# PICTORIAL ORIENTATION MATTERS 

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Issues concerning the spatial orientation of pictures play an important, though previously neglected, role in an adequate understanding of the nature and identity of visual artworks and other pictures. Using a previous contrast ('Artworks Versus Designs', BJA Vol. 41, No. 4, October 2001), I show that differing orientations of a design naturally give rise to distinct pictures, which may be appropriated as distinct artworks by a discerning artist--which also shows that such artworks cannot be types, since they share a common token.
The investigation also raises some significant issues concerning artistic printmaking, and strongly suggests in addition that two new concepts of interpretation--of identifying and constitutive interpretation--are required to adequately explain the artistic phenomena that are uncovered.

As my ambiguous title may suggest, I shall both consider issues concerning the spatial orientation of pictures, and also argue that those issues should play a considerable role in our understanding of the nature and identity of pictures (whether or not the pictures in question are artworks). The investigation will also raise some significant but neglected issues concerning artistic printmaking, and strongly suggest in addition that two new concepts of interpretation--of identifying and constitutive interpretation--are required to adequately explain the artistic phenomena that will be uncovered.

In a previous paper, I introduced the concept of a 'design', and argued for one critical respect in which the concept is distinct from that of an artwork. ${ }^{1}$ (The class of design tokens overlaps, but is not co-extensive with that of artefacts, in that on my account designs are meaningful structures, whereas artefacts need not be; while on the other hand, some naturally occurring design tokens are not artefacts.) As in that previous paper, I
shall mainly concentrate on visual artworks such as pictures, so that references to 'artworks' are to be understood as references to visual artworks only.

In this paper I shall explore some further aspects of the nature and relations of artworks and designs, in particular with respect to a relatively neglected artistic concept, that of the spatial orientation of a design token or artwork. It will turn out that orientational concepts and factors can (among other things) help to clarify ways in which pictures are distinct from design tokens.

One important question not considered in the previous paper concerns the relation between an artwork, and the concrete object that (in some way) embodies, or provides a physical substratum for, the artwork in question (such as a stretched and painted canvas in the case of a painting). ${ }^{2}$ Such an object (which, as already noted, is typically but not always an artefact of some kind) ${ }^{3}$ is, I claim, itself a design token. I shall describe the concrete design token, which thus corresponds to a given artwork, as its corresponding design token (or CDT).

As for the design itself (the corresponding design), of which that object T is a token, it may be identified as that design type which has as its tokens the class of objects (including T itself) which are perceptually indistinguishable from T under normal viewing conditions. ${ }^{4}$

However, for reasons given in my previous paper, an artwork itself cannot be identified with a token of any type (including any design type), ${ }^{5}$ so in particular an artwork cannot be identified with its CDT. Indeed, in that previous paper I argued (in effect) that a single sculptural object could serve as the CDT for two distinct sculptural artworks. ${ }^{6}$

## I. INTRINSIC AND FIELD ORIENTATION

Now I shall introduce two related concepts of spatial orientation, both of which concern the orientation of the front surface of an object (such as an artwork) that is perpendicular to a horizontal axis through its center, which axis is the normal viewing line of sight for the work in question. Relative to such an axis, the artwork may be rotated through 360 degrees; for rectangular artworks, there are four salient positions, in which the work is (perceived as) respectively upright, on its right side (turned 90 degrees clockwise from the upright position), upside-down or inverted, and on its left side. ${ }^{7}$

However, further analysis is required in order to capture the full meaning of a term such as 'upright'. Intuitively, in order to be 'upright' something must both have a 'top side' or top (which is identifiable as such, no matter how the object may be rotated), and also be oriented so that its top is currently aligned with the top of the natural environment in which it is located. Thus two related orientational concepts are needed, as follows.

The first concept concerns things that have their own intrinsic orientation, criteria for which includes having a (reasonably) well-defined unique top, ${ }^{8}$ sides and bottom (in the case of roughly rectangular objects), or (in the case of roughly circular or spherical entities) as having corresponding unique points or areas (a topmost point or area, and so on) rather than sides.

There are two sub-species of intrinsically oriented things. First, a general category of objects, that includes such things as human beings, flower-beds and buildings, as well as (I shall argue) two main topics of this article, namely pictures and works of art. ${ }^{9}$ The other sub-species of intrinsically oriented things is that of (what could be called) environmental fields. An environmental field is some area in space which is aligned with some culturally standard axes (such as the flat surface of the world for a horizontal axis, and the gravitational field of the earth for a vertical axis) in such a manner that everyday judgments about objects being horizontal, vertical, above or below others, upright and so on are made with reference to such an environmental field which contains the objects in question. An environmental field will itself have a top (or topmost area), and so on, and hence qualifies as having an intrinsic orientation.

The second concept of orientation is that of (what I shall call) field orientation, which concerns the alignment of an object--whether or not it has an intrinsic orientation--with respect to an environmental field. ${ }^{10}$ Thus, an object is generally (perceived as being) upright just in case it has an intrinsic orientation, ${ }^{11}$ and is such that its intrinsic top is
aligned with the top of its environmental field. ${ }^{12}$ An object is upside-down or inverted if its intrinsic top is instead aligned with the bottom of its environmental field; and so on.

The above points provide the outlines of (one part of) a perceptual logic of spatial orientation, whose claims, as with any logical principles, may be hoped to have a high degree of 'obviousness' about them. (But the general neglect of such issues seems to have left these points previously unformulated, at least in the field of aesthetics).

## II. AN EXAMPLE: ANNA'S PRINTMAKING

I shall now give a printmaking example showing the relevance of orientational issues to issues of pictorial identity. I shall make use of the diagrams shown in Figure 1 [p. 6], so as to have a definite case to consider.

## FIGURE 1



One way (but not the only way) to describe the relations of the diagrams is as follows. If diagram 1 is regarded as showing a picture with intrinsic top W in its upright orientation, then diagram 2 shows the same picture when rotated clockwise through ninety degrees, with diagrams 3 and 4 showing the same picture after further ninety degree increments of rotation. Thus all four diagrams could be considered as showing or representing a single pictorial object or design token in various orientations.

The example initially concerns a case of a picture or visual artwork produced by an artist Anna, in a multiple edition (with the artist's medium being any one of etching, lithography, photography, serigraphy, and so on). Suppose that the resulting original prints all exactly resemble diagram 1 in figure 1 (when both figure 1 and the prints are in their standard or upright orientation). Then each such original print is, by usual standards, a print or copy of the same pictorial artwork, or picture, as are all the others--which picture may conveniently be labelled as picture 1A, both because of its association with diagram 1, and because the picture was created by Anna.

Next, suppose that Anna is walking by the right side of a horizontal pile of prints of her picture 1A, and, looking down on it, happens to notice that (relative to her current viewing position) the top print of her picture looks like diagram 2 rather than diagram $1 .{ }^{13}$

Anna could easily be struck by the fact that her picture 1 A , when seen in this nonstandard orientation, in some ways looks aesthetically different than it did when seen in its standard orientation, with side W at the top. For example, on one natural
interpretation, the aesthetic effect of her picture 1A is of repose and harmony, with a circle centered above a firm horizontal line. But when picture 1A is seen in its 'sideways' orientation as in diagram 2, it instead 'looks' more asymmetric, aggressive and 'sequential'.

However, of course the notoriously slippery concept of what something 'looks like' aesthetically must be used with care, since Anna is also quite capable (as are we) of perceptually compensating for the sideways orientation of picture 1 A , and hence (via an appropriate perceptual adjustment) of seeing it as looking aesthetically exactly like it looks in its more standard orientation as in diagram 1. This point could be summed up by saying that any sense in which picture 1A 'looks aesthetically different' when seen sideways is at best of very questionable relevance as a point about a legitimate perception of picture 1 A itself.

Nevertheless, Anna might surmise that even if the sense in which a diagram 2-looking picture 'looks aesthetically different' from picture 1A is not relevant to picture 1 A itself, surely there must be some 'object of sight' in this case, which is such that it is what she saw, and which object had aesthetic characteristics such as looking asymmetric, aggressive and 'sequential', and as looking 'aesthetically different from' picture 1A.

I suggest that what Anna saw was actually another picture, which has side Z as its intrinsic top, and which exactly resembles diagram 2 in figure 1 , when each is in an upright orientation. But of course at this stage this 'picture 2 ', as it could be called, has a
somewhat tenuous status, in that it is not an 'artist-approved' picture as is picture 1A. Nevertheless, picture 2 at least is logically or formally distinct from picture 1 A , in that each picture has a distinct intrinsic top--side W for picture 1 , and side Z for picture $2 .{ }^{14}$

However, Anna herself is, as the artist in question, in a position to do more than merely surmise or hypothesize about this matter. For she can (if she wishes) decide that she wants picture 2 to be a picture of hers; ${ }^{15}$ and there are various ways in which she can then make it the case that there is indeed an artist-approved picture 2 A of hers, ${ }^{16}$ which has side Z as its intrinsic top, which picture is just as legitimate as picture 1 A , and which is at the same time distinct from picture 1 A in the way just discussed.

Here is one such way. ${ }^{17}$ Anna runs off more prints, using the same printing setup as she originally used for picture 1 . Then she turns each resultant print sideways so that it exactly resembles diagram 2 , and then has them mounted and framed in that orientation. I should add that in Anna's view, this is a perfectly legitimate way for her to produce original prints of her new picture 2 A .

Now of course other artists, and perhaps some aestheticians too, might disagree with Anna on this point. But my point is that Anna as a creative artist has an unchallengeable authority to decide on the methods by which she herself shall produce original prints of her artworks, including in the case of picture $2 \mathrm{~A} .{ }^{18}$

Now the example so far has tacitly assumed that prints respectively for pictures 1 A and 2A were separately produced by Anna in different printing runs, ${ }^{19}$ even though the same printing procedure was used in each case. However, there is nothing to stop Anna deciding to move to an even more simplified process, in which she simply prints many copies of the design in question (that is, of the design that figure 1 shows in four different field orientations), and when the need arises for a print of picture 1 A or picture 2 A she simply takes one of these prints, and mounts and frames it in an orientation appropriate for its role as a print either of picture 1 A , or of picture 2 A . Again, I would claim that Anna's use of this method is her prerogative, and after all (unlike some Andy Warhol cases) she still does personally decide, for each and every print, which of her pictures 1 A or 2 A it shall be. ${ }^{20}$

The example is not quite ended yet, for we need to assume (for reasons that will become clear) $)^{21}$ that Anna repeats the whole process for a further picture 3, which, in its upright orientation (with intrinsic top side Y ) exactly resembles diagram 3 in its upright orientation. Thus the example concludes with Anna having a choice between three different orientations for any given print, each of which serves to identify a different picture of hers.

As a preliminary point about this 'printmaking' example, it surely demonstrates that in some way orientational factors are integrally involved in characterizing the nature and identity of Anna's three pictures. I shall offer my own diagnosis as to exactly how orientational factors are involved, but I think that the example has some independent
value as a test case, or challenge, for those who have simply assumed the general irrelevance of orientational issues to the aesthetics and ontology of visual artworks, but who find my specific diagnosis of it to be questionable for some reason.

## III. DIAGNOSIS

Here then is my diagnosis of the 'printmaking' example (the general outlines of which diagnosis are probably already clear from my way of describing the example). First, the example as given preserves the traditional view that any given physical print produced by an artist is (after any appropriate review stages as decided by the artist) a print of at most one unique artwork by that artist. ${ }^{22}$

As it happens, artist Anna decides which artwork this should be in a given case at a much later stage than is customary--in that usually this is decided prior to anything being printed on the relevant media--but that fact is simply a reflection of the integral role of orientational factors in her decision.

Second, as to what happens when Anna first notices that one of the prints of her picture 1A 'looks aesthetically different' when she sees it in a sideways orientation (in which orientation it exactly resembles diagram 2). As noted in the example, there is a clear sense in which, if Anna were to interpret what she sees as being her original picture 1A (with intrinsic top W), then it would not 'look aesthetically different'--in spite of its
different, 'sideways' field orientation which of course would also cause what she sees to look 'field orientationally' different.

But since what Anna sees does look aesthetically different to her, my diagnosis is that what Anna is actually seeing is picture 2 (whose intrinsic top is side Z ) rather than picture 1A (whose intrinsic top is side W). For the distinctive aesthetic effects noticed by Anna (such as 'what she sees' looking asymmetric, aggressive and 'sequential') apply to it only insofar as it is seen as having side Z as its intrinsic top (or, to put the same point another way, if the current field orientation of the print, with side Z at the top, is seen as being the upright orientation of the picture in question).

Next, pictures 1A and 2 must be distinguished from their corresponding design token (CDT)--namely the relevant physical print on which Anna's gaze is directed. All three entities must be non-identical, because pictures 1A and 2 are distinct (with different intrinsic tops), plus the fact that presumably the physical print that is their common CDT must have the same relation to each of them, so that the relation in question could not be the identity relation. And, as an independent proof of the distinctness of the pictures from their CDT, arguably tokens of the (relatively abstract) design in question (such as the relevant CDT) have no intrinsic orientation of their own, whereas both pictures 1 A and 2 do have (distinct) intrinsic orientations.

However, more conceptual analysis is still required, with respect both to Anna's seeing, and to the correlative 'objects' that she sees. Three concepts of visual interpretation will be needed in the discussion, two of which are discussed in the next Section.

## IV. IDENTIFYING AND CONSEQUENT INTERPRETATIONS

The first of these visual interpretive concepts is that of an identifying interpretation, which occurs when some visual data is interpreted as being some object or property by a person. This concept covers both normal or 'basic' kinds of seeing of objects or qualities, as well as cases such as Anna's seeing of one of her pictures when she looks at one of her prints. In more precise cognitive science terms, the idea is that an identifying interpretation is any processing of low-level visual information from some relevant region of the visual field which results in a high-level sortal or entity-related (including properties when they are conceived of as entities) classification of that information.

The second interpretive concept is that of (for want of a better term) a consequent interpretation, which occurs when some item, previously identified through an identifying interpretation, is itself interpreted in some way. ${ }^{23}$

For example, when Anna first saw picture 2, she did so (on my view) by identifyingly interpreting the visual information from the 'print'-representing region of her visual field as being picture 2 (which interpretation, in my view, includes as a necessary element
interpreting the picture as having side $Z$ as its intrinsic top). But, having thus visually identified picture 2 , she was then able to carry out several consequent interpretations of picture 2 itself, including interpreting it as having various aesthetic qualities such as its looking asymmetric, aggressive and 'sequential'. ${ }^{24}$

As to the subset of identifying interpretations that thereby identify pictures or artworks (such as pictures 1A and 2), perhaps I should briefly indicate why I regard them as being interpretations of low-level visual data, rather than as interpretations of physical objects or events such as the relevant common CDT for both pictures 1 A and $2 .{ }^{25}$

One reason is systematic: since a general concept of an identifying interpretation of lowlevel visual data is needed anyway, as part of a cognitive science explanation of how we are able to perceive such physical objects in the first place, it would merely complicate theory to assume that artistic identifying interpretation must involve an additional layer of interpretation of such already-interpreted physical objects--prior to a demonstration (which I have yet to see) that such complications are absolutely necessary. ${ }^{26}$

Yet another class of reasons concerns the conceptual swamp that results from attempts such as that of Danto to regard artworks as being interpretations of such 'mere real things' themselves. ${ }^{27}$

My alternate low-level concept of identifying interpretation allows me to agree with Margolis, against Danto, that at least all 'identificatory' seeing involves interpreting (with
the complementary concept of consequent interpretation being available to explain any remaining non-identificatory cases), while yet enabling me to side with Danto against Margolis in claiming that there are some 'basic' things and qualities, as identified through visual perception, which are independent of cultural factors. ${ }^{28}$

## V. CONSTITUTIVE INTERPRETATION

Next, as to what happens when Anna decides that she likes the newly-identified picture 2 enough (in view of her consequent interpretations of it) that she wishes to make that picture her own, that is, into an artwork of hers. Now since the resultant picture is Anna's picture rather than simply $a$ picture, it must inevitably have properties (including its relations to other works in her corpus) that are not possessed by picture 2 itself. Hence, strictly speaking, Anna's 'picture 2' must be distinct from picture 2 itself. One way of characterizing their relation is to say that picture 2 is an anonymous or 'found' version of picture $2 A$ (where picture 2 A is Anna's picture), rather than itself being Anna's picture 2 A. ${ }^{29}$

But exactly how does Anna achieve the feat of 'converting' picture 2 into her own distinct picture 2A? It seems unavoidable that she must do so by (in some way) providing her own unique artistic interpretation of picture 2: Anna finds a way in which to interpret picture 2 as a picture of her own.

But the idea of interpretation at work here requires yet a third distinct concept of interpretation--Anna carries out (what I shall call) a constitutive interpretation ${ }^{30}$ of picture 2, which constructively or productively ${ }^{31}$ converts or transforms picture 2 into her own picture 2 A .

## VI. DIFFERENCES AND SIMILARITIES IN THE PICTURES

It will be recalled that in the initial example Anna did not stop after her constitutive interpretation of picture 2 as her new picture 2 A , but instead she repeated the whole process (of identifying a new picture, and then adopting it as one of her own) for a further picture 3, which, in its upright orientation (with intrinsic top side Y ) exactly resembles diagram 3 in its upright orientation.

Now one consequent kind of interpretation of that picture, identifyingly interpreted as picture 3, might find aesthetic qualities of 'domination' or 'constriction' in the relations of the line with respect to the circle in this orientation. Of course, other clusters of consequent interpretations could be provided for picture 3, such as a cluster depending on a consequent interpretation of the circle as a pool close to the viewer, with the line being a dark horizon beyond it.

However, as before, I would claim that any such consequent interpretations depend upon a prior identification of the relevant picture as one having side $Y$ as its intrinsic top. For
it is only as thus identified that picture 3 may be said both to have a horizontal line in it, and a horizontal line that is above the relevant circle (for in no other orientation of the design token are both of those statements true), which 'basic facts' about picture 3 provide the 'factual basis' of any such clusters of consequent interpretations of it.

The reason for including this third picture (or more precisely, the pair of pictures 3 and 3 A ) is as follows. Both pictures 2 and 3 are examples of (what I have called) 'found pictures', and so they are appropriately similar for comparison with respect to the integral orientational factors that serve to distinguish them (as are indeed Anna's own corresponding pictures 2A and 3A as well). Also, Anna identified each of pictures 2 and 3 in the same way (by an identifying interpretation), and her own corresponding pictures 2 A and 3 A resulted in each case from acts, similar to each other, of constitutive interpretation on her part.

However, Anna's original picture 1A is in some ways a special case, in that (I shall assume) it was created by her in some more usual artistic way, without any 'found picture' acting as an intermediary. Thus Anna's creation of it cannot be assumed to have involved either any identifying interpretation of something, or any constitutive interpretation of some appropriate intermediate entity or stage.

Nevertheless, as far as any audience members for Anna's pictures are concerned (including Anna herself, insofar as she can take up the perspective of a viewer of her works), her pictures $1 \mathrm{~A}, 2 \mathrm{~A}$ and 3 A presumably have precisely the same status as
artworks, in spite of the differing creative stages involved in picture 1A versus pictures 2A and 3A. For unless Anna were to deliberately relate the three pictures (such as by stipulating that they should be exhibited together, along with informative captions relating the history of their genesis), there would be nothing in the finished pictures to reveal that history.

Now an experienced artist's intentions about how she wishes a work to be received or understood by viewers would typically (and should) be realistic, in the sense that, not only would she want viewers to understand her work in a certain way, but she would present it to them in such a way that it is substantially possible for them to understand it in the desired way. ${ }^{32}$

Indeed, arguably it is part of the meaning of a claim that someone genuinely intends a communication of theirs to be understood in a certain way (as opposed merely to their idly wishing or hoping for that, or pretending to intend it, when they know that such hopes are actually unrealistic, i.e., very unlikely to be fulfilled) that they have adequate grounds for believing that a reasonable number of viewers could and would understand the work in that way.

In sum, then, Anna's intentions with respect to her three works must be understood as intentions regarding how all three finished works should be regarded by their viewers, if she supplies them with no information other than the finished works themselves. (For
any other supposed 'intentions' of hers would be no more than pretense, or idle or irrational wishes).

Thus the upshot of this discussion is that, as far as any legitimate or reasonable artistic intentions of Anna's go, she must intend the intrinsic orientation of picture 1A (with intrinsic top W) to play a similar 'identificatory' kind of role in her picture 1A as the (differing) intrinsic orientations of her other pictures 2A and 3A play in their respective pictures.

Hence I claim that the unusual examples provided by each set of pictures 2 and 2 A , and 3 and 3 A , which serve to draw attention to a necessary orientational factor in the identity of those pictures, may also reasonably be extrapolated to apply to picture 1A itself--and hence (since the example provided in figure 1 is only an example of what could be any design whatever) to pictures in general as created by artists.

## VII. A DEFENSE OF ANNA'S METHOD

A diagnosis still needs to be given of the simplified process by which Anna chooses a final artwork status (as picture $1 \mathrm{~A}, 2 \mathrm{~A}$ or 3 A ) for each of the extra prints that she made, using the same printing setup as she had originally used for picture 1 . Her method is, in effect, to assign a given artistic identity to any one of the prints by simply rotating the print into the correct field orientation in which it should be displayed, which choice of
orientation she then makes manifest or public (so as to make her intentions clear) by the manner in which she mounts and frames the relevant picture.

My diagnosis of Anna's procedure, which I believe to be defensible, is as follows. To begin with, it is perhaps obvious that visual artworks such as pictures have a welldefined upright orientation--which is that orientation in which the picture is normally displayed--and which they possess because of the intentions of the artist, or because of various cultural norms, such as that if a person is painted in a standing posture, then the side of the picture nearest to her head should be displayed so that it is visually higher than the other sides. Also, it will be recalled from Section I that an object cannot have such an upright position unless it also has an intrinsic orientation, in that an 'upright' orientation of a picture just is that field orientation in which the intrinsic top of the picture is aligned with the field top. So for pictures in general it is taken for granted that they have an intrinsic orientation, and are normally intended to be exhibited in their upright orientation. ${ }^{33}$

The relevance of these two points (that pictures have an intrinsic top, and that they are normally exhibited in an upright orientation) to Anna's methods is as follows. Because of those two points, artists such as Anna can be sure that, if they make it clear (such as by the manner in which they mount and frame their works) that their picture is to be exhibited with a given side $X$ of the picture as the field top (so that side X will be seen as being both the highest side, and as being horizontal, in the environment in which the picture is exhibited) then, because of the convention that pictures are to be exhibited
upright, that side X will also be perceived by viewers as being the intrinsic top of the picture.

But this point is all that Anna needs to justify her unusual method of creating a print of a given one of her three pictures. For I have argued that a necessary factor in the identity of each picture, and of their distinctness from each other, is that each has a different intrinsic top (with, respectively, sides $\mathrm{W}, \mathrm{Z}$, and Y being the intrinsic tops of pictures 1 A , 2 A and 3A). But Anna knows that (because of the 'upright' convention) she can ensure that a normal viewer (who makes the usual orientational assumptions) will, in viewing a given print, make an identifying interpretation of it as a given picture, based on whichever side Anna has (in effect) pre-arranged to be included in that identifying interpretation as the relevant intrinsic top.

Thus for example, if Anna mounts and frames her print with side Y as the field top, that is all that she needs to do in order to (reasonably) guarantee that a normal viewer will identifyingly interpret the exhibited physical picture ${ }^{34}$ as that picture (with the given printed design) which has side $Y$ as its intrinsic top, and thus which viewer will have identifyingly interpreted the print as being picture $3 A$ (rather than some other picture which also uses that same printed design). Thus Anna's procedure is justified, and does succeed as a method of creating distinct artworks, that are distinct at least partly because of the distinctness of their intrinsic tops.

## VIII. PICTURES ARE NOT TYPES

One further issue should be clarified, with respect to the relations of the four pictures 2 , $2 \mathrm{~A}, 3$ and 3 A . Recall that I set up the example in such a way that any print resulting from Anna's decisions was a print of at most one artist-intended picture, since, prior to Anna's decision about which of her pictorial artworks a particular print should be, that print is not (yet) a print of any artist-intended picture at all.

However, the same point does not hold true for the 'found' pictures 2 and 3 themselves. Part of the reason for calling them 'found' pictures is to suggest that they are in some sense 'there' to be found or viewed; that is, that they have some objective status (at least to the extent of being potentially 'findable' by viewers or artists, prior to anyone actually finding them).

But more importantly, once two such distinct pictures have been found for a given design token (which serves as the CDT for both pictures), then there are two distinct actual pictures associated with that CDT. ${ }^{35}$

One consequence of this fact is that such pictures, even though they are of the multiple, printmaking kind, such as in the present example, cannot be types; for the only plausible candidate to be a token of the two distinct (supposed) type-artworks 2 and 3 in the present case would be the single physical print which is the unique CDT associated with each of
them. However, types of the same general kind which are distinct types cannot (by definition) have a token in common. ${ }^{36}$

However, this anti-type theory point may be generalized to cover the artist-intended visual artworks $1 \mathrm{~A}, 2 \mathrm{~A}$ and 3 A as well. For since all of the relevant prints of the three distinct artworks are qualitatively identical design tokens, which presumably could not be tokens of distinct visual types any more than could a single token, ${ }^{37}$ then artworks such as $1 \mathrm{~A}, 2 \mathrm{~A}$ and 3 A could not be types either.

## IX. JUSTIFYING THE EXAMPLE

Now I shall explain further why I selected this particular kind of multiple artwork example. The fundamental reason is to try to achieve an example in which, to the greatest extent possible, it becomes clear that it is specifically orientational factors that distinguish different artworks. For orientational factors are normally unnoticed in the artworld, ${ }^{38}$ and it is all too easy to confuse their effects with those of other factors.

For example, suppose that a painter were to produce four unique, individual paintings employing the same design as figure 1 , each of which is exhibited in a different one of the four orientations as shown in that figure 1. I think that it would generally be agreed that these are four distinct pictures; but it would be all too easy for orientational critics to say that the distinctness of the objects as artworks has nothing to do with their
orientational differences, for example on the grounds that the four pictures would still be distinct pictures or artworks even if they were all intended to be exhibited in the same field orientation. ${ }^{39}$

Also, simply moving to a more usual case of a comparison of three multiply-produced artworks, ${ }^{40}$ in which prints of each artwork were produced in separate printing runs using distinct printing plates (embodying the same design) individually created for each artwork 1A, 2A and 3A, would also be questionable in a similar way. For critics could contend that the resulting three sets of prints, from the three separate printing processes, would be distinct as multiple artworks simply because of the numerically distinct creative processes that produced them, whether or not the artist intended them to be exhibited in differing orientations.

My actual example and discussion seeks to avoid such (what are in my view) 'red herring' criticisms in two ways. First, my arguments for the existence of the 'found' pictures 2 and 3 do not depend on prior distinct creative acts by an artist, so that there is less room for critics to explain away such distinct pictures in ways independent of orientational factors. And second, my postulation of a simplified joint productive phase, during which prints for all three of Anna's pictures 1A, 2A and 3A are produced prior to a decision about the individual pictorial status of any given print, also serves to short-circuit such criticisms.

## X. THE FUNCTIONAL NATURE OF INTRINSIC ORIENTATION OF CONCRETE OBJECTS

To conclude, my diagnosis of the example can be supported further by a (necessarily brief and initial) analysis of (what could be called) the functional nature of intrinsic orientation of concrete objects, in that (as was initially pointed out), clearly intrinsic orientation for such concrete objects is generally relative (in various ways) to human interests and purposes.

For though the field orientation of such an object is simply a (relational) fact about the item, that holds whatever our interests or purposes are (such as the fact that a given, ostensively identified side of an object is aligned with the top of its environment), this is not in general true for any intrinsic orientation that an object may be interpreted as having, assignment of which does depend in various ways on the functions that an object can perform for us in furthering our ends.

In particular, I would claim that, insofar as types and their concrete-object tokens are considered, it is only functionally defined types that are relevant to determining the intrinsic orientation of a token, and not any of the perceptually defined visual types, tokens of which on my account make up the corresponding design tokens (CDT's) that embody any pictures. ${ }^{41}$

As an example illustrating this point, consider an object that is both a token of a functional design type, such as a particular type of car, all of whose tokens are actual cars of that type, and also--commonly, since many objects have a visual design ${ }^{42}$--a token of a visual design type, all of whose tokens are visually indistinguishable from the current token, but some of whose tokens may not be cars at all. ${ }^{43}$

My claim is that the object considered as a (token of a) functional design type--of a vehicle used for certain purposes or functions--may be capable of determining an intrinsic orientation, ${ }^{44}$ namely of determining that the roof of the car is its intrinsic top (for we standardly use cars to drive around in, and this is best achieved by regarding the upright orientation of the vehicle as being that orientation in which its roof is topmost).

However, that same object when considered simply as a token of a visual design has no power to determine an intrinsic orientation--and what is more, this is arguably a necessary feature of purely visual designs, for it could not suit our overall purposes to have possibly conflicting intrinsic orientations assigned to the same object based on different functional versus visual considerations. ${ }^{45}$

Next, suppose that a sculptor Bob decided to use that car as the raw material for a sculpture of his. I claim that the functionally defined intrinsic top of the car is irrelevant to whatever intrinsic orientation is possessed by any sculpture that Bob might produce using the car as his raw material.

For if Bob were to weld the back bumper of the car to a horizontal base, so that the car is in a vertical orientation with its radiator at the top, then surely it is undeniable that this orientation constitutes the upright orientation of the relevant sculpture, with the car's radiator as the sculpture's intrinsic top (or equivalently, of course, with the horizontal base as its 'intrinsic bottom').

The example is of some independent interest, because arguably Bob has transformed the visual design of a real, particular upended car into an effective, ironic representation of an upended car. But still, the intrinsic orientation of Bob's sculpture itself is distinct from the (functionally defined) intrinsic orientation both of the physical car that is its raw material, and from that of the sculpture's subject matter--namely, the represented car.

But how then do pictures themselves acquire their independent intrinsic orientation? As an initial answer to this question, there are various ways in which a given, nonfunctionally defined visual design token can nevertheless be used for certain pictorial functions or purposes ${ }^{46}$--more specifically, used as a vehicle for displaying various pictures, with the particular picture displayed depending both on the current field orientation of the CDT, and on the identifying interpretation of it by its viewer. ${ }^{47}$

Thus I would claim that it is in this way that artist Anna used any given individual printed design token (when mounted and framed in an appropriate orientation) as a print of one of her pictures, having its own corresponding intrinsic orientation. And then any viewer of Anna's picture is able to make an appropriately similar pictorial use of the relevant

CDT, ${ }^{48}$ in carrying out her identifying interpretation, that identifies the relevant picture when her gaze is directed upon that appropriately oriented CDT. ${ }^{49}$

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## FOOTNOTES

${ }^{1}$ 'Artworks Versus Designs', The British Journal of Aesthetics vol. 41, no. 2 (April 2001), pp.162-177. I proposed a distinction between design intentions, activities and products, as opposed to artistic intentions, activities and artworks. Examples of design products would include a specific type of car (or any other invention or device) as well as closer relatives of art such as decorative wall designs.

In order to distinguish artistic from design intentions, I presented an example in which two sculptors independently worked on a single object to produce two sculptures that were distinct just because the artistic intentions of the sculptors were distinct. This case was then contrasted with an attempted parallel example for design intentions, which failed to produce two correspondingly distinct design products in spite of the different design intentions of its designers. I argued that this failure occurred because designs are types, for which any single token of a given type could not simultaneously be a token of some other type of the same general kind; whereas the possibility of my sculptural 'double artwork' example showed that such artworks could not be types.

2 In subsequent papers I have argued that the relation is one of representation: the physical painting represents the artwork. See 'A Representational Theory of Artefacts and Artworks', TheBritish Journal of Aesthetics vol. 41, no. 4 (October 2001), pp. 353370, 'Medium, Subject Matter and Representation', The Southern Journal of Philosophy, vol. 41 no. 1 (Spring, 2003), and 'Three Depictive Views Defended', The British Journal of Aesthetics vol. 42 no. 3 (July 2002), pp. 259-278.
${ }^{3}$ For a useful general discussion of the concept of an artefact see Stephen Davies, Definitions of Art (Ithaca, N.Y.: Cornell University Press, 1991).

4 The reason for this choice is as follows. Since any change in any normally perceptible feature of the CDT might aesthetically change the corresponding artwork, all and only the actually perceptible features of the CDT must be the features of the artwork's corresponding design, so that all of its tokens must be perceptually indistinguishable. To be sure, this is a specialized, perceptual design concept that is independent of (what could be called) functional design types, which might classify as functionally distinct certain perceptually indistinguishable items, or functionally identify perceptually distinguishable items. More broadly, the distinction, and my concentration on the perceptual cases, is defensible in terms of the galaxy of reasons that distinguish aesthetic, disinterested perception of pictures from more practical or functional concerns with them.
${ }^{5}$ See also Section VIII.
${ }^{6}$ I also argued there that probably the only conclusive way to disprove 'type' accounts of artworks is to find such an example (as I did) where a single concrete entity would have to (per impossibile) be of two distinct types of the same general kind.
${ }^{7}$ One could further investigate smaller increments of rotation of 45 degrees, so that the four square pictures considered would be interspersed with four diamond-shaped pictures. But that would unnecessarily complicate the discussion, as would any
consideration of three-dimensional cases. Also distinguish the current kind of orientation from (what could be called) 'compass orientation', which concerns instead rotations of an object around a vertical axis. I discuss other such orientational issues in 'Varieties of Visual Representation', Canadian Journal of Philosophy vol. 32, No. 2 (June 2002), pp. 183-205.
${ }^{8}$ I shall interpret this characterization in a weak, culturally realistic sense as implying only that if an object has an intrinsic orientation at a given time, then it has exactly one top at that time, rather than as more stringently implying that whenever an object has an intrinsic orientation, then there is some unique side which always serves as its top. Thus the concept allows both that having an intrinsic orientation might be a contingent property of an object, and that an object might have different tops at different times during those periods in its history (if any) when it has an intrinsic orientation.
${ }^{9}$ Clearly intrinsic orientation for objects is generally relative (in various ways) to human interests and purposes--in the case of pictures, artistic intentions or cultural norms play a primary role in determining which side of a picture counts as the top. Or in the case of a home, if it were on its side it would be very difficult to live in, and so in such a case the orientation that best fits our needs (and hence is most commonly found) is such that its top serves to define the home's intrinsic orientation. See Section X for more on such functional considerations.
${ }^{10}$ In scientific studies of perceptual orientation a distinction is commonly made between intrinsic orientation and 'deictic' or indexical orientation, e.g., George A. Miller and P. N. Johnson-Laird, Language and Perception (Cambridge, Mass.: Belknap Press of Harvard University Press, 1976) ch. 6. But my concept of field orientation is not observer-relative as is their 'indexical orientation'.
${ }^{11}$ I over-simplify here in the interests of brevity. A brick standing on end might be perceived as being 'upright' even though it has no unique top. An intermediate category of 'semi-intrinsic orientation', allowing for objects with more than one top, is probably needed to deal with such cases.

12 Miller and Johnson-Laird, Language and Perception, chs. 4 and 6, refers to this as the 'characteristic' orientation of an object.
${ }^{13}$ This happens because Anna has in effect rotated herself through ninety degrees anticlockwise relative to the print; an equivalent effect could of course be achieved if Anna, when viewing the print in its normal orientation with side W at the top, were instead to rotate the print itself through ninety degrees in a clockwise direction, so that side Z is at the top.
${ }^{14}$ In a related paper, 'Four Theories of Inversion in Art and Music', The Southern Journal of Philosophy, vol. 40, no. 1 (Spring 2002), pp. 1-19, I (among other things) defend the legitimacy of such a noticed but artist-unapproved picture.
${ }^{15}$ For example, perhaps because picture 2 resembles other works of hers, so that it would be an appropriate addition to her corpus.
${ }^{16} \mathrm{I}$ argue later that this picture 2A is distinct from picture 2: see Section V.
${ }^{17}$ I discuss some other ways in Section IX.
${ }^{18}$ Many of Andy Warhol's silkscreen pictures were actually almost entirely produced by artistic assistants and technicians; but since $h e$, as the artist in question, chose those methods of producing his prints, their integrity and authenticity as distinctive original works by him is assured.
${ }^{19}$ Much traditional artistic printmaking uses the attribute of having been produced from a given printing run (as part of a limited edition, after which the printing plates etc. might be destroyed) as a criterion of authenticity for an original print. However, this procedure arguably is primarily a means of assuring potential buyers that a given print is indeed approved by the artist. Anna could use different methods to reassure her potential buyers.

See Section VII for further justification of Anna's procedure.
${ }^{21}$ See Section VI.
${ }^{22}$ I could have changed the example so that this was not so, but that might weaken the intuition that each such print, after the artist's decision, is indeed a genuine print of its respective single artwork by her. Also see Section IX on related examples.
${ }^{23}$ This concept may simply be an explicit, generalized form of the usual concept of 'interpretation' of an artwork, which (when properly used) similarly presupposes prior identification of the artwork in question.
${ }^{24}$ My distinction here between these two kinds of visual interpretation roughly corresponds to the distinction in the philosophy of language between identifying reference to entities, as carried out by referring expressions, and predications of those entities as thus identified. It is perhaps surprising that there seems not to be any corresponding standard concepts or terminology for cases of visual interpretations, since the need for some such distinction is, I take it, hard to deny.
${ }^{25}$ Arthur Danto's general view regards artworks as interpretations of such 'mere real things'. See, e.g., his book The Transfiguration of the Commonplace: A Philosophy of Art (Cambridge, Mass.: Harvard University Press, 1981).
${ }^{26}$ The point is a significant but apparently generally unrecognized one; for example, in my paper 'Three Depictive Views Defended', I defend Gombrich's thesis that one cannot simultaneously perceive a physical painting and the relevant picture by appeal to the idea of a comprehensive interpretation of low-level visual data. The general assumption that
artistic interpretation must start with physical objects rather than with visual data may have led previous commentators to overlook such possibilities.
${ }^{27}$ As illustrated by his ongoing debate with Margolis: see J. Margolis, 'Farewell to Danto and Goodman', British Journal of Aesthetics vol. 38, no. 4 (October 1998), pp. 353-374, A. Danto, 'Indiscernibility and Perception: A Reply to Joseph Margolis', British Journal of Aesthetics vol. 39, no. 4 (October 1999), pp. 321-329, and J. Margolis, 'A Closer Look at Danto's Account of Art and Perception', British Journal of Aesthetics vol. 40, no. 3 (July 2000), pp. 326-339.
${ }^{28}$ On which issue see the two contributions by Danto to a symposium on his views, Arthur Danto, 'Seeing and Showing', The Journal of Aesthetics and Art Criticism vol. 59, no. 1 (2001), pp.1-9, and 'The Pigeon within Us All: A Reply to Three Critics', The Journal of Aesthetics and Art Criticism vol. 59, no. 1 (2001), pp. 39-44. I offer some criticism of related views of Danto in my paper 'A Representational Theory of Artefacts and Artworks'.
${ }^{29}$ Picture 2 is a 'found' picture in a sense analogous to that in which a piece of driftwood could be a 'found sculpture'.
${ }^{30}$ This is a very different concept than Peg and Myles Brand's thus-described concept which Danto accepts as relevant to his own view in the following way: 'Constitutive interpretations just are what I had in mind by surface interpretations: it is what the
audience grasps when it understands the work, and, so far as this interpretation answers to the artist's intention, to understand the work is to know what the intention was.' (Mark Rollins, Danto and His Critics (Oxford, UK ; Cambridge, Mass., USA: Blackwell, 1993), p. 201). This Dantoesque concept is much closer to my concept of an identifying interpretation (apart from the differences as noted in Section IV).
${ }^{31}$ In that the object after interpretation has acquired properties it did not have prior to being thus interpreted. But such constitutive interpretation by artists should be sharply distinguished from more controversial issues as to whether critical interpretation is ever genuinely productive; e.g. Margolis claims that it can be in 'Reinterpreting Interpretation', The Journal of Aesthetics and Art Criticism vol. 43 (1989), pp. 237-251, while Robert Stecker denies it in his 'The Constructivist's Dilemma', The Journal of Aesthetics and Art Criticism vol. 55 no. 1 (1997), pp.43-52.
${ }^{32}$ That is, not merely 'empirically possible' in some minimal sense such as 'not inconsistent with any known scientific laws', but rather that there is a reasonably high probability that reasonably informed viewers would be able to understand the work in the desired way.
${ }^{33}$ I discuss pictures exhibited in non-upright positions in my paper 'Four Theories of Inversion in Art and Music', which also discusses various competing theories regarding the role of orientational factors in defining the identity of pictures.
${ }^{34}$ Or more precisely, as I argued in Section IV, identifyingly interpret the visual data from the print-related area of her visual field.
${ }^{35}$ In spite of the fact that one can legitimately deny that these pictures are themselves artist-intended visual artworks.
${ }^{36}$ For example, two species of animal can only be distinct species if there is no animal that is simultaneously an instance of both species. See my paper 'Artworks Versus Designs' for more discussion on this point, which paper also argues (as previously noted) that singular artworks such as individual sculptures cannot be types, because of an example I present which shows that a single sculptural object could embody two distinct sculptures. I extend this result to undermine type theories in the performing arts as well, in a forthcoming paper, 'A Counter-Example to Theatrical Type Theories', Philosophia 30 (2002). See also my 'Theater, Representation, Types and Interpretation,' American Philosophical Quarterly, vol. 39 no. 2 (April 2002), pp. 197-209, for other anti-type arguments.
${ }^{37}$ I assume here, as before, that the types in question are visually rather than functionally defined types: see footnote 4.
${ }^{38}$ As is well illustrated by the near total lack of discussion of such issues in the literature. But Richard Wollheim does briefly discuss the process by which an artist chooses an
orientation in Wollheim, Painting as an Art (Princeton, N.J.: Princeton University Press, 1987), p. 20).
${ }^{39}$ For example, because of Danto's well-known arguments to the effect that qualitatively indistinguishable objects can nevertheless be distinct artworks, e.g., in Danto, The Transfiguration of the Commonplace.
${ }^{40}$ Of course I could have compared four rather than three such artworks, but that would not have advanced the discussion in any substantive way.
${ }^{41}$ Which is not, of course, to deny that those same objects may also be tokens of functional types, as in the following example.

42 I argue in my paper 'Artworks Versus Designs' that only meaningful configurations are designs, so that, for instance, some random pieces of rock may not be tokens of any design.
${ }^{43}$ The problem described earlier in Section VIII about conflicting distinct types, which prevents pictures from being types, does not apply in the present case, since visual and functional types are not types of the same general kind.
${ }^{44}$ Though not all functional types need do so; my claim is only that any types that do determine the intrinsic orientation of their tokens are functional types.
${ }^{45}$ This is not to deny, of course, that a given picture (such as a representational picture of some buildings) has an intrinsic orientation--which would normally be that orientation in which the buildings look upright when one looks at the picture. But as always it is necessary to distinguish the relevant intrinsically oriented picture from its concrete CDT, which is the particular visual design token in question.
${ }^{46}$ An analogy may be helpful. A piece of wood could be used as a hammer, or a support, or a barrier etc., without it being the case that it actually is a hammer, or a token of any other such functionally defined type.

For an account of how pictures acquire an intrinsic orientation independently of the current functionalist considerations, see my paper 'Varieties of Visual Representation'.
${ }^{47}$ Elsewhere I argue that a CDT more specifically represents such pictures: see footnote 2. Arguably the current results could be used to support such a view, but the details will have to be left for another occasion.
${ }^{48}$ As noted previously, in my view the likely cognitive mechanism by which this is done involves the interpretive processing of low-level visual information from that CDTrelated region of the visual field: see Section V.
${ }^{49}$ My thanks to an anonymous referee for very helpful comments on a precursor to this paper.

