# Are Thoughts Ever Experiences?

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**Abstract:**
The recent debate in philosophy of mind over whether thought has its own distinctive phenomenology, so-called cognitive phenomenology (CP), has led to a sharp division between proponents and skeptics of CP. This paper critically examines an ambitious argument against the existence of CP, which is based on a particular view of the temporal structure of thought. The argument, roughly, is that experiences, those mental entities that have phenomenology, persist as processes, while thoughts, on the other hand, are non-processive states or events. So no thoughts are experiences. The present paper attacks the claim that thoughts never temporally unfold as processes.

## 1. Introduction

The recent debate in the philosophical literature over the phenomenology of thought, so-called cognitive phenomenology (CP), has succeeded in polarizing philosophers of mind into two diametrically opposed, equally ardent factions.[1] Supporters of CP, phenomenal *liberals*, argue for the existence of a *sui generis* phenomenology of our thoughts, phenomenal properties that are somehow "proprietary" to cognition.[2] Phenomenal *conservatives*, by contrast, typically restrict the class of phenomenal properties to the sensory-perceptual realm.[3] Philosophers on both sides of the debate respond with incredulity to their opponents' claims. Against this backdrop, an argument that purports to show that the existence of CP in all forms is impossible, thereby rendering any further debate futile, demands serious attention from all parties. This paper seeks to refute just such an argument.

The argument in question belongs to Michael Tye and Briggs Wright (2011). Not content to explain away the apparent evidence for CP, Tye and Wright attempt to render

the liberal position untenable by establishing that thoughts are not the sorts of things that *could* have the requisite phenomenology. However, a careful assessment of their argument reveals that it leaves cognitive phenomenology unscathed.

## 2. The Process Argument

**2.1** Tye and Wright (henceforth T&W) present what I will call the Process Argument (PA) against cognitive phenomenology (2011, pp. 341-343). Their exposition of the argument is extremely brief and relies on the work of Matthew Soteriou (2007, 2009), who in turn draws on observations made by Peter Geach half a century ago. The core idea is that thought cannot be part of the stream of consciousness, because all items in a subject's stream of consciousness are *processive*, persisting by "unfolding" as a series of events over time, whereas thoughts are either static states or instantaneous events.

Even if we accept that a thought's content has a complex structure, we should not make the mistake of supposing that elements of that structure "occur successively, as the words do in a sentence" (Geach 1957, p. 104). Nor should we suppose that the thinking of the thought lasts as long as it takes to say the sentence in inner speech (Anscombe and Geach 1961, p. 96). On the contrary, "once one begins to think that claret is delightful, one has already *achieved* the thinking of it…the whole thought arrives at once" (Tye and Wright 2011, p. 342). By contrast, mental items in the conscious stream "unfold over time in the way that an event like a cricket match unfolds": by having distinct temporal parts at each successive moment of their existence (p. 342). One might capture this difference by saying that cognitive states, unlike cricket matches and conscious experiences, are "wholly present" at each moment they persist.

The relevant distinction is *not* that processes have temporal parts while states do not: we can conceive of "slicing up" enduring states into shorter temporal segments. Rather, the difference amounts to the fact that each of these temporal parts, considered on its own, already counts as that very state (type), while the proper temporal parts of a process cannot be identified with the process (type) itself. For instance, I am in a state of anxiety all day because I am in this state at each moment between sunup and sundown, whereas I am in the process of writing this paper all day by enacting successive parts of this process throughout the day, *parts that do not independently count as the whole process*. So a state's identity is already determined at the level of each individual temporal segment, but not so with a process, whose identity depends constitutively on all its temporal parts.[4]

In addition to states and processes, a third category is that of (near-) instantaneous events—examples include beginning and finishing a race—which are over as soon as they have started and produce a new standing state (Soteriou 2007, pp. 545-547). T&W's exposition of their argument is unclear on whether they believe thoughts are enduring states or instantaneous events. But there is no need to settle the issue here, because the important point is that in either case, thoughts end up being non-processive and therefore non-experiential, and essentially for the same reason: they cannot unfold in successive stages but must arrive in the mind fully formed.

T&W acknowledge that inner speech and imagery might constitute one's "experience of thinking," but they claim such experience must be distinguished from the thought itself. Since thoughts are non-processive, it is a mistake to think they could ever show up in one's stream of consciousness. But the domain of phenomenal consciousness just is that which makes up the stream of consciousness. Therefore, thoughts "simply

aren't suited to be the bearers" of phenomenology, and there is no such thing as a phenomenology of thought (p. 343).

Here is my best attempt at capturing Tye and Wright's argument:

**Process Argument (PA):**

P1 Thoughts do not unfold as processes

P2 Everything that is part of the stream of consciousness unfolds as a process

P3 All experiences are part of the stream of consciousness

C Thoughts are not experiences

By "thoughts" I mean judgments and related occurrent (non-dispositional) propositional attitudes. Each propositional attitude is a mental entity (a state, event, or process) that consists of the bearing of an attitude towards some propositional content.[5] I say a thing "unfolds as a process" as shorthand for a thing persisting through time by having a processive structure, or else being the type of thing that would have a processive structure if it were to persist.[6] The above formulation is valid. And it captures T&W's claim that thoughts cannot be "the bearers of the relevant phenomenology." For as I am using the term, all and only experiences instantiate phenomenal properties. In other words, T&W's argument is an attack on the idea that the very same mental entity could possess both a thought content and phenomenal character.

**2.2** In trying to respond to this argument in defense of CP, we have two options. We can challenge one or more of the premises, or we can accept the premises but deny that the conclusion undermines the liberal position. Elsewhere, I take up the latter strategy (Forrest 2015). In what follows here, I direct my attack against Premise 1.

I will not be challenging the other two premises. As I understand the terms involved, Premise 3 is virtually analytic. By contrast, I do believe Premise 2 is vulnerable to objections. One major problem for P2 is that it seems to require denying that in cases where a part of our total perceptual experience stays the same for some time (e.g., a persistent visual experience of a blue wall) the conscious stream is partially constituted by enduring phenomenal states (e.g., a phenomenal blue state). However, I'm interested here in exploring what we should make of the argument if we grant P2.

There are two main reasons I do not wish to rest any weight on rejecting Premise 2. The first is that challenging P2 by appealing to apparent phenomenal states as counterexamples seems to strike most people as the most obvious way to challenge the Process Argument. I have heard many philosophers suggest such a response in conversation. Indeed, Elijah Chudnoff has recently made this point in print (2015). By contrast, people seem inclined to accept Premise 1 without criticism, which makes objecting to P1 more counterintuitive, and arguably more philosophically interesting, than attacking P2. Furthermore, if I am right that many people find P1 more intuitively plausible than P2, then attacking P1 is attacking the defender of the Process Argument where she seems to be strongest. If I can show that *even* P1 should be rejected, then I will have dealt the argument a decisive blow.

The second reason I wish to focus on Premise 1 rather than Premise 2 is that the case against P1 turns out, perhaps surprisingly, to be more straightforward than the case against P2. The objection against P2 mentioned above and articulated by Chudnoff is that the conscious stream seems to be partially composed of perceptual states whose phenomenology is uniform over time. But this point is anticipated in the work of Brian

O'Shaughnessy, on which Soteriou's defense of P2 chiefly relies, and O'Shaughnessy has a rejoinder: "even when experience is not changing in type or content, it still changes in another respect: it is constantly *renewed*, a new sector of itself is there and then *taking place*…Even if I am staring fixedly at some unchanging material object, such staring is not merely a *continuous existent* across time, it is an activity and therefore also a *process*" (2000, p. 42). Likewise, "there is no state of 'hearing the sound' at the heart of listening, there is merely the constant renewal of an occurrence, the continuous ongoing or happening of a process of continuous hearing" (p. 49).[7] This is because "all that exists in the realm of experience does so in the mode of 'flux', so that whatever endures necessarily does so processively" (p. 44). And he offers what we might call the "Absolute Zero Argument," for this claim: "while many of the non-experiential contents of [the mind] could continue in existence when all mental phenomena had frozen in their tracks, say (fancifully) in a being in suspended animation at 0° Absolute, those in the experiential domain could not" (p. 43). Hence "the destruction of mental incident entails the destruction of consciousness"; this shows that "no experiences merely obtain or merely exist," but rather "of necessity 'happen' or 'occur' or 'are going on': in a word, are either events, or processes, or both" (p. 47).

Admittedly, O'Shaughnessy's argument is obscure, but being obscure does not make it unsound, and I don't think Chudnoff does enough to engage with it. On Chudnoff's reconstruction, O'Shaughnessy's argument moves from a premise that experiences are "essentially in a condition of flux" to the claim that experiences could not survive the mind's "coming to a standstill" (the Absolute Zero claim), and then from there to the conclusion that experiences are processes rather than states. He then complains that for

O'Shaughnessy to assume the premise about experiences being in flux begs the question as to whether they are processes or not (2015, p. 89). But on my reading of the argument, the Absolute Zero claim is a premise offered as motivation for the *conclusion* that all experiences are in flux and therefore processive.[8] For O'Shaughnessy, reflection on the Absolute Zero thought experiment is supposed to make it seem intuitively obvious that experiences could not survive a "mental freeze," that they are essentially dynamic rather than static, and thus that they have a processive structure. Chudnoff does not directly address this core intuition that the thought experiment is designed to provoke.

Ultimately, O'Shaughnessy's argument fails to be fully convincing, since he does not adequately motivate the claim that no experience could survive the freeze, relying entirely on his readers to share his intuition about the imagined scenario. Still, I do feel the pull of this intuition myself. So the argument at least raises doubts about the inference from an experience remaining the same in character and content over time, to that experience having a state-like rather than processive temporal structure—an inference on which Chudnoff's initial objection relies. The trouble is that moving beyond intuition pumping to a proper evaluation of the merits of O'Shaughnessy's reasoning would lead us quickly into deep metaphysical waters, and I don't know how to settle these issues from the armchair. So I prefer to set this dispute between O'Shaughnessy (and by proxy, Soteriou and T&W) and Chudnoff aside here, and turn my attention to Premise 1.[9]

## 3. Are Thoughts Processes?

**3.1** Before proceeding, I need to make one qualification, and draw an important distinction.

First: the distinction. T&W, Soteriou, and Geach each motivate P1 with the observation that thoughts occur in the mind "all at once," which might be understood as an appeal to introspection. For instance, T&W assert, "Thinking the thought does not unfold in the way that a string of sounds from a piano unfolds in an etude. The whole thought arrives at once" (p. 342). If they are attempting to describe how it seems to us from the first person perspective, then they are not ruling out *a priori* the apparent possibility that we think in unfolding stages.

However, Tye and Wright introduce their argument by saying, "we shall conclude by arguing for something stronger than the simple claim that in actual fact there *is* no such thing as a phenomenology of thought…We shall offer considerations regarding the nature of thought itself that suggest that thoughts *could* not be bearers of the relevant phenomenology" (p. 341). For T&W thoughts "do not have the right structure" and so "simply aren't suited" to be part of the stream of consciousness (pp. 341, 343). Now, it is open to them to contend that the conclusion of their argument, while metaphysically necessary, is arrived at by *a posteriori* investigation. But it is difficult to see how the case they present, if construed as built on *a posteriori* grounds, could be sufficient to establish that thoughts, by their very nature, *must* occur "all at once."[10] Nevertheless, someone could claim that, merely as a contingent fact about human cognition, thoughts are non-processive and thus non-experiential, and presumably this view would not be something we could establish by armchair reasoning alone. Thus, the key distinction we need to make is between versions of the Process Argument that are based on *a priori* considerations and those that are based on *a posteriori* considerations. I will consider—and reject—P1 in both versions of the argument.

Second: the qualification. Thoughts constitutively involve the bearing of an attitude to a content. In challenging P1, I want to leave open the question of whether the bearing of any attitude beyond merely *entertaining* a content could be a process or not. One might argue that for a subject to take up certain attitudes towards a content essentially involves accepting certain normative commitments, and one might think that standing in these normative relations is an all-or-nothing matter. So coming to bear such an attitude cannot be a gradual process, but must likewise be all-or-nothing.[11] Regardless of what we take the merits of this argument to be, I am not going to address it in what follows. For it seems to me that it is at least an open question whether the cognitive mechanisms that underlie the occurrent representation of a thought content are independent from those that underlie the taking up of any number of more specific, normative involving, attitudes towards that content (e.g., endorsing it, doubting it, desiring it to be the case) such that the former could occur as a process even if the latter could not. My claim in what follows is only that the *formation of the content* may be a process and thus need not occur "all at once." I effectively am operating under the assumption that it is possible in principle for such independence between content and attitude to hold (and that we don't know it doesn't hold in our own case). No doubt this is a substantive move, and it raises a number of deep issues, but fully addressing these issues lies beyond what I can accomplish in this paper.[12]

**3.2** Let us start by looking at the **A Priori** argument. The idea motivating P1 can be traced back from T&W to Soteriou to Geach, who writes, "unless the whole complex [of a thought] is grasped all together...the thought or judgment just does not exist at all" (1957, p. 104); and elsewhere: "unless the whole content of the thought that all tigers are

dangerous is simultaneously present to the thinker, no such thought occurs at all." The reason he gives for this is that "there is no such feat as thinking of all tigers except in the context of a thought that all tigers are so-and-so," and "though I may no doubt have an indefinite thought of danger, a thought of tigers followed by such a thought would not be a thought that all tigers are dangerous" (1969, pp. 34-35). We can borrow a thesis from Chudnoff (2015), in order to capture Geach's constraint on thinking:

> **Simultaneity:** Suppose you think that p at t. Then all the parts of your thought that p occur at t. (p. 90)

Geach's reasoning is that (i) the logical-semantic relations holding between the various elements of the propositional content of a thought ensure a degree of unity in this content, and (ii) this unity requires the thought to be thought all at once, that is each part of the complex content must be "grasped" simultaneously. Since this unity appears to be a feature of all thoughts simply in virtue of their having propositional content, it seems Simultaneity can be justified by appeal to *a priori* reflection on the nature of thought alone. In a slogan: of necessity, *one cannot think half a thought*. And this is a problem for the notion of thinking as a process, since, if Geach is right, a thought cannot be built up over time in distinct stages. So Geach's Simultaneity principle provides a reason for accepting the *a priori* version of P1.

**3.3** But the Geachian support for P1 does not stand up to closer scrutiny. Standard contemporary views of human cognition, the Representational Theory of Mind (RTM) and Language of Thought Hypothesis (LOT), raise problems for Geach's ideas.[13] According to RTM, for a subject S to think a thought that p is to bear a (functionally specifiable, physically realized) relation to a representation in S's mind that means that p. A thought—

in the everyday sense meaning the mental particular that *is* thought by the subject—is just a representation or symbol in the head, a "vehicle" with representational content. The LOT thesis adds to this picture the idea that thoughts are *complex* representations, built up out of primitive representations according to a combinatorial syntax and semantics, such that "the semantic content of a molecular representation is a function of the semantic content of its atomic constituents together with its syntactic/formal structure"(Aydede 1998).

These popular theories are in serious tension with Geach's views about thought. For starters, if to have a thought is just to token a certain kind of mental representation, and a mental representation is identical to, or realized by, a neural event, then having a thought boils down to a certain kind of neural event. But neural events arguably persist processively, by having distinct parts at each moment they exist. So it seems that thinking a thought also must unfold over time.

The defender of Geach can insist that a thought does not necessarily have the same temporal structure as any neural event that happens to bring it about. For one thing, familiar considerations about multiple realizability mean that the representation is at best realized by, but not identical to, a neural process in the brain. And for another thing, we are free to conceive of a thought as realized by the neural event/state that exists only at the very end of an extended neural process, such that the entire process is not itself necessary for the tokening to take place. In other words, while various cognitive activities might rightly be considered processes, it would be a mistake to consider the thought token that *results* from these activities to be a process. Instead the thought, on this view, is identical to the instantaneous event of the cognitive process being *completed*.

However, if this is the best Geachian reply to the above worry, then it runs into

trouble when we add an LOT framework to the RTM. According to LOT, thinking a thought literally involves the tokening of its constituents, and the propositional content of the thought is built up from the contents of these simpler representations. But then, RTM and LOT seem to leave open the possibility that the overall representation of a thought content could occur *non-simultaneously*, since the concepts that jointly constitute the thought representation could be realized in the brain consecutively.

It is no longer a viable option to identify the thought with an instantaneous event. For if thinking the thought *I dream of Jeannie* involves tokening the complex representation A-B-C, and this representation has as parts the concepts A, B, and C—meaning *I*, *to dream of*, and *Jeannie*, respectively—and further, if tokening A-B-C in fact involves tokening first A at $t_1$, then B at $t_2$, and finally C at $t_3$, then we cannot identify the thought with the cognitive event/state only beginning at $t_3$ (or with some further resulting state that only obtains after $t_3$). For LOT's commitment to the idea that thoughts have a constituent structure entails that the tokening of each constituent is literally part of the tokening of the whole. In this case, it *would* be possible to "think half a thought"—for example by tokening A and B but not yet C—before getting interrupted.[14]

To be clear: I am not claiming that the LOT must work in the way just described, with thought representations realized in successive phases. Rather, my claim is that LOT must allow for the *possibility* that thoughts are tokened in our minds in this way, given its general account of what a thought is. And since Geach's Simultaneity principle is intended as a universal constraint on all possible thought, we cannot accept both LOT and the Geachian view.

**3.4** An obvious reply to my argument in the last section is "well, so much the worse for these empirical theories." If PA, conceived as an *a priori* argument, is incompatible with RTM and LOT, why should that be a reason to reject it? If these theories really are incompatible with Geach's insights about the nature of thought, why not just think Geach has hit upon an *a priori* reason that they cannot be true?

I don't think this is a promising response. Reflection on LOT points to a general reason to be skeptical of the Geachian position, but it is important to underline that this reason does not depend on LOT, or on realism about syntactically individuated, physically realized mental representations in general. To see why, consider how LOT reveals what is deeply wrong with Geach's view in the first place. From Geach's argument we formulated the following principle:

> **Simultaneity:** Suppose you think that p at t. Then all the parts of your thought that p occur at t.

What is striking is that Geach's motivation for Simultaneity is very similar to things that Fodor says *in defense of* a "classical," that is LOT, cognitive architecture in his dispute with connectionism: we need thoughts to be representations that are compositional, built up out of simpler representations according to syntactic rules, precisely because representing a proposition is *more than* just representing its semantic parts.[15] To think the thought *I love Lucy* requires something over and above the process of first thinking *I*, then thinking *love*, and finally thinking *Lucy*. As Geach puts it, "unless the whole complex is grasped all together" there just isn't a single thought there at all. This is essentially principle (i) in my summary of Geach's reasoning above.

But in Fodor's characterization of the language of thought, LOT's method of unifying individual concepts into a single thought with propositional content does not appeal to

*temporal* unity at all—rather the unity is *syntactic*. According to Fodor, the difference between a subject tokening a string of merely associated concepts and thinking a thought lies in the structural-functional relations between the different conceptual representations constituting a genuine thought, relations that encode the combinatorial structure of a representation in the language of thought.[16] In the case of a subject merely tokening a group of concepts, by contrast, this syntactic structure is missing. But there is nothing about LOT, as far as I can see, that requires the entire syntactic structure of a complex mental representation, along with the atomic representations that it combines, to be realized in the brain at a single moment. My suggestion is that the binding together of the various constituent representations into a single thought *could itself be a process,* unfolding alongside the representations. For instance, in the case of the thought *Ricky loves Lucy*, already at $t_1$ the mind is processing the concept of Ricky *as a part of an as-yet-unfinished propositional representation*. So it is appropriate to describe what goes on at $t_1$ as the beginning of a thought, the beginning of the entertaining of a proposition about Ricky, rather than just the deployment of the Ricky concept.

One might wish to quibble with details of Fodor's account, but the point is that Geach's central insight—concerning the difference between mentally representing a proposition and merely representing its semantic constituents—can be acknowledged and accounted for by RTM in terms of LOT. Indeed, making sense of this difference is a major motivation for positing a language of thought. But then Geach's insight falls short of providing justification for the Simultaneity principle, because it only gets us as far as justification for accepting (i), but does nothing to justify the further assumption, (ii). For being "grasped all together" does not require being grasped *in a single instant*, but only

being grasped *as a unity*. And grasping a complex thought as a unity might involve grasping its parts in succession, but grasping them *as related* to one another. Thus, Geach and Fodor should be able to agree on the following alternative to Simultaneity:

> **Unity:** Suppose you think that p at t. Then all the contentful elements of your thought must be structurally unified, where this means, at a minimum, (a) they must stand in certain relations, r, to each other, such that the tokening of these r-related elements is jointly sufficient for the subject to entertain (or judge) the proposition, p; and (b) merely tokening these elements of the thought successively or simultaneously is *not* sufficient for the subject to entertain p.[17]

According to LOT, the set of r relations consists of functional properties physically realized in the brain, which constitute the combinatorial structure of a thought. But *one can accept Unity without accepting LOT or RTM*, by giving an alternative account of the r relations that bind the elements of a thought together into a propositional whole. In any event, the Simultaneity principle—and the *a priori* version of PA that it undergirds—has little left to recommend it.

**3.5** At this juncture, my opponent can try retreating to a more concessive position while still holding on to Premise 1. Perhaps, although a thought token could be constructed in successive stages as suggested above, there is nevertheless some *additional* feature of the nature of our thoughts that requires them to have a state- or event-like structure. Perhaps it is the subject's conscious *awareness* of the thought that cannot occur in stages.

We can put this idea by distinguishing between merely processing or "grasping" a thought content, on the one hand, and consciously entertaining a thought, on the other. The proposal is that consciously entertaining a thought in this sense—becoming non-inferentially, first-personally aware of its propositional content—happens instantaneously if it happens at all. Indeed, my opponent might insist that the debate was over this sort of

personal-level awareness all along: thinking, in the relevant sense, just is becoming aware of (a series of) thought contents. From this perspective, the key claim that leads to endorsement of P1 is the following:

> **Simultaneity*:** Suppose you are consciously entertaining p (i.e., enjoying direct, first-personal awareness of p) at t. Then you are consciously entertaining the entirety of p at t.

I think the prospects of finding adequate *a priori* support for Simultaneity* are dim. Remember, the sort of conscious awareness of content that figures in Simultaneity* cannot be awareness brought about by *phenomenal* consciousness. But if not, what sort of account of the awareness of our thoughts is left to us except one that ultimately invites a functionalist characterization? Certainly access consciousness (Block 1995) and related notions are functionalist notions. And if we understand this awareness in functionalist, representationalist terms, then we are back where we ended up in our discussion above: a subject's conscious awareness of a thought might be a physically realized functional process just as much as any mere non-conscious grasping of the thought content might be.[18] If so, the remarks I made above about the possibility of the unity of a thought being achieved non-simultaneously will apply *mutatis mutandis* to the unity of the subjective awareness of a thought.[19]

**3.6** We can turn, finally, to the **A Posteriori** version of the argument. What sorts of *a posteriori* considerations can we bring to bear in support of Premise 1? The options would appear to be (1) introspection of our own thoughts, and (2) what science can tell us about cognition. As for (2), there would need to be compelling scientific evidence for ruling out not only the LOT, but also *any* prima facie plausible account of thought that meets the Unity

constraint without relying on Simultaneity to do so. If one knows of such evidence, answers on a postcard, please. In the meantime, we are left with (1), our introspective reports.

Suppose the proponent of Simultaneity or Simultaneity* (I will not carefully distinguish between the two in this section) claims that we introspectively seem to grasp/entertain a propositional thought at a single moment. How compelling is her claim? Is the claim that it *always* seems this way, or only on the handful of occasions she happened to attend closely to her thoughts? It is not at all obvious to me that I can "look inward" and pinpoint the exact moment a thought begins and ends. Indeed, there are times when it seems fairly intuitive to describe a single thought as having developed during the thinking of it. An obvious example is thoughts caused by reading written language: I read 'Ricky is' at the bottom of one page, take a moment to turn the page (the pages are stuck together), and then read 'in love with Lucy,' at the top of the next page. I understood the first part of the sentence, but had no idea how it was going to finish until I turned the page. In order to say that the thought caused by reading this sentence does not unfold over time, we must insist that the first part is still being entertained when I arrive at the end of the sentence, so that the whole thing can be grasped at once.[20] But must it *always* be this way? And is this question really something we can settle just by introspecting? Of course, the cognitive effects of reading and understanding the first part will still be unfolding when I finish the sentence, but that is different from the stronger claim needed here, that I am still somehow *holding in mind* the first part of the sentence at the end. Any temptation to insist that we always entertain the whole of the meaning of a sentence at the exact moment we finish reading it—no matter how long the sentence—likely originates from the lingering

influence of Geach's *a priori* reasoning about Simultaneity, which we have already seen is flawed.[21]

However, for the sake of argument, suppose we accept the claim that we seem to be aware of our thoughts all at once. Still, we can distinguish between seeming to be aware and actually being aware, and accept the one while suspending judgment on the other. My opponent might object that to seem to be aware of a particular proposition implies that one is aware of it, at least in the episode of "seeming" itself. In response, we can grant that seeming awareness of p and awareness of p cannot come apart entirely. We only need to argue for their coming apart in a more modest way: that it is possible for an awareness of p (or for the thought that p of which one is aware) to seem instantaneous when in fact it takes time, and for instances of awareness of the constituents of p to seem simultaneous when in fact they are not.

The distinction between the actual temporal properties of events and the temporal properties they subjectively seem to have is a familiar one to philosophers of mind. Why might a subject be unaware of the true temporal relations holding between the parts of her occurrent thought?[22] We can ask this question with respect to cognitive awareness of a basic sort—the awareness we have of our thoughts simply by being awake, attentive, and in a lucid frame of mind—or with respect to introspective awareness that comes via deliberately attending to, or reflecting upon, our thoughts. Roughly, the former is awareness of *what* we are thinking—just the content—while the latter is awareness *that*, and perhaps *how*, we are thinking it. It is natural to suppose that explicit sensitivity to features of our thought tokens and acts of thinking themselves is a sophisticated capacity that we only tap into, if at all, on those occasions when we deliberately "turn inward." So

thinking or becoming aware of a thought might occur in stages, and yet we should expect a subject not to notice this fact unless she introspects.

On the other hand, it would not be surprising if we fail to notice the way our thinking a thought is built up out of stages even when we do introspect. For plausibly an intentional state makes us aware of just its content, and arguably the content of an introspective state about a thought is simply that we are thinking a thought with a given content. So introspection might give us no information about *how* we are thinking the thought. Furthermore, even supposing we can learn about the temporal properties of our thoughts from introspection, the time differences between when distinct parts of the content are grasped might lie below the threshold of what is discriminable for a normal subject.

Finally, even allowing that differences in time between the stages of a thought are in principle discriminable, one might not notice the temporal order of these parts *as* temporal. What we might call the logical or semantic structure of the propositional elements—the way they are experienced as bound together in a unified whole—could mask their experienced temporal order. Provided the transition from one part to the next is fast enough, there may not be any introspectively noticeable "time lag" between, for example, beginning to think about Ricky, and beginning to think some particular thing about Ricky, a gap in which one would have the opportunity to pause and wonder to oneself, so to speak, "what *about* Ricky?" (the way one might when reading a sentence about Ricky that begins at the bottom of one page but finishes at the top of the next). In that case, even if there is a split-second transition between, say, thinking of an object and predicating something of that object, the thinker's awareness of the unity between the parts of her thought might be

sufficient to obscure this fact. How might this occur? Perhaps, to the degree that the subject notices that one part of her thought "comes before" another part (e.g., subject before predicate), she is inclined if pressed to interpret what are temporal relations as semantic relations, as certain parts taking semantic or logical *priority* over others, in the act of fitting them together. Thus, on reflection she seems to be aware only of a structured whole, rather than of a series of temporally separate constituents.

If what I just described is on the right track, there could be cases in which neither basic nor higher order awareness affords the subject access to the thought content *the way she actually grasps it or becomes aware of it:* in successive connected conceptual units. This does not imply that the subject fails to be aware of these conceptual units successively—she may be aware of them successively, just not aware of them as a succession. We should conclude that the mere fact (if it is a fact) that it can seem to us that a thought arrives all at once is not sufficient to establish Simultaneity or Simultaneity*. But then we lack an adequate *a posteriori* reason to accept Premise 1 of the Process Argument.

**4. Conclusion**

I have surveyed two versions of the Process Argument and found that both fail to provide adequate support for the argument's first premise. The A Priori argument does not justify the supposition that a subject's grasping or consciously entertaining a unified propositional content must happen in a single moment, and the A Posteriori argument rests on dubious assumptions about how our thoughts introspectively seem to us and what this can tell us about their actual temporal structure. Thus, we should conclude that PA fails to show that thoughts are not experiences. We are free to accept or reject the existence of

cognitive phenomenology based on the evidence, but either way, our stance should not be based on the considerations presented in the Process Argument.

## Notes

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[1] I follow the standard, perhaps unhelpful, characterization of phenomenal properties as those properties of a mental state (process, etc) that constitute "what it is like" for the subject, from the subjective viewpoint, to be in that mental state.

[2] There are at least two different ways of understanding this position, depending on different ways of interpreting the claim that CP is *sui generis* or proprietary to thought. According to what I call the *Qualitative Thesis*, there exist phenomenal properties that are qualitatively different from all sensory phenomenal properties, and which are (somehow) specially associated with thoughts. The *Modal Thesis*, on the other hand, says that there exist phenomenal properties that are *necessarily* unique to cognition: the instantiation of these phenomenal properties in a subject metaphysically necessitates the tokening of a phenomenally conscious thought in the subject. Many liberals seem to accept both claims, though they do not always clearly delineate the two.

[3] Examples of the former group include Horgan and Tienson (2002), Pitt (2004), Siewert (1998), and Strawson (1994). Examples of the latter include Carruthers and Veillet (2011), Lormand (1996), Prinz (2011), and Robinson (2005). See the contributions in Bayne and Montague (2011).

[4] See Chudnoff (2015, pp. 81-82); Velleman and Hofweber (2011, p. 16); and Crane (2013). Many philosophers in conversation seem skeptical of the distinction being drawn between states and processes. I am granting that there is something to the notion for the sake of exploring my opponent's argument.

[5] In the second half of the paper, when discussing the representational theory of mind (RTM), I sometimes speak of the (alleged) mental representations that represent the propositions towards which we bear the various attitudes as "thoughts". But since it is clear what the relation between these two types of "thoughts" is supposed to be according to the RTM, I think the ambiguity here is innocuous. In particular, if tokening a thought, in the second, RTM sense, is a process, then it follows that thinking a thought, in the first sense, is at least partly processive as well.

[6] This qualification is needed in order to rule out the idea that an instantaneous thought could also be an instantaneous experience. Unqualified, the argument would be invalid: from premises about *persisting* thoughts and experiences, we could not reach the conclusion that *all* thoughts are not experiences (cf. Chudnoff 2015, p. 94). Another way to deal with this issue is to deny that there are any instantaneous experiences. On this alternative, even if there are instantaneous thoughts (which, perhaps, can be parts of the conscious stream), they nevertheless cannot be experiences, since all experiences are persisting parts of the stream. There is some textual evidence for thinking that Soteriou, at least, believes that all experiences have duration (2007, p. 562). O'Shaughnessy's "Absolute Zero" Argument (2000, pp. 42ff) might be thought to imply this claim, too.

[7] Note that even if each of these momentary occurrences counts as an instance of the general type, hearing, none of these occurrences is of the same *specific* type of hearing experience as the total experience that they

compose. For only the total experience is an occurrence of "continuous hearing" having that exact content over that exact duration of time. So even if its phenomenal character and content remain uniform, the total experience would count as an evolving process rather than an abiding state according to the criterion I introduced earlier.

[8] Perhaps the disagreement can be explained by the fact that Chudnoff interprets "being in flux" and "being processive" as picking out distinct properties, whereas I think the text basically treats them as two ways of saying the same thing.

[9] For further discussion, see Chudnoff (2015, pp. 79-99), O'Shaughnessy (2000, pp. 42-49), and Soteriou (2007, pp. 547-550; 2009).

[10] Soteriou (2007, pp. 544-547) and Geach (1969, p. 64) make much of linguistic evidence for their position. Although evidence of how we talk about thought is a posteriori, one can take such observations as corroborating evidence for a priori analyses of our concept of thought. This second approach arguably characterizes Geach's line of reasoning.

[11] I owe this point to Josh Dever.

[12] Even if forming the thought content and applying an attitude to it—in a normatively committing way—*cannot* come apart in the way suggested in the main text, we still can resist the claim that a thought must happen all at once rather than in stages. For instance, an anonymous reviewer of this article cites the work of Peter Hanks (2015), who argues that judging that O is F amounts to performing the sequence of mental acts: (1) referring to the object, O, (2) expressing the property of being F, and (3) predicating it of O (2015, p.23). On this view forming the content and performing the judgment are inseparable. The same act—predication—that is responsible for uniting elements of content into a single propositional whole is also what entails commitment. (In other words, on this model the committal, "forceful," attitude, judgment, is more basic than the neutral attitude, entertainment: the latter must be derived from the former, not vice versa.) However, as the reviewer admits, Hanks's view can be understood as one on which forming a judgment is a gradual process: referring to O, and expressing the property of being F, could occur in steps prior to predicating F of O. One might object to this suggestion that the judgment proper should only be thought of as occurring at the moment of predication. But from the fact that normative commitment is all-or-nothing, and the fact that commitment and unification of the content happen in the same moment and by the same act, it does not follow that judgment as a whole is all-or-nothing. For it doesn't follow that all there is to judgment is unifying the content and committing to it—representing the content could be a process even if unifying it is not, and we might count the thought as starting at the beginning of this process. If the correct way of individuating contentful elements implies that in some cases those elements appear in the mind prior to the moment they are combined into a propositional whole (whether they do so or not is an empirical question, presumably), then at least in one sense it seems thinking the thought begins before the act of predication. Alternatively, we could accept that content and attitude cannot be pulled apart, and that bearing an attitude to a content is all-or-nothing, yet still maintain that unifying the content is a process. For normative commitment could be introduced only at the moment that unifying the content *finishes* (e.g., via predication or some other act), so that the former could be instantaneous even if the latter were accomplished in stages. These are just suggestions, illustrating the options open to someone who grants that adopting a normatively committing attitude is an instantaneous event, but still denies Premise 1 of the Process Argument.

[13] For RTM and LOT, see Aydede (1998), Fodor (1975, 1987), and Pitt (2000).

[14] One might object that if one were to get interrupted, the tokens of A and B would not necessarily count as half a thought, but simply as unconnected tokens of the concepts *I* and *to dream of*. We can grant this point for the sake of argument (whether it is right or not depends on when and how the syntactic properties that unify the thought are instantiated—see below). But it doesn't change the fact that, if thinking a thought essentially involves tokening a string of non-simultaneous simple concepts, then the thought cannot be an instantaneous event. Nor can the thought be an enduring state, since the temporal parts of the thought are not themselves that same (or indeed any) thought.

[15] See Fodor and Pylyshyn (1988) for a classic elaboration of this idea.

[16] See note 9 in Fodor and Pylyshyn (1988, pp. 13-14).

[17] Cf. Fodor and Pylyshyn (1988, pp. 24-27).

[18] This point holds whether we adopt a first-order or higher-order functionalist account of awareness of our thoughts. Cf. Joe Levine's (2011) distinction between "implicit" and "explicit" self-knowledge.

[19] On this possibility, the awareness relation between a subject, S, and, for example, the proposition that Ricky loves Lucy would be instantiated for the period of time it takes to become aware of the individual conceptual elements of the thought (and how they relate to each other). At time $t_1$, the instant that S entertains *Ricky*, S would count as consciously entertaining a proposition derivatively, in virtue of undergoing an event that is partly constitutive of entertaining a proposition, just as long as the other events that are constitutive of this process occur at $t_2$, $t_3$, and so on. By analogy: at a given moment I count as reading a sentence in virtue of reading a word at that moment—an event that is partly constitutive of reading the whole sentence—and not in virtue of reading the whole sentence at that moment.

[20] Alternatively, one might argue that even at the beginning of the sentence, I have already grasped a whole thought if I have understood anything at all, since I do not understand 'Ricky' as meaning just *Ricky*, but always *Ricky is something-or-other*—a full proposition, which gets altered as the details of the rest of the sentence get filled in. So rather than supposing the thought is an instantaneous event occurring after I finish reading, on this view the thought is an enduring state (or, there are multiple thoughts corresponding to a series of such states), which begins when I read the first word. But the idea that every time I read, for example, a single name I have already grasped an entire proposition is implausible. Again, I suspect that any plausibility this view enjoys comes from the Geachian conception of thoughts, rather than directly from introspection.

[21] A long sentence may represent a number of conjoined simpler propositions, in which case the subject would only need to be entertaining the final simple proposition at the end of reading, not the entire meaning of the sentence. But the general point still stands. Furthermore, even if introspection did consistently suggest to us that thoughts happen all at once, it is unclear how this kind of evidence could justify the ambitious claim that T&W make about their argument: "We shall offer considerations regarding the nature of thought itself that suggest that thoughts *could* not be bearers of the relevant phenomenology" (p. 341).

[22] Alternatively: between the parts of the (first-order or higher-order) state/process of awareness of a thought.

## References

Anscombe, G. E. M., and P. T. Geach. 1961. *Three Philosophers.* (Oxford: Oxford University Press).

Aydede, Murat. 1998. "The Language of Thought Hypothesis," *The Stanford Encyclopedia of Philosophy* (Fall 2015 Edition), ed. Edward N. Zalta. http://plato.stanford.edu/archives/fall2015/entries/language-thought.

Bayne, Tim, and Michelle Montague. 2011. *Cognitive Phenomenology* (Oxford: Oxford University Press).

Block, Ned. 1995. "On a Confusion about a Function of Consciousness," *Behavioral and Brain Sciences*, vol. 18, no. 2, pp. 227-287.

Carruthers, Peter, and Benedicte Veillet. 2011. "The Case Against Cognitive Phenomenology," in *Cognitive Phenomenology*, ed. Tim Bayne and Michelle Montague (Oxford: Oxford University Press), pp. 35-56.

Chudnoff, Elijah. 2015. *Cognitive Phenomenology* (New York: Routledge).

Crane, Tim. 2013. "Unconscious Belief and Conscious Thought," in *Phenomenal Intentionality*, ed. Uriah Kriegel (Oxford: Oxford University Press), pp. 156-173.

Fodor, Jerry. 1975. *The Language of Thought.* (Cambridge, MA: Harvard University Press).

------ 1987. "Why There Still has to be a Language of Thought," in *Psychosemantics* (Cambridge, MA: MIT Press).

Fodor, Jerry, and Zenon Pylyshyn. 1988. "Connectionism and Cognitive Architecture: A Critical Analysis," *Cognition*, vol. 28, pp. 3-71.

Forrest, Peter V. 2015. "Can Phenomenology Determine the Content of Thought?" DPhil thesis, Oxford University.

Geach, P. T. 1957. *Mental Acts* (London: Routledge and Kegan Paul).

------ 1969. *God and the Soul* (London: Routledge and Kegan Paul).

Hanks, Peter. 2015. *Propositional Content* (Oxford: Oxford University Press).

Horgan, Terence, and John Tienson. 2002. "The Intentionality of Phenomenology and the Phenomenology of Intentionality," in *Philosophy of Mind: Contemporary Readings*, ed. David J. Chalmers. Oxford: Oxford University Press, pp. 520-533.

Levine, Joseph. 2011. "On the Phenomenology of Thought," in *Cognitive Phenomenology*, ed. Tim Bayne and Michelle Montague (Oxford: Oxford University Press), pp. 104-119.

Lormand, Eric. 1996. "Nonphenomenal Consciousness." *Nous*, vol. 30, no. 2, pp. 242-261.

O'Shaughnessy, Brian. 2000. *Consciousness and the World* (Oxford: Oxford University Press).

Pitt, David. 2000. "Mental Representation," in *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), ed. Edward N. Zalta.
http://plato.stanford.edu/archives/fall2013/entries/mental-representation.

------ 2004. "The Phenomenology of Cognition or What is it Like to Think that P?" *Philosophy and Phenomenological Research*, vol. 69, no. 1, pp. 1-36.

Prinz, Jesse. 2011. "The Sensory Basis of Cognitive Phenomenology," in *Cognitive Phenomenology*, ed. Tim Bayne and Michelle Montague (Oxford: Oxford University Press), pp. 174-196.

Robinson, William S. 2005. "Thoughts without Distinctive Non-imagistic Phenomenology," *Philosophy and Phenomenological Research*, vol. 70, no. 3, 534-561.

Siewert, Charles. 1998. *The Significance of Consciousness* (Princeton, NJ: Princeton University Press).

Soteriou, Matthew. 2007. "Content and the Stream of Consciousness," *Philosophical* Perspectives, vol. 21, no. 1, 543-568.

------ 2009. "Mental Agency, Conscious Thinking, and Phenomenal Character," in *Mental Actions*, ed. Lucy O'Brien and Matthew Soteriou (Oxford: Oxford University Press), 231-253.

Strawson, Galen. 1994. *Mental Reality* (Cambridge, MA: MIT Press).

Tye, Michael, and Briggs Wright. 2011. "Is There a Phenomenology of Thought," in *Cognitive Phenomenology*, ed. Tim Bayne and Michelle Montague (Oxford: Oxford University Press), 326-344.

Velleman, J. David, and Thomas Hofweber. 2011. "How to Endure," *The Philosophical Quarterly*, vol. 61, no. 242, 37-57.