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PERMANENT POSSIBILITIES OF SENSATION

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1. EXTRAVAGANT AND MODEST IDEALISM

Idealism apparently comes in both an extravagant and a more modest form.

The extravagant, Berkeleyan brand maintains that objects are nothing more than bunches of occurrent experiences. Recasting this thesis in terms of the totality of facts about objects, the extravagant idealist affirms that all facts are settled by the purely mental facts. If a fact of any sort at all obtains then that fact is settled by the totality of actually obtaining mental facts. This way of putting it suggests a supervenience thesis of some sort – that there can be no difference in the total collection of facts without a difference in the purely mental facts. The problem with extravagant idealism is that it requires extraordinary vigilance on the part of perceivers to preserve all the objects and facts we normally take for granted. With just a finite number of small and lazy minds like ours, unobserved, unthought of things have the lamentable tendency of popping out of existence. What's just as bad but often glossed over, is that even observed things are largely stripped of their richness and complexity.[1] To solve this problem Berkeley invoked an omni-observer, to keep things in their places. *Somebody* has to keep an eye on things, and God is one possible being with the wherewithal for the task. That's extravagant. Myriads of lesser gods, say one per quad, would have done the job, but the charge of extravagance would be no less justified.

A more modest idealism, one which finds expression in varieties of phenomenalism, attempts to save the noumena without postulating beings for whom we have no independent evidence. Modest idealism does not tell us that things are bunches of occurrent experi-

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ences, but rather that they are "permanent possibilities of sensation", bunches of potential rather than occurrent experiences.[2] Recasting this in terms of the totality of facts about objects, modest idealism requires only that for each fact it must be *potentially* the case – in some suitable sense – that there be a collection of mental states which settle it.

Consider a certain proposition – *Blossom* – that the tree in the Quad blossoms very feebly during the Spring Vacation of 1997 and equinoxial gales scatter the petals. Consider worlds in which everybody is away during Spring Vacation which do not differ in the totality of the mental facts which obtain in them. Intuitively, Blossom might be true in one such world and false in another. Realism preserves this intuition by postulating mind-independent trees, the feeble blossoming and denuding of which can go on without leaving any mental traces. Extravagant idealism either denies this realist intuition or is forced to invoke extra minds. On the other hand, modest idealism, like realism, seems to accommodate the intuition. The modest idealist does not require that the class of obtaining occurrent mental states settle the truth of Blossom or its negation (whichever is in fact the case) but merely that it be potentially the case that there be mental states which settle the truth of Blossom or its negation. The *potential* for some observer to be suitably placed to have the requisite mental states, to observe the tree, is all that is required. Modest thus seems clearly distinguishable from, and superior to extravagant, since it can accommodate a realist intuition which extravagant has to deny.

2. BEING SETTLED BY THE MENTAL

With the notion of *being settled by the mental* (abbreviated: Sp) it seems a relatively straightforward matter to characterise our two form of idealism:[3]

(Extravagant Idealism)	For all p, $p \supset Sp$.
Or equivalently:	It is not the case that there exists a p, such that $(p \& {\sim}Sp)$.

And where P is the *potentiality* of modest idealism:

(Modest) For all p, p $\supset$ P[Sp].

Or equivalently: It is not the case that there exists a p, such that (p&$\sim$P[Sp]).

What does being settled by the mental involve? Fortunately for the purposes of the argument that follows we don't have to decide that. All we need from are two features which any explication of the concept of being settled would clearly have to respect. Firstly, *facticity*:

(Facticity) Sp entails p.

Facticity is obviously a constraint on any account of what it is to be settled, not only by the mental, but by any kind of state at all. Being *settled* by a certain kind of state (physical, natural, etc.) guarantees being the case *simpliciter*.

Secondly, *distribution*: that if the conjunction of two states p and q is settled by the mental, so too are the individual states.

(Distribution) S(p&q) entails Sp&Sq.

Distribution, like facticity, appears to be a general feature of being settled. To make this plausible we will have to indulge in a little bit of mild analysis. A state is settled by the mental just in case there could be no change in that state without that enforcing changes in the occurrent mental states. We can afford to leave the notion of *enforcing* open in the meantime. Thus if Sp holds then changing p's truth value would enforce changes in the pure occurrent mental states. Now suppose S(p&q): that p&q is settled by the mental. Then the truth-value of (p&q) cannot be changed without that enforcing changes in some purely mental states. Now since p&q is true, and p&q entails p, changing p's truth value would *ipso facto* reverse p&q's truth value, and so, given S(p&q), there can be no changing p's truth value without that thereby enforcing changes in the truth values of some purely mental states. But that is just to say that p is also settled by the mental. The same argument applies to q.

At this stage we will not bother specifying what kind of potentiality is involved in modest idealism so long as it entails mere logical possibility ($\Diamond$) – as it surely must:

(Potentiality) If Pp then $\Diamond$p.

3. MODEST ENTAILS EXTRAVAGANT

Whatever mental states actually settle p are potential settlers of p – Sp entails P[Sp] – and so extravagant entails modest. What is apparently crippling for idealism is that, as stated, modest entails extravagant. The argument form I will use was originally deployed against verificationism. Its upshot: that verificationism entails there are no unknown truths. Everything is known! Nothing is hidden! Some might rejoice at that. The anti-verificationist argument is structured around the kind of propositions which we all of us think abound – unknown truths. I consider analogous propositions the existence of which are denied by the extravagant idealist but affirmed by the realist and, evidently, the modest Idealist – truths which are not settled by the mental.

Consider the claim that a proposition p is true but not settled by the mental: (p&∼Sp). Assume (for the sake of a reductio) that the truth of this conjunction is settled by the mental (i.e. S(p&∼Sp). By distribution this yields both Sp (p is settled by the mental) and S(∼Sp) (it is settled by the mental that p is not settled by the mental). From the latter, by facticity, we have ∼Sp. Thus S(p&∼Sp) entails a contradiction – (Sp&∼Sp) – that p is both settled by the mental and not settled by the mental. Hence, for all p, it is not logically possible that S(p&∼Sp), and so, by Potentiality:

(*) It is not the case that there exists a p such that P[S(p&∼Sp)].

(Note that to establish (**) we need only distribution, facticity and potentiality.)

Now, assume modest idealism and, for the sake of a reductio, the negation of extravagant idealism. If extravagant idealism is false, there exists a p such that p is true and not settled by the mental: (p&∼Sp). By modest idealism, since (p&∼Sp) is the case, it is potentially the case that (p&∼Sp) be settled by the mental. That is to say:

(**) There exists a p such that P[S(p&∼Sp)].

(*) contradicts (**). Thus modest cannot be consistently combined with the denial of extravagant, and so the distinction between modest and extravagant collapses.

4. CONSTITUTION AND CONTINGENCY

The principle of facticity for S is beyond sensible criticism.[4] Distribution for S, however plausible it seemed at first, could be disputed. The argument I gave for it in section 2 effectively disguised an important limiting case – that in which one of the conjuncts is necessarily true. Consider any necessary truth like, for example, the proposition that there are infinitely many primes. It is not at all clear that this is settled by the mental. On the face of it one could be a Berkleyan idealist without being committed to the idea that such necessary truths are settled by the mental. And one could even be an extreme realist about mathematics while affirming the impossibility of a change in the mathematical truths without some change in the mental – for the completely trivial reason that there can be no change in the mathematical truths at all. So an account of being settled by the mental should not, by itself, entail that mathematical truths in particular, or necessary truths in general, are settled by the mental. Recast in terms of supervenience, it should not follow as a matter of course that all the necessary facts supervene on the mental. Now suppose, as seems highly reasonable, that S is closed under *logical equivalence* – for any two logically equivalent propositions, either both are settled by the mental or neither is. Consider any state which is uncontroversially settled by the mental – say, *Carol is experiencing pleasure*. This is necessarily equivalent to the conjunction *Carol is experiencing pleasure and there are infinitely many primes* – the two propositions having the same truth value in every possible situation. Thus the conjunction is settled by the mental, and so (by distribution) is *there are infinitely many primes*. The same goes for any necessary proposition, and so the stated desideratum is violated.

We have two options – one is to drop distribution, the other is to drop closure under logical equivalence. The latter would be disastrous, being tantamount to an otherwise unmotivated concession that S is not intensional but hyperintensional. The only viable option is to revise distribution. This in turn requires a revision to our account of idealism.

The idealist claims that the facts are *constituted by*, or true *in virtue of* the mental. That there are infinitely many primes may be settled *given* all the mental facts, since it is settled come what may, but it does not follow that such a fact is settled *by* – that is, true *in virtue of* – the mental facts. Genuinely necessary truths, even if settled given all the mental facts, are not constituted by the mental. The extravagant idealist wants to affirm that any possible *change* in the facts would necessitate a change in some mental states. But a possible change in the facts has to be a change in the *contingent* facts, for the simple reason that what is necessary cannot be changed. So the extravagant idealist is committed only to the idea that the contingent truths are settled by the mental. The extravagant idealist may also want to incorporate the notion of constitution – that the contingent facts are constituted by the mental. Let S incorporate the constitution relation, whatever that amounts to. Then Sp holds only if p is a contingently true proposition constituted by the obtaining mental states. Now we have to restate modest and extravagant in terms of this appropriately beefed up notion:

(Extravagant*Idealism)	For all p, if p is contingently true then Sp.
(Modest*Idealism)	For all p, if p is contingently true then P[Sp].[5]

Note that S does not have to obey distribution. It might well be settled by the mental that *Carol is experiencing pleasure* and, assuming closure under logical equivalence, so too is *Carol is experiencing pleasure and there are infinitely many primes*. But it does not follow that *there are infinitely many primes* is settled by the mental. This necessary fact need not be constituted by mental events.[6] However, even though S does not obey distribution it should surely obey a weaker principle:

(Distribution*)	If S(p&q) then, *provided p is contingent*, Sp and, *provided q is contingent*, Sq.

Counterexamples to distribution clearly do not impugn distribution*, and the latter is also a very plausible principle in its own right. Provided the two conjuncts are contingent states, if the conjunction as a whole is constituted by obtaining mental states there seems no good reason to withhold that status from the conjuncts taken separately. The original proof of collapse is thus now blocked.

However, assume modest*. We will show that for any contingent proposition p, S(p&∼Sp) is necessarily false. Let p be a contingent proposition, and assume, for the sake of a reductio, that S(p&∼Sp). By distribution*:

> If p is a contingent proposition then (Sp),
> and if ∼Sp is a contingent proposition then (S(∼Sp)).

Since p is contingent by assumption, we have either:

(1) Sp & S(∼Sp),

or

(2) Sp & [(∼Sp) is not contingent].

Suppose (1). By facticity, S(∼Sp) yields ∼Sp, and so we have Sp & ∼Sp: contradiction. Hence (2): (∼Sp) is not contingent, so (∼Sp) is necessarily true or necessarily false. Necessary truth is ruled out because Sp is true (first conjunct). Thus (∼Sp) is necessarily false. But then so too is (p&∼Sp). Hence, by facticity, S(p&∼Sp) is necessarily false, contradicting our original assumption. The upshot is that S(p&∼Sp) is necessarily false, for any contingent p. Thus, by potentiality:

(*) It is not the case that there exists a contingent p such that P[S(p&∼Sp)].

Now for the sake of a reductio, assume the negation of extravagant*. If extravagant* is false, there exists a p such that p is contingently true and not settled by the mental: (p&∼Sp). By modest*, since (p&∼Sp) is the case, *either* (p&∼Sp) is not contingent *or* P[S(p&∼Sp)]. Suppose (p&∼Sp) is not contingent: then, (p&∼Sp) is either necessarily true or necessarily false. Necessary truth is ruled out by the contingency of p, and necessary falsehood is ruled out by the truth of (p&∼Sp). Hence:

(**) There exists a contingently true p such that P[S(p&∼Sp)].

(*) contradicts (**). The distinction between modest* and extravagant* collapses. Something ventured, nothing gained.

5. THE ACTUALITY DEFENCE

One line of defence against the Fitch-style collapse of knowability into knowledge makes use of a so-called *actuality* operator.[7] It has been claimed that verificationism is not properly captured by a formulation analogous to modest idealism,[8] and some might be inclined to think the same strictures apply here. It has to be admitted that the actuality defence has struck its critics as somewhat *ad hoc* and undermotivated.[9] But let me try to motivate it by considering an analogy between *present* and *future* knowledge. Let *modest-time* be the doctrine that everything that is true will eventually be known at some time or other in the future: for all p, p ⊃ F(Kp). *Extravagant-time* is the doctrine that everything that is true is known now. On the face of it one could coherently affirm the modest-time doctrine while denying its extravagant counterpart. But we can mimic a Fitch-style argument for collapse. We know (given distribution and facticity) that (K(p&∼Kp)) is impossible, and thus not true in any world *at any time*. It follows that it will never be the case that K(p&∼Kp): that is, ∼F(K(p&∼Kp)). Now assume that there is some currently obtaining but currently unknown proposition, p, so that (p&∼Kp) is now true. Modest-time tells us that this will eventually be known – that is F(K(p&∼Kp)) – contradicting what we have just established. Hence there is no currently obtaining but unknown proposition – modest-time entails extravagant-time.

There is surely something wrong with this. One could consistently combine modest-time with a denial of extravagant-time. We may be able to show why if we tweak our formulation of modest-time. We don't want it to say that if p is a currently unknown truth, then later it will be known to be an unknown truth at that *later* time. Rather, we want it to say that later it will be known to *have been* an unknown truth *now*. So, using a now operator N, we might better express modest-time thus:

(Modest-now) for all p, Np ⊃ F(K(N(p))).

The substitution of (p& ∼Kp) into this revised schema will give us F(K(N(p&∼Kp)) – that in the future it will be known that p was an unknown truth *as of now*, and that should be compatible with the denial of extravagant-time on any adequate semantics of F and N.

Edgington argues that we should similarly modify modest using an *actually* operator, A, analogous to the *now* operator N. She claims that the verificationist is committed only to the doctrine that if p is *actually* true, then there is a *possible* situation in which it is known to be *actually* true: for all p, $Ap \supset P[(K(Ap))]$. It is crucial that *actually* here function like *now* – in the embedded possibility operator it takes us back to the "original" state of affairs, just as *now* takes us back to the present. So what this means is that for any proposition true in the actual situation (let it be @) there must be a non-actual possible situation in which it is known that p is true in the actual situation (viz, @). Let p be an actually unknown truth: that is, $A(p\&\sim Kp)$. The revised principle commits us to there being some non-actual situation in which $(A(p\&\sim Kp))$ is known: $K(A(p\&\sim Kp))$. It is now not obvious that any undesirable collapse ensues.

If this revision succeeds both in capturing verificationism and in blocking the collapse, then we could presumably employ the same device to restate both modest and extravagant idealism without fear of collapse. Just replace K with S, and everything should go through *mutatis mutandis*.

(Modest-actual)	For all (contingent) p, $Ap \supset P[S(Ap)]$.
(Extravagant-actual)	For all (contingent) p, $Ap \supset S(Ap)$.

If p is a truth not settled by the mental, *viz* $A(p\&\sim Sp)$, then modest-actual claims there is some non-actual world, in which $A(p\&\sim S(p))$ is settled by the mental – i.e. it is settled by the mental (in that non-actual world) that $(p\&\sim Sp)$ is true in the *actual* world. Apparently, to prevent the collapse, what we require is that in a non-actual situation such truths about some other world, the actual world, can be settled by the mental even though those same facts are not settled by the mental in the actual world.

What are the truth conditions for the actuality operator A? Intuitively, if p is true then *actually* p is also true, and if *actually* p is true, so too is p. The propositions p and *actually* p appear to be mutually entailing. So if A is supposed to capture the ordinary notion of *actually*, then in each possible situation w, Ap is true in w just in case p is true in w. However, if p and Ap were thus equivalent modest-actual would be tantamount to modest, extravagant-actual would be equivalent to extravagant, and the collapse would ensue. No wonder, then, that Edgington repudiates this ordinary usage: "Ordinary usage of 'actually' is insufficiently precise to appeal to."[10](!) Instead she appeals to the following idea.[11] Some particular world is in fact actual – let it be @. For p to be *actually* true is for it to be true in that particular world @. Ap is true in a world w if p is true, not in w *itself*, but rather in the world @.

(A-rule) Ap is true in a world w $=_{df}$ p is true in @.

Note that the variable w is absent altogether on the right-hand side of this definition. Thus on the left-hand side w is idle, and Ap has the same truth value in every world. Ap is true in every world if p is true in @, and Ap is false in every world if Ap is false in @. Thus Ap is either necessarily true or necessarily false. Consequently it is clear that Ap is not tantamount to p, and typically (whenever p is contingent) Ap will not entail p.[12]

Clearly a straightforward Fitch-style argument will not induce a collapse of these formulations of idealism. Despite this, things are not good for idealism so construed. For it turns out that on this construal of actuality, both modest-actual and extravagant-actual are logically false. Assume Ap. By the A-rule, Ap is necessarily true – true in all worlds. Since Ap is necessarily true S(Ap) is false, for necessary truths are not constituted by the mental. Thus extravagant-actual is logically false. But by Potentiality, Ap is not potentially settlable by the mental either. Modest-actual is thus also necessarily false, and the two doctrines collapse trivially. This holds irrespective of whether p is contingent (and hence the brackets in the definition).

In an attempt to save this approach we could abandon the tack taken in the last section, drop the condition of contingency and the restriction against necessary truths being settled by the mental. Unfortunately that doesn't help. For if, for every p, Ap is necessarily true if true, then both modest-actual and extravagant-actual tell us only about a certain restricted class of truths – all those truths of the form Ap, for some p. Had we adopted the intuitive truth-conditions for the actuality operator, this would not have been a limitation at all, since Ap would then have been equivalent to p. But on the A-rule, truths of the form Ap are all necessary, even when p is not necessary.

It follows that neither of these formulations tells us anything at all about the relation between the mental facts and the class of contingent truths. They tell us at most which kinds of *necessary* truths are settled, or settlable, by the mental. That's not idealism.[13]

6. A LAST ATTEMPT – COMBINING FEASIBILITY AND FUTURITY

But perhaps we shouldn't yet abandon the modest-extravagant distinction without one more attempt. The actuality defence may encapsulate a kernel of truth. The purported analogy between *now* and *actual* does not by itself do the job, but it is suggestive of a more promising proposal. The suggestion is to combine both futurity and potentiality.

Consider what a modest idealist might say about Blossom. The modest idealist agrees with the realist that Blossom is a proposition which may be true despite the fact that it is not settled by the mental facts and may never be so settled. For the modest idealist this is because there is the possibility, in some strong sense, of it being so settled. Imagine you could have returned from vacation early and had you done so you would have seen the last few feeble blossoms swirling around the quad before they were swept away. Suppose that would have been enough to settle the truth of Blossom. That's all that modest idealism requires. Had things developed in a particular way which is both compatible with the past and laws, and yet different from the actual way they developed, then Blossom would have been settled by the mental.

Diagram 1 may help to make this clearer.

The main trunk is the history of the actual world, in which Blossom leaves no trace, and in which Blossom remains forever unsettled by the mental. The side-branch is the non-actual but nevertheless feasible future in which you return from vacation early to register the last remaining blossoms. The two worlds actual-past+actual-future and actual-past+feasible-future literally share *one and the same* past, up to the point of branching. Note that in the feasible future it is settled by the mental that Blossom is true at the earlier moment in that world: actual-past+feasible-future But this is of course not disconnected from its truth in the actual world,

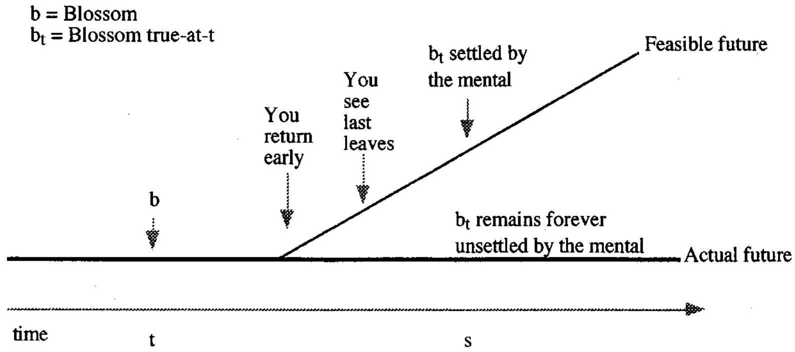

Diagram 1.

since at the moment in question, namely t, what is happening in the two worlds is the very same – remember, before branching they literally share *one and the same* past. We thus establish the appropriate connection with truth in the actual world without requiring the use of a problematic operator which collapses contingent propositions into necessary propositions.

In general:

(Modest) For all p, if p is true at t there is a time s, and a world u which is feasible at t, such that p_t is settled by the mental in u at s.[14]

According to the revised proposal, for p be true at t there has to be at least one feasible future in which it will eventually be settled by the mental that p is true at t.[15] We will now exploit this fact with respect to the proposition that p is true but never settled by the mental. Diagram 2 should make the move explicit.

Assume that p is true at t but that is never settled by the mental in fact. So at t it is true that p and it is true that p will never be settled by the mental. Hence we have the following conjunction true at t:

p and it will never be settled at any time that p is true at t

Or: $[p\&\sim(\exists s)[S(p_t)]_s]$

Since this conjunction is true at t, by modest, there is a feasible future f in which it is eventually settled that the conjunction was true at t. But then by distribution, at s the following is true:

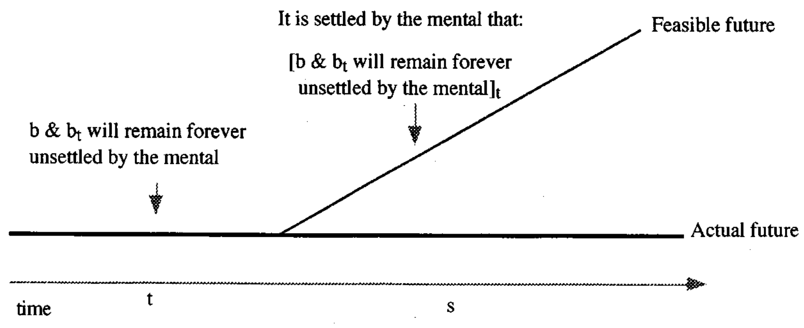

Diagram 2.

It is settled (at s) that p_t and

It is settled (at s) that there is no time at which it is settled that p_t

Or: $S(p_t) \,\&\, S[\sim(\exists r)[S(p_t)]_r]$

It should not be difficult to anticipate the next step. By facticity the second conjunct yields that there is no time at which p_t is settled, thus contradicting the first conjunct. Thus if p is true at t then at some time in the *actual* future it will be settled that it was true at t. Hence there is no world such that p_t is true but it is false that it will be settled by the mental that p_t is true. That is:

(Extravagant) For all p, if p is true at t then at some time p_t will be settled by the mental.[16]

On all these formulations of idealism, objects which are no more than bunches of potential experiences are *ipso facto* no more than bunches of actual experiences. While objects clearly provide possible experiences, there are always facts about them which transcend actual experiences. And so there are facts about them which transcend possible experience as well. Objects are not permanent possibilities of sensation.

NOTES

[1] See, for example, Hirst 1967, p. 131. What Hirst calls the "problem of fragmentariness" is as much a problem about the observed as the unobserved.

[2] Mill called them "permanent possibilities of sensation" in his 1872, chapter 11 and appendix to chapter 12.

[3] Where ⊃ is just the material conditional.
[4] This holds for knowledge as well as S. However, it is worth noting that the only point at which facticity is employed in the Fitch argument against verificationism is the inference from K(∼K(p)) to ∼K(p). Even if K is interpreted as justified belief, the inference remains valid. If one is justified believing that one is not justified believing p, then one is not justified believing that p.
[5] Note that the contingency in the definition of the *-doctrines is *logical* contingency, not P-contingency.
[6] The attentive reader will doubtless worry where the informal argument for distribution given in section 2 breaks down. I assumed there that if there can be no changing p's truth value without that thereby enforcing changes in the truth values of some purely mental states, then p is settled by the mental. But this glosses over the case where p is necessarily true, in which case the condition is vacuously satisfied even though p is not constituted by the mental.
[7] See Edgington, 1985.
[8] That is: for all p, p ⊃ ◊Kp.
[9] See Sorenson 1988, pp. 126ff.
[10] Edgington, p. 563.
[11] See Crossley and Humberstone 1977. What I call the A-rule is their stipulation (iv), p. 14.
[12] This comes out in Crossley and Humberstone's axiomatisation of modal logic with the operator A. Their axiom 5, validated by the A-rule, is: [Ap ⊃ LAp] (where L is logical necessity). Since we have [LAp ⊃ Ap] anyway, Ap is tantamount to LAp.
[13] For more discussion of Edgington's proposal see Williamson 1987. Williamson suggests that the verificationist retreat to intuitionism to avoid the collapse. From the point of view of my application to idealism however, a proof-blocking retreat to intuitionism, or to truth-value gaps, would be unsatisfactory, since the whole point of the retreat from extravagant to modest idealism is to *plug* the truth-value gaps without invoking extra minds.
[14] The argument can be modified easily to accommodate strictures concerning constitution and contingency.
[15] The latter condition is not, of course, sufficient for truth in the actual world. At midday, there may be a feasible future u in which *Carol experiences pleasure at 1.00 pm*. In u that proposition, being exclusively about the mental, will also be settled by the mental. But that is not enough to make it true in the actual world.
[16] The proponents of the actuality defence may run the following line: that what is settled by the mental is not the proposition $q = (p^t \& \sim(\exists r)S_r(p^t))$, but rather the proposition: $q_@ = [(p^t \& \sim(\exists r)S_r(p^t))$ is true in @]. However it is not hard to see that this will fall foul of the criticisms of the previous section. For $q_@$, like any proposition about what goes on in a particular world, is either true in all worlds or false in all worlds.

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