuations of its components. Furthermore, in conformity with the spirit of the 'Aristotelian' position, predictions of the form "p & -p" will be assigned the value 'false' and those of the form "p V q" (i.e., where "q" is not equivalent to "-p") will be assigned no truth - value at all.

Will this logic do for 'picture worlds'? From what has been said up to this point it might seem so. But there is a disanalogy between the 'Aristotelian' future and 'picture worlds' which unsuits them to van Fraassen's system. On the 'Aristotelian' view all predictios that are true in advance though their components lack truth - values are predictions of states of affairs that necessarily obtain or necessarily fail to obtain. By contrast, some 'picture world' - descriptions that are fictionally true though their components lack fictional truth - values are descriptions of fictional states of affairs that only happen to obtain, in the sense that there could be pictures that did not generate them. (This is not to say that such pictures would necessarily generate their non - obtaining). Thus there can be fictionally true 'picture world' - descriptions whose components lack fictional truth - values and which are of the form "p V q" (i.e., where "q" is not ewuivalent to "-p"). Suppose, for example, that a picture generates the fictional truth that it appears from a particular standpoint exactly as it would if there were a one - legged man silhouetted in a doorway. By the probability - hardening rule, it is fictionally true that either the man is missing his left leg or he is missing his right leg. But, assuming Q', neither the claim that he is missing his left leg nor the claim that he is missing his right leg derives a fictional truth - value from the picture. Given that the logic of supervaluations would assign no fictional truth - value whatever to the disjunction in question, this logic must be considered inadequate for 'picture worlds'. In general, seeing that pictures can generate fictional states of affairs which are not only disjunctive and unitary but contingent, no universal system for determining the status of a fictional disjunction on the basis of its form and the status of its components is possible.

FOOTNOTES

1. See his «Pictures and Make - Believe», Philosophical Review, LXXXII (1973), 283—319.

2. Both writers' matrices for disjunction are given in Susan Haack, Deviant Logic (Cambridge University Press, 1974) See pp. 168, 171.

3. Cf. Russell: «I do not suppose there is in the world a single disjunctive fact corresponding to 'p or q'». «The Philosophy of Logic Atomism», in Bertrand Russell, Logic and Knowledge, Robert C. Marsh, ed. (Cambridge and New York, 1956), r. 209.

4. Ibid.

5. The role played by 'internalized' knowledgo of representational conventions in perceiving what holds in a picture is explained by Walton, op. cit.

6. This point is not defended in the cited article, but Walton convinced me of it in conversation.

7. Monroe Beardsley discusses the analogous puzzle of whether the scientific beliefs of the writer's society or our own scientific beliefs ought to govern our inferences, in the elucidation of literature, from what is given as fictionally true to what is fictionally probable, in his Aesthetics (New York, 1958), pp. 242—247. He does not, however, recognize that, whichever view one takes, what is highly probale 'hardens'. Thus, for instance, he calls the hypothesis that Dr. Watson in the Holmes stories is a woman "adsurdly overcomplicated but not conclusively refutable" (244). A more recent treatment of the same puzzle is Nicholas Wolterstorff, «Worlds of Works of Art», Journal of Aesthetics and Art Criticism, XXXV, 2 (1976), rr. 121—32.

8. For example by William and Martha Kneale, in The Development of Logic (Oxford, 1962), rr. 46—8.

9. «Singular Terms, Truth - value Gaps, and Free Logic», Journal of Philosophy, LXIII, 17 (1966), rr. 481—95.

10. Haack, op. cit., p. 58.

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