## **Time and Experience**

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### I. Introduction

#### A cluster of issues

- the perception of objects as persisting through time
- the perception of objects as moving
- the perception of events as occurring in a unified but ordered manner (melody).
- Generally: the experience of the passage of time.

### • Statement of the General Problem

• How is it possible for us to have experiences as of continuous, dynamic, temporally structured, unified events given that we start with (what seems to be) a sequence of independent and static snapshots of the world at a time?

# • Two Possible Answers from Philosophy

- *Specious Present Theory*: We don't get static snapshots of the world. Rather, we are in direct perceptual contact with an ordered, temporally extended window on the world.
  - Advocates: William James (early version), C. D. Broad, Barry Dainton
- *Retention Theory*: In experience the snapshot we get of the world is always supplemented with memories or "retentions" from the past and anticipations or "protentions" of the future.
  - Advocates: Immanuel Kant, Edmund Husserl, (Maurice Merleau-Ponty?)

### • Claims of the Paper

- The Specious Present Theory makes no sense.
- The Retention Theory raises more questions than it answers.

### II. Preliminary Clarification of the Problem 1: Not Time Stamp Problem

- Time Stamp Problem: How do we come to represent events as occurring at a particular time, and therefore to represent some as occurring before others? (Dennett, Mellor, Kohler)
- Time-Stamp problem has at least two distinct answers, made famous by Dennett.
  - Answer 1: the time at which an event is represented to occur is determined by the time at which the relevant brain process occurs.
    - On such an account time is its own representation. As Kohler writes, "Experienced order in time is always structurally identical with a functional order in the sequence of correlated brain processes."
      - Kohler, Gestalt Psychology, p. 62.
  - Answer 2: the time at which the brain process occurs is irrelevant, since representations can have time-stamps.
    - Time is represented by something other than itself.

"[W]hat matters is that the brain can proceed to control events "under the assumption that A happened before B" whether or not the information that A has happened enters the relevant system of the brain and gets recognized as such before or after the information that B has happened."

- Dennett, Consciousness Explained, p. 149.
- Good problem.
- Not mine.

## III. Preliminary Clarification 2: Not Simultaneity Problem

- Simultaneity Problem: which events do we experience as simultaneous? (Russell)
  - Obviously there are events that are not simultaneous which we nevertheless experience as simultaneous.
  - Simultaneity Problem is to determine which events these are.
  - Why is experienced simultaneity a problem?
  - Can't we say that two events are experienced to be simultaneous iff they seem to the subject to be simultaneous when they are experienced?
  - Problem.
  - If I define experienced simultaneity in this obvious way then the relation is non-transitive.
  - But it is an equivalence relation.
  - Oops.
- The Problem is easy to generate.
  - Consider any two events A<sub>1</sub> and A<sub>2</sub>, that seem to me to occur simultaneously.
  - Then take some third event  $A_3$ , which actually occurs later than both  $A_1$  and  $A_2$  but is experienced as simultaneous with each.
  - By this method we can generate a series of events  $A_1, ..., A_n$  such that each is experienced as simultaneous with the next, but  $A_1$  and  $A_n$  are experienced as non-simultaneous.
  - But then experienced simultaneity is non-transitive.
  - Oops
- The Simultaneity Problem is formally equivalent to Goodman's problem about the non-transitivity of appearance properties, and has the same solution.
  - The trick is to define two events A and B as experienced to be simultaneous iff:
    - 1. They seem to be simultaneous.
    - 2. There is no third event C such that one of A or B seems to be simultaneous with C and the other does not.
  - This solution has a surprising consequence.
  - Just because two events seem to me at the time to be simultaneous, I cannot conclude that I experience them to be simultaneous.
  - Experienced simultaneity is more fine-grained than momentary reflection would

indicate.

• But again, it's not the problem with which I'm concerned.

# IV. Development of the Problem that I am interested in

- Both of the former questions seem to be focused on *when* we experience events to occur.
- Time Stamp problem is concerned with whether we experience A to be before or after B.
- Simultaneity problem is concerned with how to define the equivalence class of events that are experienced to be simultaneous.
- But the question I'm interested in is not *when* do we experience events to occur but rather ...
- How do we come to experience events as occurring through time?
- This is a question about experiencing the *passage* of time, not just a question about *at what time* we experience events to occur.
- The distinction between experiencing events to occur *at a time* and experiencing them to occur *over or through time* has been well-known since at least the writings of St. Augustine.
- Shakespeare, for instance, could write about a gracefully aging friend:

Ah! yet doth beauty, like a dial-hand,

Steal from his figure and no pace perceived;

So your sweet hue, which methinks still doth stand,

Hath motion and mine eye may be deceived:

- Shakespeare, Sonnet 104
- In general, it is a common observation that some movements or changes happen too slowly for us to experience them *as movements or changes occurring through time*.
- For example, Locke writes in the *Essay*:
  - ... the Body, though it really moves, ... [nevertheless] seems to stand still, as is evident in the Hands of Clocks, and Shadows of Sun-dials, and other constant, but slow Motions, where though after certain Intervals, we perceive by the change of distance, that it hath moved, yet the Motion it self we perceive not.
    - John Locke, An Essay Concerning Human Understanding, Book II, chapter XIV, §11.
- Similarly, it is easy to imagine successive events occurring too swiftly for us to perceive them as part of a movement or change through time.
- Locke again...

Let a Cannon-Bullet pass through a Room, and in its way take with it any Limb, or fleshy Parts of a Man; 'tis as clear as any Demonstration can be, that it must strike successively the two sides of the Room: 'Tis also evident, that it must touch one part of the Flesh first, and another after; and so in Succession: And yet I believe, no Body, who ever felt the pain of such a shot, or heard the blow against the two distant Walls, could perceive any Succession, either in the pain, or sound of so swift a stroke.

- Essay II.XIV.10, pp. 184-5.
- A third phenomenon between perceived precedence and perceived simultaneity.
- Perceived movement or change!!!
- Perceived movement doesn't seem to be the kind of thing in principle that can be explained in terms of perceived precedence or perceived simultaneity.
- C.D. Broad thought it was a basic kind of perception...

[I]t is a notorious fact that we do not merely notice that something has moved or otherwise changed;

we also often see something *moving* or *changing*. This happens if we look at the second-hand of a watch or look at a flickering flame. These are experiences of a quite unique kind; we could no more describe what we sense in them to a man who had never had such experiences than we could describe a red colour to a man born blind. It is also clear that to see a second-hand *moving* is a quite different thing from "seeing" that an hour-hand *has* moved.

- C. D. Broad, Scientific Thought, p. 351.

# V. Specious Present Theory

- How are we to account for this phenomenon?
- Specious Present theory says that we are in direct perceptual contact with an ordered, temporally extended, unified expanse.
- As William James says...

[T]he practically cognized present is no knife-edge, but a saddle-back, with a certain breadth of its own on which we sit perched, and from which we look in two directions into time. The unit of composition of our perception of time is a *duration*, with a bow and a stern, as it were – a rearward- and a forward-looking end... We do not first feel one end and then feel the other after it, and from the perception of the succession infer an interval of time between, but we seem to feel the interval of time as a whole, with its two ends embedded in it.

- William James, The Principles of Psychology, Vol. I, pp. 609-10.
- At every moment we are in direct perceptual contact not only with what is **now** occurring but also with what **has recently occurred** and indeed with what is **about to occur** as well.
- CRAZY!!!

## • Three Preliminary Problems with the Specious Present Theory

- How can I be directly aware of something that is no longer taking place?
- How can I be directly aware of a duration?
- How can I be directly aware of the future?

### • Problem 1 - The Past

- How can I be directly aware of something that is no longer taking place?
  - First Suggestion: Time-lag
    - Example: Supernova
    - Result: I am always aware of events that are no longer taking place.
    - Time-lag between event and experience of event is a way of making sense of the claim that I experience what is past.
    - But time-lag is irrelevant to specious present.
      - First: Time-lag implies (against SPT) that I am never aware of the present, (never mind the future).
      - Second: SPT says not just that I am perceptually aware of the past, but that I am aware of it as the past.
  - Second Suggestion: Akoluthic sensations. (Russell, 1921)
    - Example: Sound.
    - Russell's analysis: Hearing a sound *as* past is hearing the same sound but with less "force and vivacity"....

Succession can occur within the specious present, of which we can distinguish some parts as earlier and others as later. It is to be supposed that the earliest parts are those that have faded most from their original force, while the latest parts are those that retain their full sensational character. ... Sensations while they are fading are called "akoluthic" sensations.

- Russell, The Analysis of Mind, p. 106.
- Problem: Doesn't make sense of the main problem case perceived motion.
- Consider the case of watching Derek Jeter's throw travel through the air from short stop to first.
- On Russell's account the earlier phases of the moving ball are now seen, but seen less forcefully than the current phase.
- If that were right, then seeing a moving object would be a matter of seeing it vividly at its current position, but with a continually fading trail...
- RUBBISH

#### Problem 2 - Duration

- How can I be directly aware of a duration?
  - Suggestion: We always experience a duration, but we experience it as a moment in time.
    - Recall Locke's Cannon-bullet.
    - We experience events that happen across a span or duration of time.
    - Irrelevant to the theory of the Specious Present.
    - Difference between two claims:
      - That we experience temporally distinct events as simultaneous. (The Suggestion)
      - That we experience temporal extension itself. (The claim of the Specious Present Theory)
  - Perhaps there is some other way to explain the idea that we experience temporal extension directly...
  - If so, however, I can't imagine what it is.

### • Problem 3 - The Future

- How can I be directly aware of the future? (James)
- Suggestion: I can be aware that something is *about to occur*.
- Example: Getting hit by the pitch.
- Problem: There are surely *some* intentional states by means of which we can be directed toward the future: anticipation, expectation, hope, desire...
- But that we can *see* the future is dubious at best.

### • A Final Problem

- Suppose we can make sense of the Specious Present Theory.
- Final Problem: It still doesn't explain the problem case of pace perceived.

- Notice: Specious Present, by all accounts, lasts only a short time (~3 seconds).
- But we often experience things to be moving for periods that are longer than this...
- Conclusion: Even on the Specious Present Theory, therefore, we must *keep track* of the earlier phases of long movements in some way other than by perceiving them directly.
- That we have some relation to the past and the future *other* than direct perception of it, however, is the main point of the Retention Theory.

### **VI. Retention Theory**

# • Empiricist Beginnings

- Begins with the Empiricist question about the origin of our ideas of succession and duration.
- Locke denies outright that we have any perception of duration by means of which we can get our idea of it.
- That is, Locke denies the central tenet of the SPT.
- Hume expands upon the idea in the *Treatise*...

The idea of time is not deriv'd from a particular impression mix'd up with others, and plainly distinguishable from them; but arises altogether from the manner, in which impressions appear to the mind, without making one of the number. Five notes play'd on a flute give us the impression and idea of time; tho' time be not a sixth impression, which presents itself to the hearing or any other of the senses.

- Hume, Treatise, pp. 34-5.

- Where do we get our ideas of succession and duration from, according to the Empiricists?
- No particularly detailed story, except to say that it is by paying attention to the succession and duration of our ideas. As Hume says...

"from the succession of ideas and impressions we form the idea of time".
- Hume, *Treatise* I.II.3, p. 35

### • Criticism of Empiricism

- If the idea is that merely by having a succession of ideas we can get an idea of one thing's following another, then the idea is clearly wrong.
- Imagine a creature who has a succession of experiences, but at each moment forgets all the previous ones...

#### Kant's Approach

- This is why James (following Kant) says, rightly...
  - "A succession of feelings, in and of itself, is not a feeling of succession."
    - William James, Principles
- Kant develops this view in the A-Deduction of the First *Critique*.
- The key to Kant's view is that at every moment I not only have an experience of the thing before me now, but I also "reproduce in imagination" the things I experienced in the recent past.

• Notice, I don't *perceive* these past events, but *reproduce* them in *imagination*. As Kant says...

When I seek to draw a line in thought, or to think of the time from one noon to another, or even to represent to myself some particular number, obviously the various manifold representations that are involved must be apprehended by me in thought one after the other. But if I were always to drop out of thought the preceding representations (the first parts of the line, the antecedent parts of the time period, or the units in the order represented,) and did not reproduce them while advancing to those that follow, a complete representation would never be obtained.

- A102.
- What kind of intentional attitude is *reproduction in imagination*?
- Lots of views among Kant interpreters.
- One prominent view, suggested implicitly by Robert Paul Wolff, is that *reproducing* an event in imagination is like *remembering* it...

What I must do ... as I proceed from one moment to the next, is to reproduce the representation which has just been apprehended, carrying it along in memory while I apprehend the next. In looking at a forest, I must say to myself, "There is a birch; and there is an elm, plus the birch which I remember, etc.

- Robert Paul Wolff, Kant's Theory of Mental Activity, p. 128.

### • Husserl's Approach

- Claim: My intentional relation to recently past events is not a memory of them. (Husserl)
- Consider some different types of memory.
  - First Suggestion: Being reminded of something.
    - Example: My keys.
    - Problem: Doesn't explain Hume's example of hearing a melody.
    - Hearing the fifth note does not involve being reminded of the earlier ones at all.
    - As Husserl says...

A present tone can indeed "remind" one of a past tone, exemplify it, pictorialize it; but ... the intuition of the past cannot itself be a pictorialization.

- Husserl, Time Consciousness Lectures, §12.
- Second Suggestion: Entertaining a memory.
  - Example: Remembering my wedding ceremony.
  - Problem: Remembering my wedding ceremony is a matter of having it before me *as present*. I "put myself in the situation".
  - If we model the experience of the melody this way, then the earlier notes in the melody are experienced as present together with the current one...
  - It would be as if, while hearing the fifth note, I simultaneously entertain the memory of the notes before.
  - But this would give us the experience of a chord instead of the experience of an extended event.
- Husserl concludes from this that retention is a unique kind of intentional act that is

unlike any kind of reproduction or memory.

- Retention gives us a way of being directed towards objects and events as just-having-been.
- About perceived motion, Husserl says...

During the time that a motion is being perceived, a grasping-as-now takes place moment by moment; and in this grasping, the actually present phase of the motion itself becomes constituted. But this now-apprehension is, as it were, the head attached to the comet's tail of retentions relating to the earlier now-points of the motion.

- Husserl, Time Consciousness Lectures, §11.
- Problem: This just seems to name the phenomenon instead of explaining it.
- What is it now to experience something as just-having-been?
- I know what it is now to think of George W. Bush as the President of the United States.
- But what kind of perceptual phenomena can we point to that will help us unravel the *temporal aspect* of perceptual experience?
- Conclusion: Husserl's theory doesn't have the dis-advantages of the SPT or of Kant.
  - But it seems to raise more questions than it answers.
  - What we'd like is a standard set of examples that give us the feel for what it is to experience something now as just-having-been.
  - The project, then, is to give examples like Russell's akoluthic sensations, but examples that are phenomenologically apt instead of obtuse.

#### VII. Conclusion and The Answer

- I think there may be good examples of this sort.
- But that's the topic of another talk.

THE END.