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# Watching, Sight and the Temporal Shape of Perceptual Activity<sup>1</sup>

## 1.0 Introduction

As well as perceptual states there are perceptual doings or goings on. Amongst the perceptual tasks recorded by Gilbert Ryle (1949) and (1954) are: watching, observing, looking for, searching for, noticing, and looking at.<sup>2</sup> The task of explaining the logic and philosophical role of perceptual activities or processes exercised many philosophers in the 1950s and 1960s.<sup>3</sup> But the prevailing trend in more recent philosophy of mind has been for interest to focus more narrowly on the generic categories: *perception*, or *perceptual experience*.<sup>4</sup> Where active perceptual occurrence or perceptual doings are at issue, the terms of art “attention” (for the capacity for such activity) and “attending” (for the activity itself) are usually used to harness and direct discussion.<sup>5</sup> But in adopting these blanket terms of art we accept, even if only implicitly, the assumption that at least as far as philosophical argument and explanation is concerned perceptual activities are all the same. This assumption is, I think, mistaken. That this is a mistake, and that there are philosophically important and interesting differences between such activities, is not something I shall be in the position to wholly substantiate in this paper. However, it is my rejection of this assumption that explains a focus that might otherwise seem unduly narrow. I shall be concerned here simply with what watching a particular material object involves, and with the task of giving a solution to a problem about watching that arises from elementary reflection.

I begin the paper with a philosophical difficulty that centres on watching a particular material object over time. Two seemingly uncontroversial truths about watching an

object appear to lead us to a problematic conclusion. After canvassing and rejecting a number of different attempts to solve this problem, I describe what I take to be distinctive about the kind of perceptual activity which watching an object exemplifies, and how this helps us to make progress with solving this puzzle. The hope is that the apparatus deployed in solving the problem will prove fruitful not only in discussion of perceptual monitoring in non-visual modalities, but also in providing a foundation for discussion of both the diversity of perceptual activities and the relation of perceptual activity to other categories of mind.

## 2. 0 Background to the puzzle

### 2. 1 Time- occupation and the process- accomplishment distinction

I shall be focussing on the type of perceptual episode: watching a particular material object O. In what follows, I take the philosophical categories relevant to the discussion of the way that perceptual episodes occupy time to have a profile determined by the influential typology of verb classifications offered by Zeno Vendler (1957) and (1967).<sup>6</sup>

Vendler notes that some verbs possess continuous tense forms and some do not. It is impossible to intelligibly answer such a question as “What are you doing?” with “I am knowing”, “I am believing” or “I am crossing the finish line”. “Knows” and “believes”, says Vendler, like “loves”, “desires”, “understands” and “hopes for” are “stative” verbs: they denote states or conditions; ways that someone (or something) can be. Where states or conditions do occupy time, they do so by lasting, enduring or being maintained over those periods of time. By contrast, Vendler says, it is possible to answer the question “What are you doing?” with “I am running”, or “I am

walking”. “Running” and “walking” are things that exist by developing or unfolding over periods of time. Given that they exist by unfolding, it is not possible to merely walk at a time. Where “ $\Phi$ ” is a verb that takes genuine continuous tense form:<sup>7</sup>

(U) If S is  $\Phi$ ing at t, S is  $\Phi$ ing during a period of time  $t_x$ - $t_n$ , such that t is a time within that period.

By contrast, it is impossible to intelligibly answer such a question as “What are you doing?” with “I am knowing”, “I am believing” or “I am crossing the finish line”. “Knows” and “believes”, says Vendler, like “loves”, “desires”, “understands” and “hopes for” are “stative” verbs: they denote states or conditions; ways that someone (or something) can be. Where states or conditions do occupy time, they do so by lasting, enduring or being maintained. They do not develop or unfold over time. Though verbs like “crossing the finish line” (or “reaching the summit”, for example) differ from stative verbs in singling out things that exist by occurring at times and not by obtaining, “achievements” differ from goings on like running and walking in that necessarily they do not occupy periods of time. To cross the finish line does not take up any amount of time at all; it is an instantaneous event, constituted by a mere change in state.

According to Vendler (1957), not every verb that is capable of taking continuous tense form denotes a kind of going on with the same temporal shape. Though walking necessarily goes on for a period of time, it does not necessarily take any definite amount of time. Walking, like running or drawing, is an atelic activity or process: it does not essentially involve progress towards a point that constitutes the successful achievement of the aim of that activity and constitutes its point of termination. On the other hand, walking to the shops takes time. Walking to the shops, like drawing a

circle, or pushing a cart to the top of the hill is telic; it is a kind of occurring or going on which possesses a natural point of completion; a terminus. One walks to the shops in a certain amount of time, though one walks for a period of time.

Vendler (1957) suggests a variety of Aristotle-inspired criteria for distinguishing between atelic processes and telic accomplishments. One manifestation of the difference between activity or process and accomplishment, according to Vendler (1957) and Kenny (1963) is that activities like walking are *homogeneous*, while accomplishments like walking to the shops are not. If someone has walked for an hour, then at any time  $t$  such that  $t$  is during that hour they (had) walked at that time. But if someone walked to the shops in ten minutes, it is not true that at any time  $t$  during that ten minutes that he (had) walked to the shops at that time. The discussion in Vendler (1957) and (1967) suggests the following criterion for homogeneity:

(H) If  $S \Phi$ ed from  $t_1$ - $t_{10}$ , then for any time  $t$  such that  $t$  is within  $t_1$ - $t_{10}$ ,  $S$  (had)  $\Phi$ ed at  $t$ .

A number of writers, amongst them Barry Taylor (1977) and David Dowty (1977), argue that not all processes are homogeneous in the sense given by (H)<sup>8</sup>. According to Taylor and Dowty, some processes are only homogeneous down to certain minimal parts, where the nature of the minimal parts is determined by constraints imposed by the nature of the activity or process that goes on. Take the process of walking. In order to have walked, the claim goes, one must do a number of things, other than, say, raising one's left leg: one must swing one's left leg, plant it down, raise the right leg, etc. Given this, throughout a period of time during which one walked there are points of time during which one had not yet walked, because the occurrences that mark the completion of the cycle of activities necessary for one to have walked had not yet

occurred. At these times, it will not be true that one (had) walked at that time. What will be true is just that one had raised one's left leg, for example. Clearly it cannot be a constitutive truth about atelic processes that they are nonhomogeneous.

However, whether  $\Phi$ ing is a homogeneous or nonhomogeneous processes or an accomplishment:

(I) If S  $\Phi$ ed from  $t_1$ - $t_{10}$  then for any time  $t$  during  $t_1$ - $t_{10}$  S was  $\Phi$ ing at  $t$ .

Given (U), if Lily drummed her fingers from  $t_1$ - $t_{10}$ , then at any time  $t$  during  $t_1$ - $t_{10}$ , Lily *was drumming her fingers* at  $t$ . For, if Lily drummed her fingers from  $t_1$ - $t_{10}$  she was drumming her fingers from  $t_1$ - $t_{10}$ . So by (U) she will have been drumming her fingers at any time within  $t_1$ - $t_{10}$ . Similarly, if Jim walked to the shops from  $t_1$ - $t_{10}$  then though it is not necessarily the case that at any time  $t$  during  $t_1$ - $t_{10}$  Jim (had) walked to the shops at  $t$ , it must be the case that Jim *was walking to the shops* at  $t$ . For if Jim walked to the shops from  $t_1$ - $t_{10}$  he was walking to the shops from  $t_1$ - $t_{10}$ . Then by (U), he was walking to the shops at any time within  $t_1$ - $t_{10}$ . This does not imply that if Jim is walking to the shops at  $t$  he must succeed in walking to the shops. All it implies is that if Jim *did* succeed in walking to the shops, then at every point in time during the time he walked to the shops, he was walking to the shops.

Walking is itself a non-homogeneous process. If Jim walked from  $t_1$ - $t_{10}$  it is not necessarily the case that Jim (had) walked at any time within  $t_1$ - $t_{10}$ . But it doesn't follow from the fact that Jim had not yet walked at  $t$  that Jim was not walking. Even if Jim (had) only lifted his left leg at (by)  $t$ , if Jim *did* walk from  $t_1$ - $t_{10}$  then he nevertheless was walking at  $t$ . For if Jim walked from  $t_1$ - $t_{10}$  he was walking from  $t_1$ - $t_{10}$ , and given (U) if Jim was walking from  $t_1$ - $t_{10}$ , he was walking at any time  $t$

within  $t_1$ - $t_{10}$ . It is true that at  $t$ , Jim was (say), raising his left leg, given that he was raising his left leg from  $t_1$ - $t_3$  and  $t$  is within that period of time. But if Jim did walk from  $t_1$ - $t_{10}$ , Jim wasn't *merely* raising his left leg at  $t$ . He was walking at  $t$ . We ought to say that in such a case, Jim was raising his left leg at that time *in* walking at that time.

### 2.3 Watching, process and accomplishment

Watching a particular material object is not a state of a perceiving subject. It is not something that obtains, but is something occurrent, or at least event-like. Within the category of things that occur in time, watching has a temporal profile like processes and accomplishments as opposed to achievements. Wherever someone is watching something, what he is doing is something that can be singled out by an expression used with a genuine continuous tense (compare here by contrast “loving” “believing” or “starting to watch”). In the vocabulary of Vendler's typology, that is, “watching” can be a genuine answer to the question: “What is he doing?”. That marks watching out as a kind of going on which, unlike a perceptual achievement, necessarily exists by unfolding from one time to another, no matter how short that period of time is.<sup>9</sup>

Watching a particular material object may be either a process or an accomplishment.<sup>10</sup> Some stretches of watching are activities that do not necessarily possess a point determined by the nature of that activity at which a period of watching must come to an end. If one is watching Lily, and is just, say, watching her moving, then there is no point determined by the nature of the process at which that stretch of watching must come to an end. But if one is watching Lily walking to the other side of the courtyard then seeing Lily reach the other side of the courtyard will be a point at which

necessarily a stretch of watching Lily walking to the other side of the courtyard will have been brought to a point of termination.<sup>11</sup>

Given (U) is true of watching then whether watching is a process or accomplishment, (I) is true of it. If one watched Lily moving from  $t_1$ - $t_{10}$ , then at any time  $t$  during  $t_1$ - $t_{10}$  one must have been watching Lily moving at that time. Time  $t$  is a time at which one is watching Lily moving in virtue of the fact that there is a period of time that  $t$  is within, during which one is watching Lily moving. And if one watched Lily walking to the other side of the courtyard from  $t_1$ - $t_{10}$  then at any time  $t$  during  $t_1$ - $t_{10}$  one must have been watching Lily walking to the other side of the courtyard at that time. One was watching Lily walking to the other side of the courtyard at  $t$  in virtue of the fact that  $t$  is within a period of time during which one is watching Lily walking to the other side of the courtyard. So if one watched O from  $t_1$ - $t_{10}$ , then at any time  $t$  during  $t_1$ - $t_{10}$ , one was watching O at that time.

The process or accomplishment of watching a particular material object, then, is something that necessarily goes on throughout a period of time; which has temporal duration, and which is going on at any time during a period of time over which it is going on.

#### 2. 4 Watching and sight

The activity of watching a particular material object is perceptual. While there is much to be said about what exactly the fact that watching is a perceptual activity consists in, it appears to be a relatively uncontroversial consequence of the fact that watching a particular material object is a perceptual activity that watching involves seeing whatever is watched.<sup>12</sup>



There is a sense of “visually perceives O”, or “sees O”, according to which it designates a state of the perceiving subject; a way that the subject is.<sup>13</sup> In this sense, someone who sees something, O, is in the state of *visual perceptual awareness of O*.<sup>14</sup> The state *visual awareness of O* is not something that occurs or can be going on in or through time, or which perceivers can be engaging in. For a subject to be in such a state is simply for that subject to be in some distinctive, privileged epistemic position with respect to O, a privileged position that is in some way dependent on the reliable functioning of the perceptual faculties and the processes they subserve. Though such a visual state is not a process or an activity, there are processes the going on of which is sufficient for the subject to be in such a state. Watching appears to be one such. Once S begins to watch something, O, S either moves into the state *visual awareness of O*, or if it is a state that S is already in (in virtue of her, say, having been looking at O), it is preserved in existence into a new phase. Necessarily, S remains in that state for at least as long as the process of watching goes on.<sup>15</sup> It is plausible enough to speculate that it is the function of perceptual processes like watching, scrutinizing, gazing, touching and listening, to put those in whom such processes operate into such a state of visual awareness of things, a state that mediates the acquisition of perceptual knowledge.

In virtue of the fact that watching a particular material object, O, is perceptual, the following seems to be true of such an activity:

(W) If S is watching O at t, then S sees (can see) O at t.

### 3.0 A Puzzle about Watching

The results of the previous discussion are these. Given that the process of watching occupies time according to (I), for any S, if S watched something from  $t_1$ - $t_{10}$ , then S was watching it at any time during  $t_1$ - $t_{10}$ . Further, in virtue of the fact that watching is perceptual, if S is watching some object, O, at t, then S saw it at t.

But a puzzling case implies that at least one of these two claims about the nature of watching must be false.

### 3. 1 The Bird Case

Jim is watching a peregrine falcon swoop down from its perch high up on the crag. It plummets downwards, flying low across the field just in front of him. The bird passes behind a tree, before flying across the other side of the field, then climbing steeply back up to its nest on the cliff edge. Suppose the bird took off from the crag at  $t_1$  and returned to the nest at  $t_{10}$ . Then Jim was watching the bird from  $t_1$  to  $t_{10}$ . Given that Jim watched the bird from  $t_1$ - $t_{10}$  and given the continuity of the activity of watching a particular material object, Jim was watching the bird at any time during  $t_1$ - $t_{10}$ . The fact that the activity of watching the bird is perceptual implies that if Jim was watching the bird at any time, then he saw the bird at that time. But together these truths entail that Jim saw the bird at  $t_5$  when (suppose) the bird was passing behind the tree. But that cannot be the case. Given that the bird was behind the tree between  $t_4$  and  $t_6$ , Jim *could not* have then seen it at  $t_5$ .

To resolve this puzzle, one must apparently reject at least one of the following:

(1) If Jim watched the bird from  $t_1$ - $t_{10}$ , then Jim was watching the bird at any time t within  $t_1$ - $t_{10}$ . (Watching satisfies (I))

(2) Jim watched the bird from t1-t10

(3) If Jim was watching the bird at t, then Jim saw the bird at t. (Watching satisfies (W))

(4) At t5 (a time when the bird is behind the tree) Jim does not see the bird.

The puzzle of watching is that one must reject one of (1)-(4), though they are all independently compelling.

#### 4. 0 Solving the puzzle by denying (2)

Perhaps premise 2 is false, because (W) is false. Someone may be tempted to argue in the following way: Throughout the period of time the bird was behind the tree, what Jim was doing was *watching for* the bird, or *watching out for* the bird (or perhaps, equivalently, *looking for* the bird or *looking out for* the bird). Throughout this period of time, the activity he is engaged in is a type of activity to be understood in terms of concepts more appropriate to *visual search* than to concepts like *watching the bird* or *seeing the bird* which appear to imply the ‘success’ of one’s perceptual project. To watch for or look for O is, at least in part, to attempt to spot O or to attempt to catch sight of O.

However exactly the process of watching (out) for something is to be explained, it is clearly to be distinguished from the process of watching a particular material object.<sup>16</sup>

One can be watching for a particular object from t1-t10 without watching it from t1-t10. For example, one might have been told that an eagle has a nest up in some particular tree, and as a result set up watch for the bird. But it may never show up.

Given this, there is a tempting line of argument for the conclusion that Jim could not have been watching the bird at  $t_5$ , when it was behind the tree, and he had not yet watched it flying out from behind the tree. According to this line of thought, even where Jim did come to watch the bird flying out from behind the tree he could not have been watching the bird at  $t_5$ , before it had re-emerged, because plainly he was not doing anything at that time that he was not also doing at that time in circumstances in which he clearly failed to watch the bird from  $t_1$ - $t_{10}$ . Suppose a case in which, when the bird goes out of Jim's vision behind the tree at  $t_4$ , it is vapourized by a blast from a ray-gun, or that at  $t_4$  it flew full-speed into a hole on the far side of the tree. Clearly, Jim fails to be watching the bird at  $t_5$  in those cases. So he must fail to be watching the bird at  $t_5$  in the type of case where he did watch it re-emerge after having flown behind the tree. Were one to excise out the relevant stretches of mental activity from  $t_4$ -  $t_6$  in both such cases those stretches of mental activity would be phenomenally identical. But given that there is nothing going on in one such case at  $t_5$  (when the bird was behind the tree) that was not going on in the other, Jim could not have been watching the bird at that time.

But this is not immediately convincing. We saw in the discussion of a non-homogeneous process like walking that it does not follow from the fact that  $S$  was raising his left leg at  $t_2$  that  $S$  was not walking at  $t_2$ . It may be true that at  $t_2$ ,  $S$  was raising his left leg, say, because he was raising their left leg from  $t_1$ - $t_3$  and  $t_2$  is within that period of time. But if  $S$  was walking from  $t_1$ - $t_{10}$  and  $t_2$  is within  $t_1$ - $t_{10}$  then  $S$  will also have been walking at  $t_2$ , even if  $S$  was also raising their left leg at that time. The fact that one might have raised one's left leg at  $t_2$  without having walked does not entail that where one had raised one's left leg at  $t_2$  and one did walk from  $t_1$ - $t_{10}$ , that

one was merely raising one's left leg at  $t_2$ . In such cases one was not merely raising one's left leg from  $t_1$ - $t_3$ .

Correspondingly, the simple response to the thought about watching out or visual search will be that it does not follow from the fact that S was watching out for the bird as it passed behind the tree at  $t_5$  that S was not watching the bird from  $t_1$ - $t_{10}$ . It is true that S was watching out for the bird as it passed behind the tree at  $t_5$ , given that he was watching out for the bird from  $t_4$ - $t_6$  and  $t_5$  is within  $t_4$ - $t_6$ . But even though to watch out for the bird is not to watch the bird, this does not in itself show that S could not have been watching the bird at  $t_5$ . It does not follow from the fact that he was watching out for the bird when it passed behind the tree that he was merely watching out for it (even if the excised stretches of activity from  $t_4$ - $t_6$  in a watching and a non-watching case are "identical"). Given that  $t_5$  is within  $t_1$ - $t_{10}$  what we ought to say is that S was also watching the bird at that time, given that from  $t_1$ - $t_{10}$  S was watching the bird flying along, behind the tree, watching out for it as it passed behind the tree and then watching it re-emerging from behind the tree.

But this line of response does not get to the bottom of the worry about (2). The worry is not just that when the bird passed behind the tree he was watching for it and to watch for something is not to watch it. It is that watching for O excludes watching O. There is no difficulty in understanding how someone may have been not merely raising their left leg at  $t$  but walking at  $t$  (and, perhaps, raising their left leg at  $t$  in walking at  $t$ ). But it is difficult to see how one may have been not merely watching out for O but watching O. For, surely, if S was watching for O at  $t$  then S could not have seen O at  $t$ . Given that watching for something is a mode of visual search, you cannot watch for something that you can already see.<sup>17</sup> But if S was watching O at  $t$ ,

we have been assuming, necessarily S could see O at t. But then if S watched for O at t, S cannot have been watching O at t.

Is this the solution to our puzzle? Ought we to say that at all times when the bird is behind the tree, S is watching for the bird (or looking for the bird), not watching it, and, hence, given that watching satisfies (I), proposition 2 of the puzzle ought to be rejected?

We will be in a better position to evaluate this purported solution later. In advance, though, it is worth noting that if I assert, of the circumstances envisaged in the puzzle case: “Jim could not have watched the bird from t1-t10 because he was only watching out for the bird (or looking for the bird) as it passed behind the tree” what I say appears false. More to the point, if Jim became momentarily distracted by his niece shouting his name when the bird passed behind the tree, and turned to see what she wanted, then arguably we say something true when we say: “Jim did not watch the bird from t1-t10 because he did not watch out for it when it went behind the tree.” There is something puzzling here. Though their relation to sight may suggest a reason to think that one cannot be watching something if one is watching out for it, there is at the same time some sort of intuition that watching for O (or looking for O) and watching O do not exclude one another. The solution I shall later recommend can explain why this is.

## 5.0 Unfolding activities and the relevance of times

A different way to proceed with the puzzle might be to concede that at any time during the period the bird is behind the tree Jim fails to watch the bird, and so fails to see it, but to insist that this does not entail that Jim did not watch the bird from t1-t10.

I now turn, then, to the thought that (1) is false; that the activity of watching a particular material object does not unfold in such a way that necessarily one is watching something at any time during a period of time through which one watched it.<sup>18</sup>

One suggestion is that (1) is false because what is true of processes and accomplishments is only:

(I\*) If S  $\Phi$ ed from t1-t10 then S was  $\Phi$ ing at any relevant time during t1-t10

Here, we might suppose, facts about the relevance of times are determined by facts about the intervals of time that they fall within, and facts about the context in which the activity of  $\Phi$ -ing goes on. As an example, it might be plausible to suppose that one may have been working on a paper from 10am-12pm, but one was not working at all times during 10am-12pm, because one may have been looking out of the window at 10.40am and making a cup of tea at 11.10am. According to this line of thought, that one was doing these things at these times during 10am-12pm is consistent with one's having worked on a paper from 10am-12pm, because the periods of time during which one was not working, say, 10.38am- 10.41am, and 11.08-11.15 am, are in the context (for whatever reason) irrelevant. Given that they are irrelevant, the fact that one was not working on a paper at those times does not entail that one did not work on the paper from 10am- 12pm. In addition, the thought may go, changes in the context can make a difference to whether these times and the sub-intervals they fall within are relevant. One can envisage circumstances, for example, in which the urgency of working with great intensity on one's paper all morning makes these points in time, and what one does (or fails to do) at them, relevant to whether one worked on one's paper all morning. When more is at stake, one cannot have been

idling away time in reverie at some time or making a cup of tea at a time and yet have worked on a paper from 10.00am- 12.00pm.

The corresponding thought about the puzzle case is that at the time when the bird went behind the tree, Jim was not watching the bird, but, say, merely watching out for the bird, or looking for it, but this does not entail that he failed to watch the bird from  $t_1$ - $t_{10}$  because the times during  $t_1$ - $t_{10}$  at which he did not watch it are, in the circumstances, irrelevant. They are irrelevant because in the circumstances they are just too short to make a difference to a proper and informative specification of what Jim is doing from  $t_1$ - $t_{10}$ . The same ought to be said, it could be suggested, about cases in which during  $t_1$ - $t_{10}$ , Jim briefly rubbed his eyes or screwed his eyes up to protect against a leaf that blew in his face.<sup>19</sup> None of this entails that there are not circumstances in which what goes on (or fails to go on) at such times is relevant. Suppose for example circumstances in which what is being watched is a rare kind of bird capable of a spectacular display of colour that is short enough to be missed as the bird flies past on the far side of the tree. But it is the fact that what is true of activities ought to be understood in terms of (I\*) rather than (I) that solves our puzzle: failure to watch O at irrelevant times during  $t_1$ - $t_{10}$  is consistent with having watched O from  $t_1$ - $t_{10}$ .

There are a variety of different ways in which the context in which perceptual activity takes place may be involved in determining the facts about what goes on in those circumstances. But the particular line of thought suggested here, as it stands, ought to be resisted.

One response is to just insist that if these are genuine cases in which one is not  $\Phi$ ing at the relevant times, then there are momentary interruptions to one's  $\Phi$ ing and hence



it cannot be true that one  $\Phi$ ed from t1-t10 given that if one  $\Phi$ ed from t1-t10 one must have been  $\Phi$ ing from t1-t10. What is true is that one  $\Phi$ ed or was  $\Phi$ ing *with momentary interruptions* from t1-t10. But there is obviously no conflict between having  $\Phi$ ed with momentary interruptions from t1-t10, and one's not having been  $\Phi$ ing at all times during that period. Given that it is usually not relevant or informative in specifying what someone is doing from one time to another to mention momentary interruptions to what they were doing we usually do not qualify in this way our reports of activities to which there were, and we know there were, momentary interruptions. But nevertheless the failure to qualify reports of activities to which there are, and we know there are, such interruptions, ought not to lead us to think that in these cases the relevant processes or accomplishments are non-continuous.

A more interesting response, though, draws on ideas about non-homogeneity discussed earlier, and the relation of these facts to the context in which the activity takes place. That certain activities are nonhomogeneous is a consequence of the fact that certain activities—walking, running and waltzing, amongst them—are complex; the fact that activities of this kind go on during a period of time entails that certain 'simpler' sub-activities that compose them went on during that period of time. A feature of these complex activities is that there may be no fully general context-independent way to determine what someone has to be doing, or to have done, in order to count as doing them.<sup>20</sup> Perhaps it is enough for a patient recovering from serious injury to have taken two steps in order to have walked, though on the occasion of first being injured, that he took, and was able to take, only two steps was enough to manifest the fact that he did not, and could no longer, walk. Activities like working on a paper from t1-t10 may similarly also be held complex, involving a range of different

sub-activities that go on during that time. Plausibly, what counts as working on a paper is context-dependent. In one whose long-established work habits involve looking out of the window or making tea while thinking about philosophy, looking out of the window and making a cup of tea are ways of working on one's paper: one looks out of the window and makes tea *in* working on one's paper. In these circumstances, looking out of the window and making tea are sub-activities or constituents of the complex activity that is working on one's paper. But there may be other contexts in which working on one's paper is a complex of a different kind, an activity that excludes looking out of the window or making tea. Perhaps with urgent deadlines and with one having spent a great deal of time in previous days looking out of the window and drinking tea while thinking through interesting lines of thought one knows to be strictly speaking irrelevant to the final draft of the paper that has to be written, one's looking out of the window or making tea will be excluded from the complex activity of working on one's paper. In this context, it may be that working on one's paper is now just the activity of attentively and urgently typing up one's notes on the final draft into the computer (this activity will itself be a complex of mental and bodily sub-activities.)

What we ought to dispute with respect to the line of argument offered here, though, is just that relative to the same particular interpretation of what it takes to be  $\Phi$ ing, one may have  $\Phi$ ed from  $t_1$ - $t_{10}$  and yet not been  $\Phi$ ing relative to that same interpretation at some time during  $t_1$ - $t_{10}$ . Suppose that in a particular context, looking out of the window and making a cup of tea are sub-activities of the complex activity of working on one's paper. Then that one was, for example, looking out of the window at time  $t_1$ , where  $t$  is a time during  $t_1$ - $t_{10}$  will be insufficient to show that working on one's paper is does not satisfy (I). For one was looking out of the window at  $t$  *in* working on

one's paper at  $t$ . If there are contexts in which these activities are excluded from working on one's paper it will be false that one is looking out of the window at  $t$  in virtue of working on one's paper at that time. But then neither will it be true that one was working on one's paper from  $t_1$ - $t_{10}$  where one was looking out of the window at  $t$ , where  $t$  is during  $t_1$ - $t_{10}$ . As in the first response, these cases will then be best described as cases in which one hurriedly typed up one's notes on the final draft, but with momentary interruptions, from  $t_1$ - $t_{10}$ .

Similarly, there may be circumstances in which one is watching out for  $O$  at  $t$  in virtue of watching  $O$  at  $t$ . Here, for reasons concerning the context in which the activity goes on, watching out for  $O$  may count as part of the complex of activities that constitutes watching  $O$ . In other circumstances, however, features of the context of activity may exclude watching for  $O$  from being part of watching  $O$ . Perhaps where what is watched is a bird that offers a fantastic colour change display in a barely perceptible interval of time, watching out for the bird as it passes behind the tree at  $t_5$  is incompatible with watching the bird at that time, and in such circumstances, one will not have watched the bird from  $t_1$ - $t_{10}$ . In either case, though, there is no threat to the claim that watching a particular material object satisfies (I). Neither case shows that a perceiving subject may watch something from  $t_1$ - $t_{10}$  and yet fail to watch something at a moment of time during  $t_1$ - $t_{10}$  relative to the same interpretation of watching, and relative to the same set of restrictions or permissions on which sub-activities can constitute part of it.

The objection started with the thought that facts about the role of the context of activity may help to show why continuity fails. What appears to emerge though is that features of the way that context enters into determining what activities go on in those

contexts offer us a principled way of explaining and defending the idea that activities are continuous, as well as affording a reasonable diagnosis of one source of the temptation to take (1) to be false. Shifts in the contextually determined requirements for constituting part of the activity of watching may deliver verdicts that appear to be at odds with (I).

In motivating the idea that in different contexts distinct sub-activities may be parts of watching I made the claim that it is plausible that in some contexts watching out for O may count as part of the activity of watching O, while in others it does not. But if (I) does not fail for the reasons just mentioned, then we are still in need of an explanation of the puzzle about watching. We are also still in need of a solution to the difficulty that emerged in the previous section. How could a perceptual agent be watching out for O at t in virtue of watching O at t, given that according to (3), the fact that S is watching O entails that S can see O, and given that it is overwhelmingly plausible to maintain that if S is watching for O at t then S cannot see O?

## 6.0 Towards a solution to the puzzle about watching

We do talk of watching the bird or watching him *simpliciter*. That, of course, is how the issue about watching has initially been broached and investigated here. But this way of talking is misleading. At the core of processes of perceptual monitoring of the kind exemplified by watching—and this is the first step on the way to a solution of the puzzle about watching—is the fact that when one watches a particular material object, what one watches is *what that object is doing*.

Watching what O is doing, I suggest, is a kind of ‘visual perceptual monitoring’ of O. For S to visually monitor O throughout a period of time is for S to be maintaining

visual perceptual awareness of O throughout that time. Visually monitoring O is a process or accomplishment that plays a preservative function with respect to visual perceptual awareness of O. This is reflected in the idea that to visually monitor O throughout a period of time is to visually keep track of O throughout a period of time.

Watching what O is doing is a particular kind of visual monitoring of O. For S to watch what O is doing is not just for a process or accomplishment to merely happen or occur, in S, which involves the maintenance of visual awareness of O. For S to watch what O is doing is for S to do something. To distinguish the kind of process or accomplishment of maintaining visual awareness of O which goes on when S watches what O is doing from the kind of maintenance of awareness which is a mere happening or a mere occurrence I shall say that for S to watch what O is doing is for S's visual monitoring of O to be 'agential'. It is not my aim in this paper to explain what makes watching what O is doing agential, or the different ways that agency can be manifested in perceptual processes and accomplishments. That is something I take up elsewhere. In advance of such discussion, however, I use the adjectival term 'agential' or the noun 'activity' as marks of neutrality about the relation between a going on of the type *watching what O is doing*, and the kinds of occurrences that constitute paradigmatically 'full-blooded' instances of action.<sup>21</sup>

Where S watches what O is doing, S is maintaining visual awareness of O, where S's monitoring of O is agential, an instance of S actively doing something. We can further characterize the activity of watching what O is doing by reference to the aim of the process of visual monitoring, where S watches O; that is, what such an activity of monitoring is for, or, what its function is, when S is engaged in watching something. In rational agents, watching a particular object is epistemically directed. Where S is

watching what O is doing, the aim of that activity of monitoring O is to provide S with knowledge of what O is doing; to put S in a position in which he knows what O is doing. For S to know what O is doing, I shall take it, is for S to know that p, where “p” is an answer to the question: “What is O doing?”. The aim of watching is realized where S maintains awareness of O with the aim of knowing what O is doing, and S knows what O is doing in virtue of maintaining awareness of O. It may be, for example, that the aim of watching O is realized in the knowledge that O is flying, or that O is doing nothing. Where the aim of watching is realized in S’s knowledge, at t, that p (where “p” is an answer to the question: “What is O doing?”) and where this state of knowledge is a state that the subject is in, at t, in virtue of the fact that at t he is engaged in maintaining visual awareness of O, we can characterize that condition as one in which S can see what O is doing, where to see what O is doing is to see that p, where “p” is an answer to the relevant question about what O is doing.<sup>22</sup>

A perceiving subject may be watching something even though he fails to realize the aim of the activity of watching with respect to that object, at least to any substantial or interesting degree. If a subject has been given misleading counterevidence to the effect that an object which may appear to be moving is stationary, then that subject may be watching that object though he will not, because of the misleading counterevidence he possesses, be in the condition of knowing what that object is doing in virtue of maintaining awareness of it. I set it out that in order for a perceiving subject to know what an object is doing in the sense that is relevant to the realization of the aims of watching, it is necessary that in virtue of agentially maintaining visual awareness of O S knows that p, where p is a correct answer to the question: “What is O doing?” There may be very many things that count as correct answers to the question: “What is O doing?” But in the circumstances described here, given that our

subject has good counterevidence against any proposition to the effect that O is moving around, it is highly implausible that the subject will be in the position to have knowledge that p where p concerns O, where p is almost any interesting or informative answer to the question about what O is doing. In these circumstances, it is not even true that *O is doing something*. O is doing nothing.

So it is enough to count as realizing the aims of watching that the subject possesses perceptual knowledge that p, where p is some correct answer to the question about what O is doing. To all practical intents and purposes, and even granting the existence of defeaters to some putative items of perceptual knowledge, there will almost always be knowledge about O that the subject possesses in virtue of agentially maintaining contact with O.

In some contexts though, a particular correct answer to the question: “What is O doing?” may become salient. Then if the subject fails to have the relevant bit of knowledge it may be plausible to think that the aims of the relevant stretch of perceptual activity have not been fulfilled. Suppose the salient answer to the question: “What is O doing?” in the circumstances is “O is signalling for the subject to stop”, but where the subject has no concept of such an act of signalling. However, though the aim of watching is not fulfilled in virtue of the possession of this piece of perceptual knowledge, the subject may nevertheless have perceptual knowledge that the person in the road is jabbing their finger furiously at the ground. Alternatively, it may be that certain contingent constraints of the circumstances prevent the subject from knowing the most salient answer to the question: “What is O doing?” It may be that the most salient thing that someone is doing as he goes through the motions of promising you something is crossing his fingers behind his back. Here, one will not

have the perceptual knowledge that they are crossing their fingers behind their back. Though one may not know this most salient fact about what they are doing though, one may still have fulfilled the aims of watching in virtue of possessing the perceptual knowledge that the individual in question is rocking back and forth on their feet or taking a drag on a cigarette. Failure to have perceptual knowledge of the truth of the most salient answer to the question: “What is O doing?” is not necessarily to fail to know what O is doing in virtue of their perceptual activity.<sup>23</sup>

Watching O involves the perceiving agent being in a position to know what O is doing (in a particular case, to know that O is  $\Phi$ -ing) in virtue of the fact that in maintaining visual awareness of O throughout that period of time, with such an epistemic aim, the agent must see O  $\Phi$ -ing. It is the perceiving agent’s, for example, seeing Jill running that explains how that agent is in the position to have perceptual knowledge that Jill is running. *But one can see O  $\Phi$ -ing from  $t_1$ - $t_{10}$  even if one doesn’t see O at every instant of time from  $t_1$ - $t_{10}$ .* For example, one may see the hologram appearing and disappearing from  $t_1$ - $t_{10}$  without seeing the hologram itself at all points during  $t_1$ - $t_{10}$ . One may see the guard’s head bobbing up above the parapet and then going down below again as he runs along from  $t_1$ - $t_{10}$  without seeing the guard’s head at all points of time during  $t_1$ - $t_{10}$ .

The solution to the puzzle described here then, I propose, is that (3) is false. If one watches a particular material object throughout a period of time, one doesn’t necessarily see it throughout that period of time. What is entailed by one’s watching something throughout a period of time, given the role of that activity in sustaining knowledge of what something is doing, is only that one sees it  $\Phi$ -ing throughout that period of time. In the puzzle case described earlier, a subject watches O from  $t_1$ - $t_{10}$



while seeing  $O \Phi$ ing from  $t_1$ - $t_{10}$ , but without seeing  $O$  at every instant of time during  $t_1$ - $t_{10}$ .

In the bird case, Jim agentially maintains visual awareness of the bird with the aim of knowing what it is doing, from  $t_1$ - $t_{10}$  in virtue of the fact that during the relevant period of time, he saw the bird flying along, passing behind the tree and flying out the other side and over the field. Though Jim saw the bird flying along, and saw it passing behind the tree, from  $t_1$ - $t_{10}$ , he did not and could not see it at  $t_5$ , nor at any point during the time that the bird was behind the tree.

The intuition mentioned earlier, to the effect that our epistemic agent couldn't have watched  $O$  unless he watched out for it is explained is a consequence of this view. Had  $S$  not watched out for  $O$  during the time  $O$  could not be seen, then  $S$  could not have seen  $O \Phi$ ing throughout that time. And unless he could see it  $\Phi$ ing through that time he couldn't have watched it throughout that time. In this case, had Jim not watched out for the bird when it went behind the tree, he could not have seen it passing behind the tree throughout that time. (Though he may have seen it disappear behind the tree, and then seen it re-emerge a little later.) And if he had not seen it passing behind the tree during that time (assuming there was nothing else he saw it doing) then he wouldn't have been watching it during that time. Where there are periods of time during which what  $S$  is seen doing entails that  $S$  cannot be seen throughout the entire period of time it is watched, for  $S$  to watch the object throughout a period of time entails that it is watched out for.

## 7.0 Watching $O$ and Watching $O \Phi$ ing

The account suggested here affords a further explanation for the intuition that one can watch something from  $t_1$ - $t_{10}$  without watching it at any time within  $t_1$ - $t_{10}$ .

Suppose that  $S$  is *watching O  $\Phi$ ing* if and only if  $S$  watches what  $O$  is doing and in virtue of maintaining visual awareness of  $O$   $S$  can see  $O$   $\Phi$ ing. To watch the bird flying, for example, is to watch what the bird is doing and in virtue of maintaining awareness of the bird to see the bird flying. Given this understanding of watching  $O$   $\Phi$ ing, if  $S$  watches  $O$  from  $t_1$ - $t_{10}$ , then  $S$  must also have watched  $O$   $\Phi$ ing, where “ $\Phi$ ing” is an answer to the question “What is  $O$  doing?”. Unless there is something that the perceiving agent can, for example, see the bird doing in virtue of maintaining awareness of it, then that activity could not put the subject in a position to know what the bird was doing.

In circumstances in which the bird Jim is watching is capable of split second changes of colour, and in which that bird changes colour as it passes behind the tree, Jim could not have been watching the bird changing colour during the time it was behind the tree, because he could not have seen it changing colour during that time. Similarly, should the bird have undulated very rapidly in flight as it passed behind the tree, Jim could not have watched the bird undulating rapidly in flight during that time, because he could not have seen it doing that during that time.

Nevertheless, Jim may have perfectly well watched the bird from  $t_1$ - $t_{10}$ , in watching it flying along, passing behind the tree, and flying up to its perch again during that time. In just the way that one may watch something without having perceptual knowledge of everything it is doing, or without even having perceptual knowledge of the most salient thing it is doing, one may be watching  $O$  from  $t_1$ - $t_{10}$  in watching  $O$

$\Phi$ ing from  $t_1$ - $t_{10}$  and yet be failing to watch O  $\Psi$ ing from  $t_1$ - $t_{10}$ , because one cannot see O  $\Psi$ ing from  $t_1$ - $t_{10}$ .

The fact that a perceiving agent may watch O  $\Phi$ ing from  $t_1$ - $t_{10}$  without watching O  $\Psi$ ing at  $t_5$  does not entail that (I) is false. If S watches O  $\Phi$ ing from  $t_1$ - $t_{10}$ , then S watches O at any time within  $t_1$ - $t_{10}$  in watching O  $\Phi$ ing at that time (relative to the same interpretation of “ $\Phi$ ing”).

Earlier the suggestion was made that though there are some contexts in which a complex activity of watching O may have watching (out) for O as a constituent sub-activity, and others in which the complex excludes such simpler activities. The discussion here yields a natural suggestion: the source of such a distinction between varieties of watching complexes is what, in any such case of watching, S is watching O doing. Unlike in the case of watching the bird flying in and out of cover, *watching out for the bird* cannot be a constituent of the complex activity *watching the bird changing colour*, in the way that it can be a constituent of *watching it flying in and out of cover*, given what the subject is and is not in a position to see going on at the time when the bird is not perceptible.

## 8.0 Conclusion: perceptual activities and their aims

A puzzle about watching has occasioned reflection about the nature of the objects of that kind of activity. I have proposed that watching a material object is watching what that object is doing. Watching what an object is doing is a kind of agential maintenance of visual awareness of an object, where the aim of that activity of maintaining visual awareness of the object is knowledge of what that object is doing.

At the outset of the paper, I suggested that the discussion of watching and the kind of explanation of watching to be offered might be useful for thinking about perceptual activities in general. I also suggested a rationale for the narrowing of focus to the watching an object; that it may not be that all perceptual activities are the same from the point of view of philosophical explanation. I end with some comments on these suggestions in the light of what has been offered.

According to the account suggested here, watching an object is a kind of maintenance of awareness that is distinguished by its aim, by what it is for. Watching what O is doing is a visual activity which has the aim of providing the subject with knowledge of what that object is doing. The state that realizes this aim, knowledge of what O is doing, is the state of knowledge that p, where “p” is the answer to the question “What is O doing?”. Similarly, I propose, there is a variety of listening whereby in listening to O one listens to what O is doing. To listen to what O is doing is in this sense to agentially maintain aural awareness of O with the aim of knowing what O is doing. The state that realizes the aim of listening to O is the state of knowing that p, where “p” is the answer to the question: “What is O doing?”. We can see watching O and at least one particular manifestation of the activity of listening to O, then, as instances of a common species of perceptual monitoring of material objects. They are perceptual activities which share the aim of providing the subject with knowledge of what the object perceptually monitored is doing.

I propose that we can draw a basic distinction between kinds of agential monitoring processes and accomplishments. Some activities, like watching or a form of listening, have the aim of knowing what O is doing. Other perceptual activity-types (or perhaps families of activity-types) like *looking at O* or *scrutinizing O* do not. To look at O is

not to maintain visual awareness of O with the aim of knowing what O is doing. The aims of the perceptual activity of looking at O may be many and various. Any particular instancing of perceptual activity in which S looks at O may be an agential process that has the aim of providing S with knowledge of what kind of thing O is, or, knowledge of what kind of stuff O is made of, or what colour O is, or what shape O is.

These are programmatic suggestions. Whether they are vindicated will depend on whether they can do significant explanatory work for us. That is something I attempt to show in more detail elsewhere. Nevertheless, there are linguistic intuitions that, in conjunction with a suggestion fairly straightforwardly derivable from the account of watching offered here seem to provide some measure of support, no matter how indirect, for this proposal.

In contrast with talk of looking at what shape something is, it is not clear that it is intelligible to talk, for example, of *watching* what shape something is.<sup>24</sup> To the extent that such talk is intelligible, it appears to be intelligible as talk of watching O *change shape* or watching O *changing shape*. But to watch O changing shape is not to watch what shape O is. It is to watch what O is doing. I suggested above that for S to watch O  $\Phi$ , or for S to watch O  $\Phi$ -ing, is for S to agentially visually monitor O with the aim of knowing what O is doing, and for S to be in the position to know that O is  $\Phi$ -ing, in virtue of seeing O  $\Phi$ ing.

Against this, it might be argued that it is not at all unintelligible to talk of S looking at what O is doing, or to talk of S looking at O  $\Phi$ -ing. We may talk, for example, of a student looking closely at what their piano tutor is doing, or that student looking at their piano teacher playing octaves. But these claims need to be handled carefully. For

a student to look at what his piano teacher is doing, or to look at him playing octaves may be, for example, for the student to look at the piano teacher's hands *while* the teacher is playing octaves. We can concede that in the circumstances, for the student to look at his piano teacher's hands is for him to look at his piano teacher. But to look at the piano teacher's hands while they play octaves is not to look at what they are doing. It is for the student to maintain visual awareness of the piano teacher's hands while they play octaves with the goal of, say, knowing what position they occupy with relation to the keyboard as he does so. So for the student to look at what the piano teacher is doing in this sense is not, after all, for the student to be visually monitoring the teacher with the aim of knowing what the teacher is doing.

Alternatively, it might be that for the student to be looking at the piano teacher playing octaves is for the student to be looking at the piano teacher's playing of octaves. There is a great deal to be said about exactly what it is for the student to look at the piano teacher's playing of octaves (and other activities of this kind). But a plausible suggestion that preserves the structure of the original proposals is that to look at the piano teacher's playing of octaves is to watch the piano teacher playing octaves now with an additional aim of having perceptual knowledge (for example) of what kind of octave-playing her playing of octaves is; i.e. whether it is quick, skilful, graceful or halting. In such cases, the epistemic object of the looking is itself the dynamic object of something that is being watched.

Though the above does not establish anything by way of detail about the aims that give processes of looking and scrutinizing their shape, nor what significance such a distinction may have, it suggests at the very least that the suspicion that there may be

philosophically interesting differences between these kinds of perceptual activities is well-placed. A natural next step, then, is to flesh out these suggestions.

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<sup>2</sup> Ryle (1949), 143-6; 192-200; Ryle (1954), lecture VII.

<sup>3</sup> Ryle (1949), (1954); Sibley (1955); Vendler (1957); White (1964); Campbell Garnett (1952); Alexander, (1953); Marshall (1970); O’Shaughnessy (1963).

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<sup>4</sup> A notable exception here is the illuminating discussion of active attending offered by Brian O’Shaughnessy (1991), (1992), (2000). For discussion of O’Shaughnessy’s account of active attending see Crowther (forthcoming). Discussion of the role of the will and its relation to perception is offered in Baldwin (2003). The “active” character of perception is centre-stage in the accounts developed in Hurley (1998), (2005), and Noe (2004), (2005). The project pursued here differs in basic ways from the treatment of the relation between perception and action offered by Hurley and Noe. I leave these issues for independent treatment.

<sup>5</sup> See, for example, Campbell (2002).

<sup>6</sup> See Vendler (1957), (1967), ch. 4. For similar a similar typology of verb classifications see Kenny (1963). For discussion of Vendler and Kenny’s proposals see Mourelatos (1978), Galton (1984), Steward (1997). For discussion of formal semantical developments of Vendler’s verb classification see Rothstein (2004).

<sup>7</sup> Genuine continuous tense uses can be distinguished from certain idiomatic uses of statives (“I am loving it”) and also from their expression through verbs of “achievement”. Though verbs like “crossing the finish line” (or “reaching the summit”) are syntactically continuous, they are not genuinely continuous in that they do not make reference to something which may unfold or develop over time. To cross the finish line does not take up any amount of time at all; it is an instantaneous event, constituted by a mere change in state.

<sup>8</sup> These ideas are developed further in Taylor (1985) and Dowty (1979). Mourelatos (1978), Galton (1984) and Rothstein (2004) concur.

<sup>9</sup> There are states and achievements that are intimately related to watching particular material objects. A subject watching a particular material object may thereby be in a state of watchfulness or vigilance. Such attentive states do not exist by unfolding but by obtaining and persisting. It is an interesting question what the relation between such states and occurrent active goings on is. Given that one may watch something absent-mindedly it is not obvious that wherever one watches one must thereby be in a state of vigilance, nor a state of watchfulness.

Starting and stopping watching, on the other hand, are perceptual achievements: it takes no time to start or stop watching something. A more detailed understanding of the relations between the starting and stopping points of periods of watching and periods of watching themselves ought to be sensitive to the

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differences between the properties of the starting and stopping points of atelic processes and of telic accomplishments.

<sup>10</sup> In what follows, I refer to the relevant perceptual episodes as “perceptual activities” instead of the cumbersome “perceptual process or accomplishment”. It should be noted that Vendler (1957) and (1967) uses the term “activity” for what I have called here “process” whether those processes are mental or not. It is one of the shortcomings of Vendler’s discussion that the lines between agential and non-agential processes are not particularly clearly drawn. See, for discussion, Mourelatos (1978) and Steward (1997).

<sup>11</sup> Compare here Vendler (1957) on the way that the temporal character of grammatical objects of perceptual verbs can determine temporal character of the verb.

<sup>12</sup> For discussion of the relationship between monitoring activity (specifically listening) and perception see O’Shaughnessy (1992) and (2000).

<sup>13</sup> Though there is a way of understanding visually perceiving something as a state (that is, though there is such a thing as a state of perception of something) that is not to imply that there is not a way of understanding visually perceiving something as an occurrence; as something event-like.

<sup>14</sup> For ease of expression in what follows I will just refer to “visual awareness of O” and drop the “perceptual” qualifier.

<sup>15</sup> At least as long, for it may not be true that if someone stops watching something they stop seeing it. They may stop watching it, and simply start to gaze at it, or peer at it.

<sup>16</sup> Much remains to be said about exactly what *watching for* or *monitoring for* something is. Watching for something appears to be an attempt to locate something but also apparently involves the state of being expectant for or about the appearance or emergence of something. One couldn’t be watching for something if one had no expectation that it would appear. And perhaps it might be added that the expectation in question be rational, or that it exploit knowledge of the object; i.e. in our case, where the subject concentrates his attention manifests knowledge about objects and the ways that they are likely to behave in certain circumstances. One cannot, at least unless some fairly special stage-setting is involved, watch the road for sharks. I offer further discussion the structure of watching out for below and in Crowther (forthcoming).

<sup>17</sup> There is a range of cases in which I watch for something I see but do not notice which arguably constitute counterexamples to the proposal as it is stated here. On the platform at Paddington, I may

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watch for my mother in the crowd getting off the train and fail to notice her walking along towards me right in front of my nose. It can be argued that in such cases I may nevertheless see her. For it may be true that I would not walk into her, or, that I would move out of the way were she to be on a collision course with me. I set aside the question of how to describe these cases. Even if we decide to describe these as cases of watching for something without seeing it, such cases would not provide much help in motivating a response to the solution to the puzzle suggested here.

<sup>18</sup> Some verbs of action have “habitual uses”. For S to have smoked from t1-t10 may have been for S to have been in the habit of smoking from t1-t10. It may be true that S was in the habit of smoking from t1-t10 without S smoking (in the sense of activity) at any time during t1-t10. This does not constitute an example of the failure of activities to satisfy (I) so much as the independence of the obtaining of a habitual condition from the activity in virtue of which that condition is understood. In any case, such facts do not help with the explanation of the puzzle case, because the fact that S watched O from t1-t10 is not a matter of some habit or disposition that our perceiving agent has. For discussion of habitual uses of verbs see Vendler (1967), 108-110, Kenny (1963), 123. Ryle (1949), 113ff.

<sup>19</sup> Compare Landman (1992).

<sup>20</sup> See Dowty (1979), p. .

<sup>21</sup> I take the term ‘full-blooded’ action from Velleman (1989); (1996). Following Frankfurt (1988), Velleman distinguishes between mere happenings, activities and actions. Activities are less than full-blooded exercises of agency. A satisfying treatment of the role of agency ought to be sensitive to the analogous distinctions to be drawn between types of agential perceptual processes, i.e. those perceptual processes which are not mere happenings. As well as watching O carefully and deliberately, S may, for example, be watching O idly or absent-mindedly.

<sup>22</sup> I do not assume here that if S watches what O is doing, S himself is necessarily in a position to answer the question: “What is O doing?”. S may be a creature that does not have the ability to speak, and, hence, which does not have the capacity to raise and settle questions about what O is doing. What the strategy here involves is rather the specification of the objects of the state of knowledge or perception that constitute the aim of knowledge through the use and mention of a linguistic action.

<sup>23</sup> An anonymous reviewer for this journal suggests the following case. Suppose that in a certain context, one watches a baby in order to know where it is. If one doesn’t know where the baby is, then it appears quite legitimate of someone to complain that one hadn’t been watching the baby at all. The

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implication is that contrary to the suggestions made here, there are cases in which failure to possess the relevant knowledge counts as failure to watch at all.

There is a way of understanding the notion of watching something according to which to watch something is to be a caretaker of that thing; to make sure, for example, that something does (or does not) happen to it. There are clear cases here in which one's failure to know where such and such a thing is entails that one is not in that context making sure that something is not happening to it, so fails in this sense to watch it. If one failed to know where the baby was, then one couldn't have been making sure that it was not putting its fingers in a plug socket. So one was not, in this sense, watching it, and it is one's failure to know where it is (as well as one's failure to know what it is up to) which explains why one fails. Or, if one is attempting to make sure that no-one is in a position to steal the Star of India, then one won't have been watching it if one fails to know where it is. For if one fails to know where the diamond is, then one won't be able to prevent anyone from being in a position to steal it. Though these are clear cases in which failure to possess the relevant bits of knowledge is what explains why one fails to watch, their relation to the perceptual activity of watching is delicate.

While this notion of watching as caretaking plainly takes its shape from perceptual activities that involve vigilance and maintenance of awareness one could clearly engage in such activities without watching those objects in the specifically perceptual sense at issue here. I may watch a baby in this sense by employing others to give me verbal reports every two seconds as to how the baby is disposed. Or I could watch the Star of India in this way by training my binoculars on the safe in the middle of the ring of laser beams. In neither one of these instances would my successfully watching the object in this sense require my maintaining visual awareness of it, and in doing so, seeing it  $\Phi$ ing. So conceding that there is a sense in which one can fail to watch something in failing to know where it is does not as it stands constitute a clear counterexample to the views about the perceptual activity and its relation to knowledge advanced here.

Suppose that we focus attention specifically on the perceptual activity of maintaining visual awareness of O with the relevant epistemic aims, and on the consequences of the failure to know where the thing purportedly watched is. Then if a failure to know where O is from  $t_1$ - $t_{10}$  is a failure to visually keep track of O from  $t_1$ - $t_{10}$  it can be conceded that a failure to know where O is entails a failure to watch O in the strictly perceptual sense. For visually keeping track of O from  $t_1$ - $t_{10}$  is maintaining visual awareness of O from  $t_1$ - $t_{10}$ , and one cannot agentially maintain that awareness if it is not maintained at

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all. But this concession does not impact on the suggestions about the relation between knowledge and perceptual activity above. For I maintained only that it was possible to watch what O is doing without having perceptual knowledge only in the sense that one may fail to possess propositional perceptual knowledge about what it is doing (which we can assume will involve such knowledge about where it is) and yet still be in a position to have that knowledge in virtue of what one sees. If what is at issue is propositional perceptual knowledge about where something watched is, then as in the cases discussed in the main text, there will in practice almost always be some fact about the location of the object perceptually known in a case of watching. But in principle it is at least possible that this may fail. For example, in circumstances in which one possesses misleading counterevidence to the effect that an object being watched is very near, one may plausibly be thought not to have the perceptual knowledge that the object one is watching is very far away (even though it is), and even though one is watching that object.

In other cases, facts about the context in which the perceptual activity goes on may appear to have the consequence that if one does not know that p where p is the most salient answer to the question “Where is O?” (suppose, “Right underneath the broken branch precariously poised to drop from the tree.”) then one will then have failed to fulfil the aim of watching in that context. Though there may be developments of such cases in which this is so, the most basic way to respond here is that though the subject may fail to fulfil the aim of watching in not having perceptual knowledge that he is stood underneath the precariously balanced branch, he may nevertheless fulfil it in having the knowledge that he is stood under a tree. It will also be true in these circumstances that if he was watching the person visually in order to make sure that they were not standing under the precariously balanced branch, (i.e. if he was doing his watching as caretaking in watching qua strictly visual activity) then his failure to know that he was standing underneath that branch will constitute his failure to have ensured against his standing underneath that branch. But though failure to know this counts against his having failing to have watched as a caretaker it does not necessarily count against his failure to have watched (and to have successfully watched) in the strictly visual sense, given that he may know, in virtue of what he is doing perceptually, that the relevant person is stood underneath the tree.

<sup>24</sup> Compare also talk of watching what colour something is, or watching what kind of thing something is, or watching what kind of stuff O is made out of.