

# Phenomenal Holism

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## Abstract

According to proponents of 'phenomenal holism', the intrinsic characteristics of the parts of unified conscious states are dependent to some degree on the characteristics of the wholes to which they belong. Although the doctrine can easily seem obscure or implausible, there are eminent philosophers who have defended it, amongst them Timothy Sprigge. In *Stream of Consciousness* (2000) I found Sprigge's case for phenomenal holism problematic on several counts; in this paper I re-assess some of these criticisms. Recent experimental work suggests cross-modal perceptual interference may be far more prevalent than expected. I argue that although these results do lend support to phenomenal holism in one of its guises, they do not support the strong form of holism espoused by Sprigge. I then move on to consider the relevance and impact of certain gestalt-related considerations, and argue that these considerations at best establish that the stronger form of holism applies to some parts of some experiential states, but not to all parts of all states, as Sprigge claims. I then consider a more promising way forward for anyone who wishes to defend an across-the-board holism of the strong variety, arguing that what is required is a form of phenomenal interdependence that is rooted solely in phenomenal unity. I conclude by outlining a case for thinking that an interdependence of this sort is a quite general feature of unified conscious states.

## 1. Phenomenal Interdependence

To make matters vivid and concrete, take a look at the shaded expanse shown in Figure 1 below. After focusing your attention on this for a few moments, reflect on the character of the visual experience you are now having, and consider this question: if some small part of this experience had been different over the past few seconds, would the other parts of your visual experience also have been different as a result of this?

To make matters still more vivid, we shall concern ourselves with just two small portions of your visual field: those corresponding to the A- and B-regions of E, as indicated by dotted lines in Figure 1 (we are now supposing that E represents the visual content which fills a part of your visual field). Now consider: if the B-region had been a subtly different shade, would your experience of the A-region have been different? Would A be affected in the slightest if the B-region were removed altogether? This experiment is easily

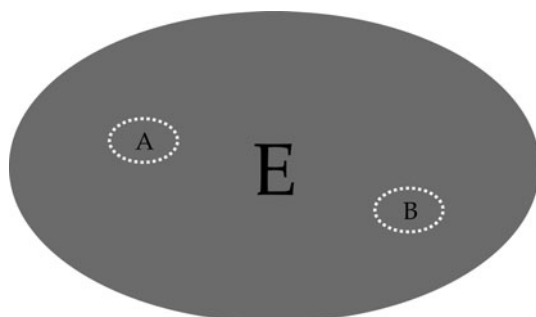


Figure 1.

performed: it suffices to cover the relevant part of Figure 1 with your finger, or a piece of paper. When you do this, does your experience of the A-region change in appearance in any discernible way? I strongly suspect that most of us would answer ‘no’ to each of these questions.

We have been considering the interdependence (or otherwise) of experiences (or parts of our experiences) within a single sensory modality, that of vision. What of cross-modal cases? Present purposes will be served by a single example. Focusing again on the precise phenomenal character of your experience of the B-region, would this character be in any way different if during this time you could also hear a faint buzzing noise? Or even a loud drill? The character of your *overall* state of consciousness would certainly be different – in one case you are experiencing the B-region without auditory accompaniment, in the other case you are experiencing it *with* an auditory accompaniment – but would the purely *visual* character of your experience be different in the two cases? Again, I suspect most of us would be inclined, quite strongly, to answer ‘no’. This isn’t to say the onset of the sound would produce no effects at all. If the noise were sufficiently loud, or unexpected, your attention might well be drawn away from your visual experience, and the character of your visual experience would certainly be altered as a result. Nonetheless, were this to occur, the visual and auditory contents that you are apprehending would still remain distinct. In our ordinary experience at least, there is no discernible *fusion* or *interpenetration* of phenomenal qualities belonging to different sense-modes: sounds remain purely and exclusively auditory in nature, visual contents remain purely and exclusively visual in nature.

These *prima facie* plausible claims about the independence of the intrinsic characteristics of phenomenal contents are quite mistaken

if the doctrine I shall here call ‘phenomenal interdependence’ is true. The doctrine can be formulated in different ways – and indeed, it comes in importantly different forms, as we shall see – but the rough-and-ready formulation below will suffice to convey the basic idea:

If X and Y are phenomenal contents that are apprehended together, in a single state of consciousness by a subject *S* at a time *t*, then the intrinsic character of each of these contents impacts in a significant way on the character of the other.

Now the doctrine of phenomenal interdependence is by no means obviously true, and we have just encountered an example of why: in the case of the visual field which results from looking at Figure 1, regions A and B are phenomenal contents that are experienced together within a single state of consciousness, but it seems quite plausible to suppose that the intrinsic phenomenal qualities of A would not have been significantly different had A been experienced in the absence of B. That said, if the phenomenal interdependence doctrine *were* true, it would have very significant implications for our understanding of the nature of conscious experience, and conscious states. For this reason alone the doctrine should be of interest to those concerned with understanding the nature of consciousness.

## 2. Sprigge’s Phenomenal Holism

The phenomenal interdependence doctrine may not be obviously true, but it does have its supporters. In recent years, one of its most eminent champions has been Timothy Sprigge. He defends the doctrine at some length in his own distinctive terms and manner in *The Vindication of Absolute Idealism*, where it plays a key role in his idealistic metaphysic – see in particular Chapter 5, part 3. But although Sprigge recognised the importance of the doctrine, he did not take himself to be propounding anything novel, far from it. The notion that the parts of a conscious state are profoundly interdependent may sound somewhat odd to contemporary ears, but it was comparatively commonplace among nineteenth century philosophers. In his *James and Bradley*, Sprigge points out that although they differed on much else, both Bradley and James subscribed to the view that our states of consciousness ‘at any one moment are wholes such that every element within them is so coloured by the totality

that they could not exist again without difference in another state of consciousness'.<sup>1</sup> Sprigge himself subscribed to this view:

A holistic relation is strong if the kind of whole its terms unite in forming has a character which so suffuses its every element that no element with some difference from it in character could be found without a whole of just that sort.... All holistic relations between terms actually given in experience appear to be strongly so.<sup>2</sup>

As I mentioned earlier, the phenomenal interdependence doctrine can be formulated in different ways, and it comes in a variety of stronger and weaker forms. A proponent of *complete* phenomenal interdependence claims that all parts of all unified states of consciousness are holistically interrelated, whereas the proponent of the weaker *partial* phenomenal interdependence maintains only that *some* parts of unified conscious states are so interrelated (or alternatively: only some parts of *some* states). It is also possible to hold that phenomenal interdependence applies necessarily, or only contingently. If the latter obtains, states that are actually interdependent might not have been, if the former obtains, states that are actually interdependent could not possibly be otherwise.

Sprigge subscribes to the interdependence thesis in its strongest guise: complete and necessary. Given this, it is reasonable to conclude that he believes that the parts of conscious states are *by their very nature* holistically interrelated. But why believe this to be true? In the *Vindication* he motivates this doctrine thus:

That some holistic relations are strongly so is readily revealed. Consider the character of a painting and the relation between its parts, when the painting is seen as a whole. Consider the painting, that is, as a total presence in someone's perceptual field (where else?). It is a commonplace of aesthetics and of right-minded psychology, but something we can each discover for ourselves, that every detail in the painting as a complete presentation has some difference, even within its own bounds, from what the detail would have if it were seen apart, or in another whole (as can be arranged on various physical bases), although if when one sees the detail 'on its own', or in a different whole, one has a lingering memory of the whole, it will be less different

<sup>1</sup> T. L. S. Sprigge, *James & Bradley: American Truth and British Reality* (Illinois: Open Court, 1993), 2.

<sup>2</sup> T. L. S. Sprigge, *The Vindication of Absolute Idealism* (Edinburgh: Edinburgh University Press, 1983), 218–9.

from its previous self than otherwise. An eye, as it figures in a certain painted face, will supply a good example. Certainly, the same identical shape and pattern of colour can be present in a different whole, but one cannot think of what lies within the eye's own bounds as having a character unaffected by the whole it helps to form. Indeed, the mere place at any moment of any visual phenomenon in the visual field, high or low, to the left or the right, gives it a different character. So far as it makes sense to think of it as a particular component in experience, having its individual character within its bounds, that character is affected by the whole, though one may prefer to say that it really has no such separate character.<sup>3</sup>

Sprigge here suggests that phenomenal interdependence, at least in certain cases, is clearly manifest in our own experience, provided we pay sufficiently close and careful attention. But he also maintains that the same sort of interdependence applies across the board, to *all* parts of unified states of consciousness. Following Sprigge, let us use the term 'total state' or 'total experience' to refer to our overall states of consciousness at any one time (*i.e.* a momentary or very brief temporal cross-section of our streams of consciousness). It may seem that our total states of consciousness include parts that might conceivably exist in a total state of a different overall character, but this is wrong:

These, however, are in an important sense not real parts of the total experience, nor are any of its other components. This is because they lack an individual essence which could be specified or grasped without reference to the whole to which they belong. That is, an attempt fully to grasp what one of these components is, within the limits of its own being so to speak, could not specify a determinate possible form of being it actualises, since its fully determinate form of being is something which involves its particular sort of contribution to the character of the whole.<sup>4</sup>

This fully general claim is a very strong one indeed. If it is true, it has significant implications for the nature of conscious states. But how convincing are the considerations which Sprigge brings to bear in attempting to establish that it *is* true?<sup>5</sup>

<sup>3</sup> *Ibid.*, 219.

<sup>4</sup> *Ibid.*, 170.

<sup>5</sup> As will already be clear, I am focusing here on the experienced-based (or phenomenological) case for holism which Sprigge develops. It is important to note – and I am grateful to Pierfrancesco Basile for reminding me – that Sprigge also subscribes to (a form of) holism on more general

### 3. Cross-Modal Interference

When discussing these issues in my *Stream of Consciousness*, I argued that the sort of consideration to which Sprigge appealed fell a long way short of establishing the conclusion he sought.<sup>6</sup> I did not deny that there are *some* localised phenomenal interdependencies. Indeed, much of what Sprigge says about the effects of changing the context of an eye is very plausible. As can be seen from Figure 2, an eye of a dog that is set in the surroundings of a (friendly-looking) dog looks rather different from the same image placed in a different context.

These context-induced changes are quite subtle, and not easy to describe, but they are nonetheless real for that. Also, importantly, it seems right to ascribe them – in part at least – to changes which affect the intrinsic visual qualities of the experiences in question: the eye on the right *alters in visual appearance* when the surrounding dog is eliminated. Other examples of localised intra-modal

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metaphysical grounds: ‘I do not see how one can ever imagine two or more things related to one another in any way one likes to specify, without this being an imagining of them as forming a specific sort of whole together, or joining with other things in doing so’ (*Vindication, op. cit.*, 208). In short, Sprigge was of the view that we cannot coherently view two items – of *any* kind – as being connected by a genuine relation unless they form parts of a single whole. However, the doctrine that real relations can only hold between the parts of a whole does not, in itself, entail the stronger holistic doctrine (more clearly distinguished in section 4 above) that the intrinsic characteristics of the parts of a whole are influenced, in a distinctive way, by the character of the whole to which they belong. So far as I can see, Sprigge’s grounds for subscribing to this stronger form of holism are phenomenological. I should also add that, for Sprigge, the significance of these holistic considerations is not confined to our understanding of the nature of consciousness; it extends to the whole of reality: ‘I think that real relations between things can only be conceived as the way in which they join together to form a whole, and that the whole which a congeries of experiences can form is itself an experience . . . So all the experiences which fill up the world must ultimately join together as part of one great Cosmic Experience’ (T. L. S. Sprigge, ‘My Philosophy and Some Defence of It’ in *Consciousness, Reality and Value*, edited by P. Basile and L. McHenry (Ontos Verlag: Heusenstamm, 2007), 301). Interesting though it is, I will not be concerned with Sprigge’s case for absolute idealism in what follows.

<sup>6</sup> B. Dainton, *Stream of Consciousness* (London: Routledge, 2000; expanded 2nd edition, 2006).



Figure 2.

interdependencies of this sort are not difficult to find. In the case of the well-known Müller-Lyer illusion, the direction of the ‘tail-fins’ makes a difference to the apparent length of the two horizontal parallels. But, I suggested, while it is right to recognise that such interdependencies exist, it is questionable whether they are enough to sustain Sprigge’s very strong conclusion.

First of all, these interdependencies look to be contingent rather than necessary. The Müller-Lyer effect is certainly due to the idiosyncrasies of the human visual system. As for the case depicted in Figure 2, it is not implausible to suppose that a visually-endowed subject with no prior acquaintance with either dogs or the appearance of mammalian eyes, would see both eyes in much the same way. If the effects are only contingent, we have no reason to think that phenomenal interdependencies are rooted in the very nature of conscious experience.

Secondly, from the fact that *some* parts of some total experiential states are interdependent, we cannot automatically, or without further argument, conclude that the same applies to *all* parts of *all* such states. Our earlier example is relevant here. I suggested in connection with Figure 1 that it is not obvious that the intrinsic *visual* qualities of the B-region would be in any way affected if the contents of the A-region were altered or absent. The inter-modal case looks to be even less promising from the point of view of the would-be holist: how plausible is it to suppose that the visual quality of either region be altered in the slightest if these visual contents were accompanied by an auditory sensation? In *Stream of Consciousness* I laid considerable emphasis on the apparent scarcity of intermodal interdependencies:

It is hard to believe that one’s current auditory experience is significantly responsive to small variations in one’s visual

experience, or that the character of one's current tactile experience would be different were one's current olfactory experience other than it is. Quite generally, at any given moment, any pair of co-conscious experiences belonging to different perceptual modalities seems largely – and typically completely – unaffected by each other..... If the character of experiences in different sensory modalities are generally independent, which contrary to Sprigge's claim they seem to be [then] complete holism cannot be grounded in phenomenal interdependence.<sup>7</sup>

Suppose, just for a moment, that these claims are correct. If the bulk of our experience is *not* phenomenally interdependent, why did Sprigge think otherwise? I outlined two possibilities. The first is that he had succumbed to 'consciousness mysticism', a condition of intellectual intoxication produced (or so I speculated) by spending prolonged periods engaged in intense introspection, and which leads its victims to ascribe exaggerated or chimerical properties to consciousness.<sup>8</sup> But I went on to mention a second and more charitable possibility: he may simply have exaggerated the extent to which the kind of interdependency described above actually obtains. It is not difficult to see how this might have come about.

It is very plausible to think that phenomenal unity – the sort of unity we find in our conscious states at any given time – is a unity of a distinctive kind. If this is so, it seems equally reasonable to suppose that experiences that are unified in this way might be affected in some way as a result. Since *all* parts of a total conscious state are phenomenally unified, the phenomenal effects (as we might call them) generated by this mode of unity will also extend to all parts of these states: the resulting holism will be complete, rather than partial, and necessary, as opposed to contingent. The only remaining question is the *kind* of effect or change that we are dealing with here. Sprigge was, of course, well-acquainted with the doctrine to which both Bradley and James subscribed, that every element in an experiential whole is invariably 'coloured' by the totality it finds itself in, to such an extent that the part could not exist in isolation, or in a whole of a different kind. Finding some confirming evidence for this contention in his own experience – see the quotations above – he not unreasonably concluded that this sort of interdependency obtains across the board: that it applies to *all* experiences, even if this is not obvious.

<sup>7</sup> *Ibid.*, 194–5.

<sup>8</sup> *Ibid.*, 195.



This unity-related line of reasoning may have its merits, but as we have seen, Sprigge's conclusion can seem highly dubious. If we confine ourselves to what is revealed by introspection, it simply does not seem to be the case that the intrinsic visual characteristics of simple expanses of colour are 'coloured' or influenced in any introspectively discernible way by accompanying experiences in other sensory modalities, or by accompanying mental images or conscious thoughts. If the conclusion is false, we have no option but to conclude that Sprigge's reasoning is unsound. As for where it goes astray, the most obvious candidate is the extrapolative step: from the fact that *some* parts of our total states of consciousness impact on the character of other parts, it does not follow that they *all* behave in this manner.

### 4. Sprigge Vindicated?

We will be returning to the issue of whether it is possible to mount a plausible case for a generalised or *complete* inter-experiential holism. But before moving on I want to take a step back. When I confidently pronounced in *Stream of Consciousness* that inter-modal interdependencies were non-existent, or at least very rare, was I in fact correct? A growing body of empirical results from psychology and psychophysics suggests that I may well have been quite wrong.

That there are *some* instances of inter-modal interference has been known for some time. The 'ventriloquist illusion' is perhaps the most familiar. Even though we know that the ventriloquist's doll isn't really saying anything – all the sounds are actually emerging from the (misleadingly motionless) mouth of the ventriloquist – it seems as though the words are being produced by the doll, whose lips *are* moving. In this case, visual data influences the apparent location of sounds. The 'McGurk effect' is another well-established instance of audio-visual interdependence, one which also involves speech-perception. But in this case, rather than visual data influencing the apparent location of sounds, the auditory and visual influence each another. Our lips move in different ways when we utter different phonemes – *e.g.* when making the *mmmm* sound our lips come together, when making the *nnnn* sound they don't. When shown a video film featuring a close-up of a subject whose lips make the movement associated with the *gaa* sound, but who in fact produces a *baaa* sound, what most of us hear is a *daaa*. It seems that in the case of speech perception at least, if our brains are presented with auditory and visual information which conflicts, they seek a compromise solution. The effect is robust – it usually persists even when one

knows the trick being worked – and is not confined to native speakers of English.<sup>9</sup>

These two effects may be the best-known examples of ‘cross-modal’ interference, but they are not alone. Recent investigations have uncovered a variety of other cross-modal interactions, involving different sensory modalities, in different combinations:

- *the sound-induced flash*: when a single flash of light is accompanied by several auditory ‘beeps’, subjects tend to perceive several flashes of light, rather than just one.<sup>10</sup>
- *the touch-induced flash*: if subjects are shown a single flash accompanied by two taps on the skin, they tend to see two flashes.<sup>11</sup>
- *the parchment skin illusion*: when subjects are asked to rub their hands together while listening to high frequency sounds delivered via headphones, they report that their skin feels unusually smooth and dry (like parchment); if the high frequencies are dampened, subjects report that their hands feel unusually smooth and moist.<sup>12</sup>
- *sound-induced changes to perceived crispness and fizziness*: the apparent ‘crispyness’ of a potato-crisp depends on the sounds heard while munching on it – damp down the high-frequencies and it will seem soft and stale; in a similar vein, fizzy water on the tongue feels fizzier when accompanied by high-frequency sounds, and electric toothbrushes feel smoother in the absence of high-frequency sounds.<sup>13</sup>
- *motion-after-effects transferring between sight and touch*: in the well-known ‘waterfall’ illusion, if you stare for some time at

<sup>9</sup> See H. McGurk and J. MacDonald, ‘Hearing Lips and Seeing Voices’, *Nature* **264** (1976), 746–8. There are a good many examples of the effect readily available on the web (including several on *Youtube*), some more effective than others.

<sup>10</sup> L. Shams, Y. Kamitani and S. Shimojo, ‘What You See is What You Hear’, *Nature* **408** (2000), 788.

<sup>11</sup> A. Violentyev, S. Shimojo and L. Shams, ‘Touch-induced Visual Illusion’, *Neuroreport* **16:10** (2005), 1107–1110.

<sup>12</sup> V. Jousmaki and R. Hari, ‘Parchment-skin Illusion: Sound-based Touch’, *Current Biology* **8:6** (2006), 190–191.

<sup>13</sup> M. Zampini, S. Guest and C. Spence, ‘The Role of Auditory Cues in Modulating the Perception of Electric Toothbrushes’, *Journal of Dental Research* **82:11** (2003), 929–32. Also, M. Zampini and C. Spence, ‘The Role of Auditory Cues in Modulating the Perceived Crispness and Staleness of Potato Chips’, *Journal of Sensory Studies* **19:5** (2009), 347–63.

downward-moving water, and then focus instead on the neighbouring rocks and trees, you will see the latter seemingly move upward, even though in reality they are motionless. Surprisingly, a similar effect can be induced via the sense of touch. Subjects are asked to spend a few moments staring at a screen filled with motionless horizontal stripes, after which time the palm of their hand is stimulated (by electronically controlled pins) so as to provide them with the impression that an object is sweeping up or down over their skin; the subjects then report that the lines on the screen have started moving, in the opposite direction to the motion they feel on their skin. The effect works in reverse: motionless pins seem to start moving when subjects are observing horizontal stripes moving up or down on the screen in front of them.<sup>14</sup>

These examples of cross-modal interference are intriguing in their own right, but they also potentially have significant implications of a more general kind. Vision has often assumed to be the dominant sensory modality, and it has been thought that the processing of visual information is independent of goings-on in other modalities. The sound- and touch-induced flash illusions cast a large shadow over these assumptions. They demonstrate that in the case of conflicting or ambiguous stimuli, vision does not invariably trump the other senses, and in some circumstances (at least), the processing of visual information is *not* independent of the processing of data in other sensory modes. Although much remains to be investigated and discovered, these various results are pointing in the same general direction: it may well be the case that none of our senses are independent of any of the others. In ordinary circumstances, confronted with the task of providing us with perceptual experience which corresponds with our external environments, on the basis of flimsy, fleeting and often conflicting sensory data, our perceptual systems are only too willing to allow information deriving from some modalities to override others. In this quest for consistency and coherence, no sensory modality is immune to potential interference of this kind.<sup>15</sup>

<sup>14</sup> T. Konkle, Q. Wang, V. Hayward and C. Moore, 'Motion Aftereffects Transfer between Touch and Vision', *Current Biology*, DOI: 10.1016/j.cub.2009.03.035 (2009), <http://dx.doi.org/10.1016/j.cub.2009.03.035>.

<sup>15</sup> For further useful discussion of these matters, see C. O'Callaghan, 'Seeing What You Hear: Cross-Modal Illusions and Perception', *Philosophical Issues* **18:1** (2008), 316–38.

If this is right, what are the implications for our current concerns? One thing is very clear: I was wrong when I claimed that our sensory modalities are almost completely independent, and hence that the character of our experience in one modality at a given time *t* would almost certainly be exactly the same if the character of our experience in other sensory modalities were different at *t*. However, my being mistaken in this respect does not in itself mean that phenomenal holism, in the form espoused by Sprigge, is correct. And this for several reasons.

The phenomenal interdependence doctrine comes in stronger and weaker forms, and as noted earlier, Sprigge subscribes to the doctrine in its strongest form: he holds (i) that *all* parts of *all* total experiences are interdependent, and (ii) that this obtains as a matter of necessity. The fact that cross-modal interference, of the kind we have just been looking at, is more prevalent than has sometimes been thought does not, in itself, establish strong, Sprigge-grade holism. Since 'more prevalent' does not mean 'extends to *all* parts of *all* total states of consciousness', we are still looking for a reason for supposing that Sprigge was right to opt for the *complete* interdependence doctrine. Furthermore, since there is no reason to think these interference effects are due to anything more than the peculiarities of human (or mammalian) sensory systems, there is no reason to think these interference effects are anything other than contingent.

A second point is epistemological, and relates to the grounds we have for accepting a phenomenal interdependence claim, of whatever strength. Sprigge's case for holism rests on phenomenological considerations: the evidence which suffices to establish that interdependence obtains is available to introspection, or so he suggests. Irrespective of whether he is right about this, most of the interference effects outlined above are invisible to introspection. Indeed, that these interdependencies exist at all only emerges under unusual experimental conditions. And of course, since they come as a complete surprise to most of us, it is reasonable to conclude that nothing in our everyday experience suggests they exist.

A third point relates to the *kind* of interdependence that is at issue. While there may well be a greater quantity of inter-modal perceptual interference than one might have supposed, prior to learning of the experimental results from psychology, it is doubtful whether these interdependencies are of the kind which interested Sprigge. To bring this out, it will help to make explicit a further distinction. Let us suppose we have a total state of consciousness *S* at a time *t*, which can be divided into proper (experiential) parts,  $P_1, P_2, P_3 \dots$

$P_N$ . We can now distinguish two ways in which these parts can be holistically interrelated:

*Deep Interdependence:* in actual fact, all of  $P_1, P_2, P_3 \dots P_N$  exist and form part of  $S$  at  $t$ ; each of these experiential parts has one or more intrinsic phenomenal features which (in some manner) reflect(s) the character of the whole, in such a way that none of the parts could exist in a total state of consciousness with an overall phenomenal character different from that which  $S$  possesses at  $t$ .

*Shallow Interdependence:* in actual fact, all of  $P_1, P_2, P_3 \dots P_N$  exist and form part of  $S$  at  $t$ . If any of these experiential parts had been absent, or replaced by a part with a different phenomenal character, then the phenomenal character of some or all of the remainder of  $S$  at  $t$  would have been different as a result. Despite this,  $S$ 's parts are not essentially bound to a whole of this particular type: each of  $P_1, P_2, P_3 \dots P_N$  could exist in a total state whose character differs from that of  $S$  at  $t$ .

These formulations are deliberately vague – I have, for example, made no attempt to say anything about the precise manner in which experiential wholes impact upon the parts in the case of Deep Interdependence, hence the ‘... (in some manner) ...’ but for our immediate purposes they will serve. If a collection of experiential parts are Deeply Interdependent, then the whole to which they belong impacts in a distinctive way on the phenomenal character of each of the parts, with the result that none of the parts could exist in a whole of a different overall type. (Here the standard assumption that the precise phenomenal character of a token experience is essential to it is in play.) In contrast, where only Shallow Interdependence obtains, it is also the case that if some parts of an experiential whole were absent, or replaced by a substitute with a different character, then the other parts would not have the character they actually do have, but in the absence of any ‘imprinting’ of the character of an experiential whole onto its parts, there is nothing to prevent experiences with the character of these parts existing in experiential wholes of a different type.

Now, it is clear that Sprigge subscribed to the Deep Interdependence doctrine. In the passages cited earlier he says that all holistic relations between elements given in experience are of the *strong* variety, and that a ‘holistic relation is strong if the kind of whole its terms unite in forming has a character which so suffuses its every element that no element with some difference from it in

character could be found without a whole of just that sort'.<sup>16</sup> It is natural to read Sprigge as holding that Deep Interdependence arises as a consequence of the distinctive way in which experiential parts are related within total states of consciousness. Irrespective of whether he is right about this, now that we have the distinction between the two modes of phenomenal interdependence clearly in view, the question we need to consider is the following: is there any reason to think that the intermodal interference effects outlined earlier involve Deep rather than merely Shallow Interdependence? I cannot see that there is. In the case of the sound-induced flash, for example, the presence of a second 'beep' causes subjects to see an illusory second flash, but this flash is a perfectly ordinary visual experience: there is no fusion or interpenetration of beep-content and flash-content, and it would be perfectly possible to experience a phenomenally indistinguishable flash of light *in the absence of any beeping sound*. Much the same applies in the parchment skin case: thanks to the presence of high-frequency sounds, one's hands feel rougher to the touch than would otherwise be the case, but the auditory and tactile sensations remain (seemingly) entirely un-merged or un-fused. And it is very plausible to think that exactly similar tactile sensations could have existed in total states of consciousness of a different kind – states which do *not* include high-frequency sounds, even if the skin on one's hands might need to be significantly rougher to provide these sensations, if the sounds were absent. If this is right – and it does seem plausible – then these interference effects are manifestations of Shallow rather than Deep Interdependence.

Pulling these points together, the conclusion is clear: cross-modal interactions of the kind we have been considering may be a good deal more common than has usually been thought, but they do not provide Sprigge with what he needs.

## **5. Gestalt-Based Holism**

If the parts of our total states of consciousness are interdependent in the deep way which Sprigge, following here in the footsteps of Bradley and James, believed them to be, we will need to look beyond the cross-modal perceptual interference effects we have been considering latterly. But where? Do we have any reason to believe experiential parts *can ever* be Deeply Interdependent? Sprigge's example of the eye-in-a-painting may provide some support for the

<sup>16</sup> T. L. S. Sprigge, *Vindication*, *op. cit.*, 218.



Figure 3.

possibility of Deep Interdependence, but there are simpler and (somewhat) more straightforward cases that point in a similar direction. I will confine my attention here to these simpler cases.

If you stare for a minute or so at the vertical lines depicted in Figure 3, you will probably see them undergo a series of ‘aspect-shifts’: for a few seconds you will see them as forming two groups of three, then three groups of two, then back to two groups of three, and then (perhaps) as a group of four with a single outlier to the right and to the left. As the lines form one ‘perceived whole’ after another, their appearance undergoes a subtle alternation: the line third in from the left *looks* somehow different when it is being seen as part of two groups of three. Do we have here a case of Deep Interdependence, a case where the intrinsic phenomenal character of the part is influenced by the kind of experiential whole to which it is perceived as belonging? Certainly, some Gestalt theorists seemed to take this view, when they maintained that ‘structured’ or ‘organized’ experiential wholes exert an influence on the character of their component parts. Here is one such:

Since [sensory] data exhibit phenomenal features only derived from the configuration into which they are integrated, it follows that *such a configuration cannot be considered as built up out of the parts* ... if a constituent of a configuration is isolated and taken by itself as an independent and self-contained element, it may be affected so radically and by such deep reaching modifications as to destroy its phenomenal or experiential identity, the constancy of the external stimuli notwithstanding.<sup>17</sup>

I discussed this and similar claims in *Stream of Consciousness*<sup>18</sup>, and expressed some scepticism. Yes, the lines in Figure 3 do look different when they are perceived as belonging to different configurations – and

<sup>17</sup> A. Gurwitsch, *Field of Consciousness* (Pittsburgh: Duquesne University Press, 1964), 114; italics in the original.

<sup>18</sup> *Op. cit.*, §§ 8.5 and 8.6.

the same applies in cases featuring other kinds of perceived whole – but we must remain wary. It is one thing for a line to look subtly different when seen as belonging to a group of three rather than a group of two, but to assess whether this difference amounts to an instance of Deep Interdependence we need to consider questions of the following sort. When (for example) the line in question is seen as the centre-most part of a group of three, does it have an appearance which a similarly shaped line could *only* have when perceived in such a configuration? Or could a line with exactly similar intrinsic phenomenal features exist all by itself, or in a group of a different kind? The latter proposal, I suggested, seems the more plausible. A little experimentation suggests that the intrinsic visual features of the line in question *are* discernibly different when it is perceived in different configurations, but these differences are of an unremarkable kind: the line may appear to vary slightly in thickness, or the distance between the lines may seem to change in some small way. Accordingly, when the same (physical) line is perceived as belonging to a group of three it may have an appearance that differs slightly from what it would have if it were to appear as a part of a group of two, but there is nothing to prevent a line with precisely the same intrinsic features appearing on its own, or as a part of a different combination (*e.g.* as a part of a group of four), even if it is likely that different physical stimuli would be needed to generate the same phenomenal appearances in these cases (*e.g.* the line on the page would have to be slightly thicker, or thinner or darker). If this is right, then it seems that *gestalts* do not, after all, present us with instances of Deep Interdependence.

While much of this still strikes me as plausible, it may well be that *gestalts* have properties that I failed to notice or address in my earlier discussion, and which may be of assistance to the holist. Consider that familiar illustration of an aspect-shift, the duck-rabbit, as shown in Figure 4.

As you see the figure take on the aspect ‘duck’ then ‘rabbit’, then ‘duck’ again, its general appearance differs in quite a dramatic way: when it looks like a rabbit, it *looks* very different from how it looks when seen as a duck, even though the visual stimuli, in the form of the markings on the page (or screen) are precisely the same. So far, so familiar, but now focus your attention onto just *part* of the picture, *e.g.* the ears and/or beak region, as picked out in Figure 5.

The question we need to consider is whether this part of the visual whole also has a different visual appearance when the whole appears under the aspect ‘rabbit’ than it does when it appears under the aspect ‘duck’. The answer, I take it, is plain: there is a difference, and the difference is a significant one. When the whole figure looks like a



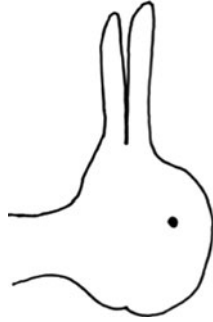


Figure 4.

duck, the encircled region looks like a *beak*, whereas when the figure looks like a rabbit, this same region looks like a *pair of ears*. It is clear that in this case at least, the visual alterations which accompany aspect change extend to the parts of the whole that is perceived. Drawing on this, the holist can argue as follows:

The duck-rabbit is a simple illustration of a more general phenomenon. What it illustrates, in so very striking a manner, is the fact that there is more to visual experience than colour-patterns of one kind or another. The additional ingredient is *meaning*, or if you prefer, *representational content*. For the switching or ‘dawning’ of aspects surely is best explained in these terms: the same few lines on the page are seen *as a duck*, and then *as a rabbit*. The fact that high-level content of this kind is present *in* sensory experience – and not, as some have argued, wholly a matter of accompanying judgments or beliefs – is demonstrated by the way the duck-rabbit changes in visual appearance when

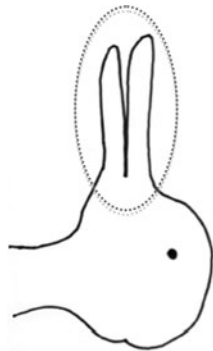


Figure 5.

it is seen under different aspects. This fact supplies plausible and compelling grounds for recognising that Deep Interdependence is a reality. Evidently, the reason why the encircled part of Figure 5 looks like a pair of ears (when it does) is because the other parts of the figure are jointly suggestive of a rabbit. Hence we are dealing here with a case in which the character of the whole influences the character of the parts. Importantly, in this sort of case, the influence is of a highly distinctive sort, for the character with which the whole imbues the part is *not* of a kind which could or would exist in a whole of a different kind. After all, we do not see the rabbit-ears attached to a duck, or the duck-beak attached to a rabbit. It is the non-transferability of meaning-imbued parts which generates phenomenal interdependence of the strong variety in such cases.

This general line of argument points to a number of interesting avenues that are worthy of further exploration, but I am doubtful that it will supply Sprigge with what he needs.

For the argument to be viable, it has to be the case that high-level concept-laden representative content can be present in sensory experience. A case can certainly be made for thinking that when we see a duck *as* a duck (or a door *as* a door or hear a duck's quacking *as* a duck's quacking) the content 'duck' (or 'door' or 'quacking') is as much a part of our sensory experience as any colour or sound qualities. But a case can also be made for thinking that this is not the case. Couldn't a subject – perhaps an animal or young infant – look at a door, and have an experience which in all *purely visual* respects is indistinguishable from the experience we ourselves have when we look at a door, but without their experience being imbued with anything resembling the concept 'door'? It is not obvious that this is wrong. The question of whether and in what form anything resembling conceptual or representational content features in our perceptual experience itself is an important one, and as yet very much unresolved. A recent issue of the *Philosophical Quarterly* was largely given over to this topic, and whereas some authors – *e.g.* Bayne and Siegel – defend the view that the phenomenal features of perceptual experience can include higher-level categorical or kind-properties (*e.g.* ... *is a tomato* or ... *is a pine tree*), others – Byrne, Pautz and Price – find the claim that the contents go beyond basic sensory properties (shape, size, colour *etc.*) highly problematic.<sup>19</sup>

<sup>19</sup> See T. Bayne, 'Perception and the Reach of Phenomenal Content', *The Philosophical Quarterly* 59 (2009), 385–404; S. Siegel, 'The visual

To cut a long story short, holists who rest their case on the doctrine that our sensory experience is imbued with high-level content are offering a sizeable hostage to fortune.

Setting this point aside, even if we suppose that sensory experience does have the sort of content the holist needs, it still may well be not enough. First of all, in the case of objects perceived under a certain aspect, is the character of the parts of the resulting phenomenal wholes really such that it is impossible for the parts to exist in wholes of a different type? So far as the duck-rabbit is concerned, I find that – on some occasions, if not all – I can succeed (after a little effort) in seeing the figure as embodying both aspects simultaneously: I see the figure as a rabbit with a duck's beak emerging from the top of its head, or alternatively, as a duck with a rabbit's face for a head. A few informal tests carried out on other subjects suggest I am not alone in this. (If when performing the experiment you find that you only succeed in seeing a rapid alternation of duck

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experience of causation', *The Philosophical Quarterly* **59** (2009), 519–40; A. Byrne, 'Experience and Content', *The Philosophical Quarterly* **59** (2009), 429–51; A. Pautz, 'What are the Contents of Experiences?', *The Philosophical Quarterly* **59** (2009), 483–507; R. Price, 'Aspect-switching and Visual Phenomenal Character', *The Philosophical Quarterly* **59** (2009), 508–18. Needless to say, the issue is by no means a new one, and it divided Gestalt theorists themselves: whereas some of these theorists held that structural or aspectual features are present in our base-level sensory experience, others held that these features are to be found only in higher-level conscious acts or qualities. In a useful chapter on this topic, Smith summarises thus: 'The fact that our experience is structured, is, according to Ehrenfels, a matter of certain special *Gestalt qualities* which are given in special experiences, superadded to our experiences of sensory elements. A two-level theory of this sort was ... characteristic of that "Austrian" approach to complex experience which was developed by Ehrenfels, Meinong, Witasek, Benussi, Bühler, and their followers. According to the later "Berlin" approach [of Wertheimer, Koffka and Köhler], in contrast, a collection of data (or any other psychological formation) does not *have* a Gestalt on a second level. Rather, it *is* a Gestalt, a whole whose parts are themselves determined as being such that they can only exist as parts of a whole of this given kind. The significance of this distinction, or of the transition from the Austrian theory of Gestalt as *quality* to the Berlin theory of Gestalt as *whole*, cannot be overestimated' (B. Smith, *Austrian Philosophy* (Illinois: Open Court, 1994), 245). In *Stream of Consciousness*, I was reluctant to extend high-level content or conceptual content to perceptual experience, but did allow that meaning is certainly to be found in our perception of speech and writing (*Stream of Consciousness, op. cit.*, §8.7).

and rabbit, try telling yourself first what you are looking at is a *duck-rabbit*, the unfortunate upshot of an experiment to fuse ducks and rabbits at the genetic level.) Not all instances of aspect-switching permit this permutation and re-combination of parts. The 'staircase illusion', where the same drawing can suddenly flip from a staircase running in one direction to a staircase running in a different direction, is one such. But even a few counter-instances will be enough to worry anyone seeking to develop a case for *complete*, rather than partial, phenomenal holism on gestalt-related factors.

A further and probably stronger consideration points in the same direction. Suppose Sprigge is right, and holism extends to all parts of every unified state of consciousness. If this holism is to rest on gestalt-related considerations, then *every* combination of the experiential parts which jointly compose such states must form gestalts. No doubt many do: it seems plausible to suppose that gestalts feature prominently in our ordinary visual experience. When I look out of the window, I see a road, some trees, a car, a woman walking a dog: here the various parts of my experience corresponding to a familiar stretch of the *road* constitute a gestalt, as do parts corresponding to the *trees*, and also the *cars*, likewise the *woman walking a dog*. Moreover, given that this scene – or much of it – is a very familiar one, it may well be that the entire combination of road + car + trees + woman-walking-dog *also* constitutes a gestalt. But other everyday examples are less promising in this regard. If I walk into town, some parts of my visual experience will form gestalts – a familiar row of buildings, a street-corner of long acquaintance – but there are many others that will not: the combination of the familiar street-corner with the person now standing there (whom I have never before seen) and the vehicle parked there (likewise entirely new to me). More generally, although many of the individual *objects* which feature in our visual experience are gestalts, a great many of these objects *when taken together* do not form gestalts, simply because these particular combinations of elements are new to us, or unique, or both.

The situation worsens when inter-modal combinations are taken into account. Earlier today, while gazing at the familiar scene visible from my window, I entertained a mental image of the Eiffel tower, enjoyed the flavour of cheese from my lunchtime sandwich, and simultaneously felt a tingle in my toe. The elements of my visual field may form a gestalt, but does the combination of cheese-related gustatory sensation, the toe-tingle and the mental image of the Eiffel tower? There is no reason to think so. These very diverse experiential elements do not form a pattern of any recognisable

kind; taken together, they lack anything which could plausibly be called organisation or structure: in these respects they are quite *unlike* the patterns of dots on the face of a die, or the sequences of notes which comprise familiar melodies. It may well be true that any combination of heterogeneous experiences *can* form a gestalt. Someone who, for whatever reason, takes a serious interest in the experiential combination ‘mental image of Eiffel tower + tingle in the toe’ would no doubt feel a sense of familiarity and recognition whenever they enjoyed this pairing of experiences: for *this* subject these experiences probably would form a gestalt. But obviously, this sort of case is very much the exception, rather than the rule: for most subjects, most heterogeneous combinations of experiences do not form gestalts. Since it seems plausible to suppose that substantial parts of our ordinary streams of consciousness are composed of precisely this sort of experiential combination, the prospects for building a compelling case for *complete* phenomenal holism based on gestalt-related considerations seem dim.

### 6. From Unity to Holism

If gestalt-related considerations will not sustain a phenomenal holism of the complete and necessary variety, what can? Can anything? The answer, I think, is ‘quite possibly’, and indeed, we have already encountered a promising-looking route forward. When speculating earlier (in section 3) as to what might have led Sprigge to endorse the complete phenomenal interdependence thesis, I suggested that he may have been influenced by the following line of thought: (1) the sort of unity which we find in consciousness – *phenomenal unity* – is of a very distinctive kind; (2) being unified in this way impacts upon the intrinsic phenomenal character of the experiences concerned; (3) the resulting difference in phenomenal character is also of a very distinctive kind, for the influence that each part derives from the whole reflects the character of the other parts which compose the whole; (4) hence this influence cannot be replicated by other types of whole. I also pointed out that if we suppose, as seems plausible, that all parts of a total conscious state are phenomenally unified, then any unity-generated phenomenal effects will be felt by all the experiential parts of such wholes. The resulting holism will be both complete, and necessary: complete because it applies to all parts of the relevant class of phenomenal wholes, necessary because it is a direct product of phenomenal unity, which is itself an essential (or defining) feature of such

wholes – a collection of experiences forms a phenomenal whole if, and only if, all members of the collection are phenomenally unified.

The general line of argument looks promising, but for it to be viable the holist needs to be able to mount a persuasive case for supposing that collections of individual experiences that are phenomenally unified necessarily acquire distinctive phenomenal features *by virtue of being so unified*. In chapter 9 of *Stream of Consciousness*, I proposed one route to this conclusion – a route which still strikes me as having some merit.

The point of departure is a particular way of thinking of phenomenal unity. Suppose we confine our attention to what can be said about the unity of consciousness at a purely phenomenological level. If I hear a bell ringing while looking at the tree outside my window, these two phenomenal contents – one auditory, one visual – are undeniably *unified*, and they are unified by virtue of being *experienced together*. Let us call the relationship that phenomenal objects (or contents, or properties) have when they are experienced together in this way, ‘co-consciousness’. From a purely phenomenological standpoint, co-consciousness looks to be a primitive relationship, at least to the extent of being direct and unmediated. In the case of my seeing the tree while hearing the bell, I experience the visual and auditory contents together, but this ‘togetherness’ does not seem to involve the experiencing of any additional experiential ingredient which comes between the contents, and serves to connect or bind them. There are simply the auditory and visual contents, together in my consciousness.

As soon as our attention is drawn to the existence of the co-consciousness relationship, it is evident that it is a familiar, if easily overlooked, feature of our conscious lives. Visual contents can be co-conscious with auditory contents, but visual contents can also be co-conscious with olfactory contents, bodily sensations, conscious thoughts, feelings, and so forth; in a similar fashion, any auditory content can be co-conscious with phenomenal contents of these and other kinds. More generally, any two parts of our total conscious states at any given time are co-conscious. More generally still, it is plausible to think that the same applies irrespective of how we opt to divide these total states into parts. So, for example, the contents figuring in the left half of my visual field are co-conscious with the tingle in my toe and my current conscious thoughts; but so too are the contents in the *whole* of my visual field, and the same applies to the contents in just the lower third of the field: these too are also co-conscious with the toe-tingle and my conscious thoughts. Precisely the same applies for cross-modal parts. The experience

which consists of my conscious thoughts and the left half of my visual field is itself co-conscious with the vague ache in my lower back, and the sensations of pressure in the sole of my foot.<sup>20</sup> Co-consciousness is thus a *pervasive* relationship, in this sense: no matter how we choose to divide a total conscious state into parts – irrespective of how complex or simple these parts happen to be – all of these parts are connected to one another by the co-consciousness relationship.

Turning matters around, the co-consciousness relationship provides us with a natural way of defining a complete or total conscious state. Such a state is simply one whose parts are all mutually co-conscious. More precisely, a total conscious state is a collection of experiences (or experiential parts) which are all co-conscious with one another, and which are not parts of any larger collection of experiences whose members are all co-conscious with one another. To put it another way, a total experience is a *maximal* collection of mutually co-conscious experiences. It is plausible to think that our ordinary experiences, at any one time, form parts of total experiences in the sense just defined.<sup>21</sup>

The next question is whether phenomenal contents which are unified in this manner acquire any additional phenomenal characteristics as a result – characteristics which they would not and could not acquire in any other way. To simplify, let us suppose that your total state of consciousness at the present time is confined to the hearing of a bell ringing, and the seeing of a tree. We can label these auditory and visual contents ‘F-type’ and ‘G-type’ respectively, and use the expressions ‘ $a_1$ ’ and ‘ $v_1$ ’ to refer to the token experiences involved.

<sup>20</sup> Those who subscribe to the doctrine of ‘unrestricted composition’ in the physical realm hold that every combination of material items, no matter how scattered or disparate (from the standpoint of common sense) counts as a fully legitimate *physical object*. In an analogous manner, I count any combination of parts in a total conscious state as ‘an experience’ – even if many of the resulting experiences are of unfamiliar kinds.

<sup>21</sup> It is very natural to think that our own experience at any given time forms a total state defined in this way. There are those, however, who argue that a single subject at a single time could have three experiences  $E_1$ ,  $E_2$  and  $E_3$ , which are such that  $E_1$  and  $E_2$  are co-conscious,  $E_2$  and  $E_3$  are co-conscious, but  $E_1$  and  $E_3$  are not – cf. M. Lockwood, *Mind, Brain and the Quantum* (Oxford University Press: Oxford, 1989), chapter 6. If co-consciousness is a transitive relationship, as I (tentatively) argue (*Stream of Consciousness*, *op. cit.*, §4.5 and *The Phenomenal Self* (Oxford: Oxford University Press, 2008), §8.6), then experiential structures of this sort are impossible, and experiences can only partake in wholes whose parts are all mutually co-conscious.

Is the character of  $a_1$  affected in any way by virtue of being co-conscious with  $v_1$ ? In a real-life case, the purely auditory character of  $a_1$  may well be largely unaffected by virtue of being experienced together with  $v_1$ , but bearing in mind the possible prevalence of cross-modal interactions, it would be wrong to insist on this. To simplify still further, let us set to one side the contingent interference effects of the kind we encountered in sections 4 and 5. The stipulation that there are no cross-modal or gestalt-based interference effects – at least in this particular instance – serves the useful purpose of allowing any purely unity-generated phenomenal effects or influences to stand out in clear relief.

In clarifying the situation further it will help to distinguish between two kinds of phenomenal feature. Let us call the purely and exclusively visual features of  $v_1$ , and the purely and exclusively auditory features of  $a_1$ , the *local* phenomenal properties of these experiences. In addition to these local features – in this case, an F-type auditory content and a G-type visual content – these token experiences each possesses *relational* properties of a phenomenal kind, properties each experience possesses by virtue of being experienced together with other token experiences. We can refer to these unity-generated features as *global* phenomenal properties. Since we are considering a total state of consciousness of an unusually simple kind, the global properties of  $a_1$  and  $v_1$  are also very simple:  $a_1$  has the global property of ‘being co-conscious with a G-type visual experience’, whereas  $v_1$  has the global property of ‘being co-conscious with an F-type auditory experience’. Of course, in the more realistic case of a more complex total state of consciousness, the global properties of a typical part of this total state would be considerably more complex. For the total state  $S$  composed of experiential parts  $P_1, P_2, P_3, P_4 \dots P_N$ , of local phenomenal types  $T_1, T_2, T_3, T_4 \dots T_N$  respectively, the global character of (say)  $P_2$  would be along the lines of ‘is co-conscious with experiences of local types  $T_1, T_3, T_4 \dots T_N$ ’. But since this additional complexity does not affect the essentials of the situation, we can safely remain with our simple example.

This stage-setting out of the way, we can move on to the key question: if we want to specify the phenomenal character of a token experience such as  $a_1$ , does it suffice to mention just its local phenomenal properties (in this case, F-type), or do we also need to include its global phenomenal properties as well? If the specification is intended to be maximally complete, capturing as much as possible, there are strong grounds for supposing that it will have to encompass both local *and* global properties. The complete story about  $a_1$ 's phenomenal features will obviously include mention of its local properties



(it is F-type: the hearing of a bell), but if this story is to be truly complete it cannot end there, for it will also have to include the *relational properties*, of a phenomenal sort, that  $a_1$  possesses (*i.e.* ‘is co-conscious with a G-type visual experience’). A truly exhaustive specification of the physical properties of any material object will obviously include the object’s intrinsic and relational properties – *e.g.* its distances from other objects, the forces acting on it – why should it be otherwise with phenomenal objects?

Adopting this inclusive policy also has a clear phenomenological rationale. A complete and accurate account of the phenomenal character of any experience will exactly capture *what it is like* to have that experience. The nature of phenomenal unity is such that a complete and accurate account of the character of  $a_1$  which failed to include reference to the occurrence of a G-type visual experience would simply be failing *fully* to capture what it is like to experience  $a_1$ . The experiencing of  $a_1$  involves a hearing of a ringing bell, but not just that: it involves a hearing of the sound of a ringing bell *that is co-conscious with the seeing of a tree* – this relational element is an important ingredient in what it is like to have this particular auditory experience. It is for this reason that we cannot hope to capture the complete phenomenal character of  $a_1$  without including both the local and the global phenomenal properties that it possesses. And of course, what goes for  $a_1$  goes for any other token experience that is part of a larger experience.

Although it may not be immediately obvious, the distinctive nature of the co-consciousness relationship is playing a crucial role here. As noted above, co-consciousness is not some additional element in experience that possesses phenomenal features of its own. When  $a_1$  and  $v_1$  are experienced as co-conscious, they are simply experienced together: there is no trace of any *experiential glue* (as it were) binding or connecting or linking them. Two contents that are experienced together are in *immediate phenomenal contact* (as we might put it) with one another. This contact is of a distinctively pervasive kind:  $a_1$  and  $v_1$  are not only experienced together, but every part of  $a_1$  (the auditory experiencing of the bell ringing) is co-conscious with every part of  $v_1$  (the visual experiencing of the tree). It is because of the peculiar – but very familiar – intimacy created by the co-consciousness relationship that such a strong case can be made for supposing that a maximally complete and revealing characterization of what it is like to have either of these contents must make mention of the other.

If we do opt to include both local and global properties in our specifications of the phenomenal character of token experiences, the

consequences are far-reaching and dramatic. Since the proper parts of any total state of consciousness are all mutually co-conscious with one another, it follows that a complete specification of the phenomenal character of any one of these parts will make essential reference to all the other parts. As we saw above, in the case of the total state  $S$  composed of  $P_1, P_2, P_3, P_4 \dots P_N$ , the global character  $P_2$  would be along the lines of 'is co-conscious with experiences of local types  $T_1, T_3, T_4 \dots T_N$ ', and similarly *mutatis mutandis* for the other parts. In this manner, the character of the whole impacts on the character of each of its parts – or if you prefer, the character of each (proper) part of a phenomenal whole – impacts upon the character of all the other parts of the same whole. Once we have recognised that the global phenomenal properties of an experience contribute to its overall phenomenal character, then provided we opt to individuate token experiences in the standard way, by holding that the precise phenomenal character of any experience is essential to it, we have the result that it is impossible for any token experience to exist in a total state that is of a different type to the one to which it actually belongs.<sup>22</sup> Given that this form of interdependence applies to the constituents of all total states, irrespective of how they are divided into parts, we have a phenomenal holism that is complete. Since the influence on phenomenal character derives from the co-consciousness relationship – the very relationship which binds experiences into phenomenal wholes in the first place – the holism in question is of the necessary variety: it extends to all parts of all total states of consciousness, in all possible worlds.

I think that a defence of phenomenal holism along these lines, rooted as it is in the distinctive unity that is to be found in our streams of consciousness, would at the very least have been congenial to Sprigge. Indeed, there are grounds for thinking this is close to (part of) what he had in mind. In a passage of the *Vindication* dealing with these matters, he considers an experience that is part of a particular total state of consciousness, and tells us that this experience will lack a precise phenomenal character that is independent of the whole to which it belongs, because imagining the experience 'in its full nature is necessarily imagining it as just that aspect of just such a total experience'. It follows that experiential parts cannot coherently be envisaged as existing in wholes that are of a

<sup>22</sup> To simplify matters I am overlooking here an important distinction between type-specific holism and token-specific holism – for a fuller treatment see *Stream of Consciousness*, *op. cit.*, §9.2 and also *The Phenomenal Self*, *op. cit.*, §9.5.

different type to those wholes to which they actually belong. He continues:

such components may share quite specific characteristics with components in centres [of experience] not duplicating the centre to which it itself belongs, but the full possibility of which it itself is an actualisation is bound to be different from that actualised by such another component, not because one decides optionally to include its relational characteristics as part of its individual essence, but because its inherent character and its relations to the rest are not separate matters at all.<sup>23</sup>

Sprigge may not have used the *terminology* of 'local' and 'global' properties, but this distinction is certainly implicit in this passage, as is the claim that both sorts of property must enter into fully adequate specifications of the phenomenal characteristics of experiences. And as we have just seen, if this claim is correct, then a surprisingly strong and wide-ranging form of phenomenal holism swiftly follows.

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<sup>23</sup> T. L. S. Sprigge, *Vindication*, *op. cit.*, 170–1.