The Emergence and Unfolding of Violent Events: A Transactional Approach

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Abstract: *»Die Entstehung und Entfaltung von gewaltsamen Ereignissen: Ein transaktionaler Ansatz«.* Standard approaches to the analysis of crisis situations either take some psychological stance, where the individual is the unit of analysis, or they investigate groups of actors taking turns, where individuals act following their own interpretation of what others have done. Philosophers have characterized these two approaches as self-actional and interactional. Actions and interpretations clearly can be assigned to one or the other actor, which allows allocating the responsibility for a violent event to someone "culprit." A radically different, rarely chosen approach is a transactional one, where each action is understood as joint action both in space and in time that cannot be decomposed into independent individual contributions. In this paper, following a sketch of the differences in the epistemological underpinnings between standard and transactional approaches, exemplifying analyses are presented and discussed from a violent encounter that left a streetcar passenger dead and a police officer before the courts of justice for homicide. Discussion topics include the attribution of cause and effect, understanding the historical trajectories of participant actors, and the consequences of analyzing events in terms of events (not substantive entities, and inter-actions).

Keywords: Self-action, interaction, transaction, event, causation.

En realidad, no hay causas y efectos, sino un complejo de reacciones y tendencias que se penetran mutuamente.[1] *(Paz 1950)*

1. Introduction

1.1 The Program for This Study

In this paper, I articulate and exemplify an epistemological and empirical stance on violent events that radically differs from the self-actional and interactional (constructivist) approaches dominating the mainstream.

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[1] In reality, there are no causes and effects, but a complex of reactions and tendencies that penetrate each other.

Philosophers termed this different stance a *trans-actional* one (Dewey and Bentley 1949/1999). Whereas self-actional and inter-actional takes on social life focus on people, things, and the actions (practices) that relate them, the transactional approach considers people, things, and actions to be abstractions of continuously unfolding events specifically and the continuously unfolding universe more specifically. A transactional perspective takes as its starting point the flow of events, and thus is an intransitive perspective that contrasts the transitive one interested in agents and things (Ingold 2011). The transactional perspective therefore does not focus on "a localizable relation going from one thing to the other and back" but rather is interested in "a perpendicular direction a transversal movement that carries one *and* the other away, a stream without beginning or end, which eats away the two banks and picks up speed in the middle" (Deleuze and Guattari 1980, 37). Because the relation of interest no longer is transitive, the transactional approach thus makes apparent why there are no causes and effects in reality, as outlined in the opening quotation. It has been suggested that to regain the flow of social events, "we need to shift our perspective from the transverse relation between objects and images to the longitudinal trajectories of materials and awareness" (Ingold 2011, 14).

The form of analyses described below precisely require such a shift of perspective. In the remainder of this section, and to set the stage for the description of a transactional approach to social situations, I introduce the thematic by means of some preliminary analyses of an event that ends with the violent death of a streetcar passenger apparently at the hands of a police officer. In section 2, I then elaborate on the distinction between self-action, inter-action, and trans-action. I turn in Section 3 to specifying how social situations may be analyzed focusing on *events* and *transactions*. This sets the stage for my comments on why in the transactional approach there is no space for cause–effect relations, which makes the particular form of analysis proposed consistent with the intuition of numerous philosophers that such relations do not exist in reality. I close with some comments on the difficulties making the step from classical takes on social analysis to a truly transactional perspective.

1.2 Setting the Stage: A Concrete Case Analysis

My research area is not violence in particular but the study of everyday events as these occur across the entire lifespan and in many different settings, including schooling (kindergarten, elementary, high school, university), workplace (fish culture, electricians, piloting and pilot training, computer programming), and leisure settings (e.g., environmental activism). For decades, I have been interested in the ways that social situations unfold after having made an interesting personal and professional observation: although

participants in situations do not know the outcome of what is happening, often do not know other people and their historical backgrounds, and often find themselves in types of situations (e.g., workshops) that they never experienced before, they still contribute to making their situation what it recognizably is. The self-actional and inter-actional (constructivist) theories that I espoused earlier in my career did not well (or not at all) account for the actual data I had collected across very different types of setting (activities).

Figure 1 Multicamera plus audio feed from the surveillance cameras mounted in the streetcar. Views of front door (a), from back to front (b), of side door (c), and from front to back (d). The arrow in (d) points to the person ending up shot dead some time later.

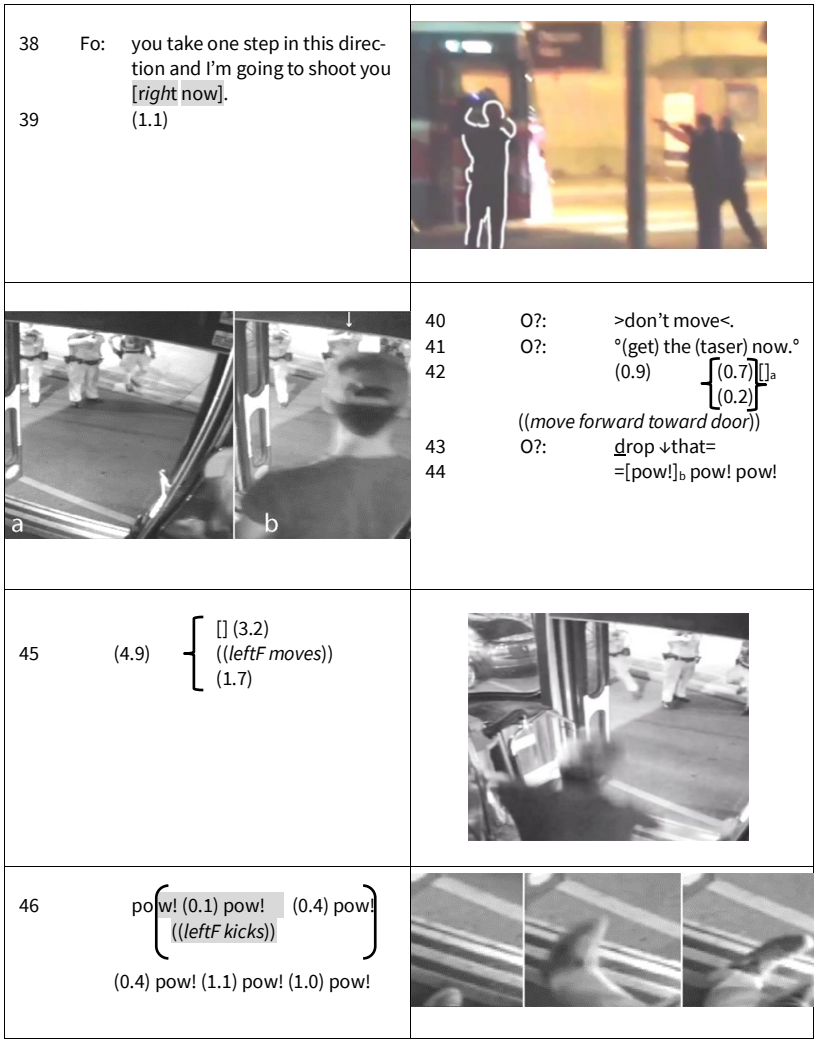
Consider the following materials from an event on and surrounding a streetcar in Toronto, Canada, which has as its temporal end the death of one of the passengers at the hands of a policy officer later charged and convicted of man slaughter (Roth 2018b). The evening appeared to be unfolding without anything happening that would have been particularly significant. At one point prior to what will have been an escalating situation, the four streetcar surveillance cameras document what seemingly is an uneventful night. Most passengers have taken a seat, one male person is standing at the side exit door (right Fig. 1b and center, Fig. 1c), and a couple is standing not too far from the side exit (Fig. 1b and Fig. 1d). In the back seat, the legs of a person apparently lying on the right side (as seen from the front) are protruding toward the center. Nothing in the scene allows us to anticipate that that (male) person would fall to the floor at the front end of the bus some 4:20 minutes later and subsequently be declared dead.[2]

[2] See Appendix A for links to all the videos of the event that are or had been available online while this research was originally conducted.

The participants in such situations, as in life generally, act without having to cogitate prior to acting, taking whatever is available (physical situation, talk, physical action) as resources in subsequent action. The constable James Forcillo, who pulled the trigger from which the bullets hitting the streetcar passenger Sammy Yatim came, did not likely set out his nightly shift to shoot someone dead. There is no evidence that he had any intentions to shoot until some point into the exchange with Yatim, where the threat "I am going to shoot you" was linked to a condition, "You take one step in this direction" (turn 38, Fig. 2). Thus, there is a form of radical uncertainty about action in the sense that we – including even highly trained engineers and scientists – do not know while acting what we are actually doing and only do so, with hindsight, when our action has ended (Roth 2009; Suchman 2007). It is out of such situated acting that events involving human beings evolve, sometimes doing so in ways that we have come used to calling "escalations." Because of the indicated uncertainty, there cannot exist a causal relation between any thinking that antecedes and accompanies acting and acting itself (Ilyenkov 1977, 34). As Paz suggests in the opening quotation, instead of cause-effect relations, there only exist complexes of interpenetrating reactions and tendencies. This way of viewing social situations has implications for the ways in which we analyze them generally and those escalating into violent happenings specifically. My particular take on understanding and analyzing such events involves an epistemological shift from considering entities (persons, things) and actions relating them to a position that takes events as irreducible. Because events can be grasped as a whole only when they have come to an end, the evental perspective suggests that at best we may *witness* something happening without understanding it in the way we will once everything has been said and done. In the particular case of the streetcar shooting, the final moments have been transcribed in Fig. 2.[3]

[3] The transcription conventions are available in Appendix B. Appendix C features the full transcription of the final moments after several police had arrived at the scene and when the first shouts to drop a knife can be heard while the formerly resting/sleeping streetcar passenger was wielding a knife standing near the front entrance.

Figure 2 The transcription of what will have been the final moments of an event that left the streetcar passenger Sammy Yatim dead, with courts attributing the responsibility for the death to the constable James Forcillo (attempted murder)



The transcription shows a number of police officers pointing guns at the front door (turn 38, turn 42 image a). On the soundtrack, one can hear a phrase originating from the constable Forcillo that can be heard as a threat to shoot if the intended listener steps into the direction of the streetcar front exit (turn

38). There are reiterations of the utterance to not move (turn 40), there is talk about a taser, and the beginning of a phrase heard earlier about dropping the knife (turn 43). At that time, the sound of three rapid shots from a (presumable single) gun are occurring just after Yatim had been moving from standing next to the front passenger seat (turn 42) forward until standing such that his body is fully visible in the door frame (turn 44). Yatim is beginning to fall to the ground with his left hand reaching for the bar next to the driver seat and the right hand grabbing the handle of the folded front door (turn 45). He is falling backward so that the front security camera only shows his feet, one of which can be seen to kick in what will have been Yatim's last recorded movements. He is later declared dead on the scene.

These final moments of the unfolding happening evolved from, and had as their constitutive happenings, a number of exchanges mainly between Forcillo and Yatim but also involving other (unidentified) officers (see Appendix C). Not reproduced (and reproducible) here is the howling of numerous police car sirens, the streetlights constituting the background to the eerie illumination from the flashing police car lights. There is a dynamic occurring that is not reducible to the actions of either of the two main protagonists (Roth 2018a, 2018b). What is happening unfolds as if having a dynamic of its own, with its own rate and direction of unfolding. In part, this arises from the fact that neither Forcillo nor Yatim can know what the other is going to be doing or saying, and thus neither can know what they themselves are going to do next only fractions of a second hence from any instant that one might demarcate as a point of reference. Indeed, neither one can know what they are doing themselves in the very duration of their acting, for what they are doing exactly at any one point is determined in part by the responding of the other that is concurrently emerging and then materializing itself in what is occurring next. This means that what is happening cannot be explained based on individual characteristics of the participants, including their biographies, or the history of other constitutive moments of what is happening at the time. Whereas during my early career I might have ascribed the event to the social construction of the participants, one of whom unfortunately died, I became unsatisfied with socio-constructivist explanation the more I was attempting to understand from an inside perspective – from the shop floor of society (Garfinkel 2002), so to speak – the continuously emergent nature of events in which what will be occurring only fractions of a second later is unknown and in principle unpredictable.

2. Self-Actional, Inter-Actional, and Trans-Actional Approaches to Social Life

All research can be classified as taking one of three perspectives: a self-actional, inter-actional, or transactional one (Dewey and Bentley 1949/1999). These authors also arrange the three perspectives from a developmental perspective of science, suggesting that a self-actional take characterizes the most "primitive" and trans-action the most advanced stage of science, with inter-actional approaches lying somewhere in between (ibid., chap. iv). But, as suggested above, there is a radical shift in perspective between the first two and the third, a shift from a transitive to an intransitive perspective on social events.

2.1 Self-Action

In Canada, the case of the shooting and the subsequent court cases appeared all over the news. I thus was aware of what had happened as reported in the media. But I only looked closer at the case while working with a graduate student, who had been a police officer previously and in the same city where the event had occurred. While the two of us were watching one of the existing videos, her analytic approach was grounded in what has been termed the *self-actional* take to understanding life (Dewey and Bentley 1949/1999). In her work, police actions are understood in terms of *naturalistic decision-making*, which are based on information processing theories (e.g., Endsley 1994). Central to this approach are the "individual cognitive mechanisms," including the "mental models" of the police officers involved, the ways in which they recognize cues, match mental patterns, anticipate situations based on "internal representations," and so forth. For example, pattern matching is treated as the ability to recognize key features in the current environment that are linked to elements of the mental model. In the case of the Sammy Yatim shooting, an investigator might suggest that police officer Forcillo perceived Yatim to step forward right after two commands not to move had been shouted out: "you take one step in this direction and I'm going to shoot you" (turn 38) and "don't move" (turn 40). Investigators might attribute to him the mental model of a dangerous situation, involving as cues the wielded knife and a movement toward law enforcement, which, again in the model, was to be followed by imminent and more serious actions (here shooting). If something happened that was problematic, then this would be attributed to some problem in the situational awareness or the mental model of the officer, here Forcillo. The mental model would have been a key factor determining the situation awareness of the police officer (Roth 2017, chap. 1). Any taken-to-be-objective cues may be misinterpreted due to faulty mental models,

contributing to an improper appropriation of the significance of the cue – a fact known in that scholarly field as a representational error.

Pragmatic philosophers have pointed out the severe limitations of the self-actional approach, referring to it as a form of "pre-scientific presentation [of events] in terms of presumptively independent 'actors,' 'souls,' 'minds,' 'selves,' 'powers,' or 'forces,' taken as activating events" (Dewey and Bentley 1949/1999, 122). As in aviation (Roth 2018a), in research (Lim and Webb 2009), and in practical application (Horne 2020), the actions of police officers are framed in terms of an actor's *situation awareness* and the individualistic take on acting in complex social settings. The courts, too, have taken and do take an individualistic approach, which allows them to lay blame on one or another person involved in a violent event. However, investigators taking such an approach overlook that people reasonably act and talk in situations where it can be shown that they did not have prior opportunities to build any mental model whatsoever – i.e., in situations where they do something for a very first time (Roth 2008). In the transactional approach described below, human subjects cannot be considered the cause of the actions, statements, and even the thoughts ascribed to them (e.g., Deleuze and Guattari 1980; Vygotsky 1987).

2.2 Inter-Action

For a long time, some scholars have recognized that individualistic approaches to social life common in (cognitive) psychology are fundamentally flawed because they fail to recognize, for example, the social nature of representations and memory (e.g., Halbwachs 1950). However, it was only after the publication of *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (Berger and Luckmann 1966) that social constructivist (constructionist) theories and their focus on the interactional nature of social situations developed into a mainstream force across the various social sciences. With this set of theories, researchers began to focus on *inter*-action. For example, in turn 40, a police officer can be heard to say "don't move," which is followed by a movement on the part of the apparently intended recipient, Yatim (turn 42). It is not just a movement in general, a kind of movement that interaction participants do not attend to and treat as irrelevant (among these are grooming gestures), but it is a movement toward the door and thus also toward the group of police officers standing outside with their guns directed toward the entry to the streetcar. Research focusing on interaction attributes the initiation of a turn pair to the first individual, here the police officer, and the response, here the movement toward the door, to the second (i.e., Yatim). Yatim would be said to have heard the police officer, *interpreted* the contents of the saying, and then acted contrary to what the phrase can be heard to request: don't move. Thus, in moving, Yatim also was manifesting an express challenge to what could have been heard as an order. The shots at Yatim can

be understood as one of the police officer's response to precisely that movement. He might be said to have "interpreted" Yatim's movement not only as disobeying the command of a police officer attempting to control the unfolding happening but also as a direct threat and imminent attack deriving from the fact that Yatim still was wielding his knife.

In the foregoing example, we clearly see those aspects that philosophers have identified as characteristic of interactional takes of social life: "thing," here people and their actions, "is balanced against thing in causal interconnection" (Dewey and Bentley 1949/1999, 132) presenting "particles or other objects," here individuals and actions, are "organized as operating upon one another" (ibid., 122). In this way, the individuals are treated as self-sufficient entities acting upon each other based on their own interpretations of what the other entity has done. The interactional take thereby still retains aspects of the self-actional approach – e.g., the interpretations someone constructs in their mind – and adds to it inter-actional *elements*. The cited philosophers reject interactional approaches noting that these make use of

> mixtures of self-actional "entities" and inter-actional "particles" are used to produce inter-actional explanations and interpretations *ad-lib*.: as when selves are said to inter-act with each other or with environmental objects; when small portions of organisms are said to inter-act with environmental objects as in the traditional theories of sensation; when minds and portions of matter in separate realms are brought by the epistemologies into pseudo-interactional forms; or, probably worst of all, when a word's "meaning" is severed from the word's actual presence in man's behavior, like a sort of word-soul from a word-body. (ibid., 133)

A similar critique of constructivist (constructionist) approaches has recently been articulated from within ethnomethodology, noting that they only add the social and social interactions to a plenitude of worldly (social, material) facts that exist independent of the social relations (Livingston 2008, 212).[4]

The main problem of interactional approaches is their ontology: They consider events in terms of the people and their actions rather than understanding the world in terms of events. This is so even when they point out to be considering events and actions, which they do but in terms of events and actions taking the epistemological status of (completed) things. The "individual" then is nothing other than an abstraction from a family of (physiological, material, ideal) events much like a photograph is an abstraction from the continuous flow of life, and a video is a sequence of stills played rapidly enough to create the illusion of movement (Bergson 1908). The interactional take on social life thus is the condition for an illusion that arises from the animation of (still) entities, using "actions" as the glue that connect intentions with their

[4] Schütz (1932) presents a non-reductionist version of the social world that was an important foundation for the ethnomethodological work of Harold Garfinkel.

presumed effects.[5] Dewey (1938) uses an example pertinent to the present situation – a person getting killed by a bullet – to show that the interactional take on events is fallacious. This is so because it is impossible to pick out an antecedent – here Forcillo later convicted for attempted murder, his interpretations, and his gun – to make it the cause of the situation in question (the death of Yatim).

Thus, it would be said that *the* antecedent of the death of the murdered person is a shot fired from a revolver by another person. But examination shows that this event is not temporally antecedent, leaving out the matter of its being the antecedent. For the mere firing of the shot is not sufficiently close in temporal sequence to be a "cause" of death. A shot may have missed the man entirely. Only a bullet which actually enters some vital part of the organism in such a way that the organic processes cease to function is "causally" connected with the occurrence of death. Such an event is not an antecedent of the event of dying, because it is an integral *constituent* of that event (ibid., 448-9).

2.3 Trans-Actions and the Evental Nature of Events: Foundations

The term "transaction" may be difficult to grasp because, in the literature, it is often employed synonymously with interaction, though the two are to be understood as incommensurably different (Dewey and Bentley 1949/1999).[6] As suggested in the introduction, the transactional approach requires a radical shift in perspective. Dewey and Bentley's definition, if those who inappropriately use the term actually knew it, can be misread in interactional terms: "*Trans-action:* where systems of description and naming are employed to deal with aspects and phases of action, without final attribution to 'elements' or other presumptively detachable or independent 'entities,' 'essences,' or 'realities,' and without isolation of presumptively detachable 'relations' from such detachable elements" (ibid., 133). One important and easily overlooked aspect of the definition are the "aspects and phases of actions," that is, the fact that there no longer are things to be investigated but *actions* (*events*). These actions are not those of "detachable" individuals, or individual meanings, but those of the "'organism-as-a-whole' transactionally viewed," and likely even more accurate the "organism-in-the-environment-as-a-whole" (ibid., 133). Studying transactions means to study living organisms and the living world as a whole in a manner where not even "thinking" can be attributed to the individual but is a feature of the organism in the environment (e.g., Ilyenkov

[5] The classic story exemplifying the problems arising from such a take exists in the form of Zeno's paradox.

[6] Dewey and Bentley do not exempt George H. Mead from their critique, because he often sets forth the "'situational' […] in transactional form, though his development is more frequently interactional rather than transactional" (1949/1999, 133, note 1).

1977). Organisms and environments, as traditionally thought of, are in fact abstractions from the stream of life (Whitehead 1919).

Any misreading of these characterizations derives from the fact that interested scholars continue to think about the organism and environment as independent entities, for example, as the constable Forcillo showing up in a particular setting and then acting, reacting, and inter-acting based on his interpretations. But (video) analysts need to keep in view that neither organism nor environment are things but are living organisms in a living and ever-changing world; and they are existing for each other (c.f. Bateson 1979; von Uexküll 1928/1973).[7] The transactional perspective is one that considers an event as an irreducible whole (see definition). A similar importance to considering the world as alive was highlighted by others, who orient us toward being and more so to becoming (e.g., Bakhtin 1993; Ingold 2015). Bakhtin, for example, suggested thinking about Italy not as a thing, with some stable characteristics, culture, and physical features, but as something continuously occurring in time, that is, we ought to think about the "event of once-occurrent Italy" (ibid., 71). Others, too, encourage us to think about the (social) world in terms of its becomingness (e.g., James 1912; Mead 1932; Schütz 1932).[8] Even "the Great Pyramid throughout a day, meaning thereby all nature within it, is an event of the same character as the [...] accident [of a man run over]" (Whitehead 1920, 74). Thus, rather than theorizing the shooting of Sammy Yatim in terms of the people and their cognitive frameworks, situation awareness, interpretations, and the interactions between them, we ought to investigate events and their phases (which also have evental character) – it would be "a mistake to conceive of an event as the mere logical sum of its part" (Whitehead 1919, 77). In the unfolding of experiencing, "the sensitive qualities not only are the felt: they also are the feeling, as effective states" (Levinas 1971, 22). The whole of nature is an event one part of which are the percipient events of those partaking in a particular situation such as that which ended in Sammy Yatim's death. All these scholars recognize that *novelty*, too, is an integral part of every part of life, of every happening and event. Every event, and every phase thereof, comes with novelty, which is the origin of Bakhtin's (1993) insistence on the world as "once-occurrent." This also means that the future, including any next instant however proximate, cannot be predicted

[7] Von Uexküll showed that the same tree appears differently in the life of a beetle, a bird, and a human; and the beetle appears differently in the life of the tree, bird, and human. Bateson points out that psychological characteristics normally attributed to persons are in fact traits of irreducible relations.

[8] Harold Garfinkel (2002, 83) reports of a reading group in which he participated as a graduate student, where it was held that reading *Philosophy of the Present* (Mead 1932) was more important than reading *Mind, Self and Society* (Mead 1972). Schütz (1932, 28) asks us to focus on the unfolding of the social world ("*Ablauf* von Handlungen") rather than on things that can be (analytically) connected *after* the fact.

with (absolute) certainty (e.g., consider all the little accidents that occur in the course of everyday life).

The perhaps best – most concise and succinct – articulation of a theory of events and the transactional relations relating them, and certainly the most rigorous presentation (which in fact formalized ideas earlier proposed by William James), was provided by Alfred North Whitehead (1919). He notes that stable entities, including space and time, are abstractions from events. In the continuous unfolding (event of) experiencing, perceiving is of its own kind "in which self-identical entities dissolve themselves and from which they emerge" (Levinas 1971, 22). To understand material and social life, we have to analyze the "continuous stream of happening" (ibid., 69) reproduced in a videotape *in terms of events*.[9] This recognition anticipated the one emerging much later in sociology according to which even (actor) networks theorize the world in terms of stable entities (nodes) rather than in terms of *flow*, the smallest unit of which again is flow (Mol and Law 1994). Thus, for example, rather than theorizing what happened in the event transcribed in Fig. 2 in terms of the content of what participants will have said aloud (e.g., "you take one step in this direction and I'm going to shoot you r*ight* now"; turn 38), the *said*, we ought to focus on the *saying* and its relation to other part-events that may be occurring concurrently, in and out of which the saying has evolved, or in and out of which subsequent phases of the event arise. These points are elaborated in section 3 below.

Events are extended; and it is this extensionality that characterizes the relations between events. Thus, for example, the pulling of the trigger, the moving bullet, and the latter's entering Yatim's body are part-events that arise one out of the other, whereas the fourth and fifth pops from the gun occur simultaneously, during the same duration, with the last kicking of Sammy Yatim's legs. These two types of relation are the origin of the human notions of space and time.[10] Importantly, two (part-) events overlap or have a third (part-) event in common or they do not relate at all. But if they overlap, for example, then the two events are parts of the same more extended event and thus are no longer independent – which embodies the same recognition that is embodied in Dewey's above-quoted argument that pulling the trigger and the death of a person are not *causally* related because they are parts of the same overall event. As Paz noted, they are part of the same complex of reactions and tendencies. It is therefore understandable when "events appear as indefinite entities without clear demarcations and with mutual relations of baffling complexity" (Whitehead 1919, 73).

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[9] This was a point that Friedrich Nietzsche (1922, 43 [§531]) had made half a century earlier, when he critiqued that events such as the event of lightening (*das Leuchten*) are reduced to a flash (*Blitz*) that lights (*leuchtet*).

[10] George Herbert Mead (1938) also shows how the notion of the distant object arises out of the movements of the infant.

3. Analyzing Events in Terms of Events and Transaction

In the preceding section, I articulate the difference between self-actional and inter-actional approaches and a transactional take to the (professional, legal, or folk) analysis of social situation. From Whitehead we learn that stable things (objects, entities) are abstractions from events, stills that function not unlike photographs from which life has been taken; from Bergson we take that the seriation of stills played rapidly enough only gives the illusion of movement, which in fact derives from the movement generated by the cinematographic device rather than from the inner movement of the world in the situation of interest; and from Dewey and Bentley (or Schütz) we appropriate that a transactional approach to social science requires approaching events *as* events, a focus on "aspects and phases of action." In this section, I exemplify the approach (principles of the analysis) by taking a closer look at the early phase of the exchange between the constable James Forcillo and the knife-wielding streetcar passenger Sammy Yatim (Fig. 3). The following sketch of an analysis centers on the use of the present participle and gerund forms (-ing) to emphasize that our focus is on events occurring in real time (e.g., *saying*), which are transactionally comprehended in their unfolding rather than as completed and comprehended act (e.g., *said*).

Any *saying*, as all forms of acting (Ilyenkov 1977), is borne in and out of the hearing (perceiving) and thus not independent of it. It is not as if there is an independent thing, the *said*, that can be and is "interpreted" in the standard way of understanding the term, which then is the causal impulse of the reply (word, as in "you're a pussy," turns 8, 11, 13; or action, as in shaking the head, turn 5, or the subsequent pulling of the trigger). Consider the phases of the event transcribed from turn 7 to turn 10 (Fig. 4). The representation makes apparent that a speaking turn arises in and out of a hearing one. The reply (i.e., content of turn 8) is not independent of turn 7 because the antecedent hearing initiates what follows (e.g., Vološinov 1930). What I call the event of *responding* has as its first phase a *hearing* (or other form of perceiving, e.g., an action, any other concurrent happening such as the police sirens); and the *saying* in turn 8 has its origin in turn 7. It is not independent thereof. If it were, the former (turn 7) could be the cause of the latter (turn 8) – which, as articulated above, it cannot (Dewey 1938; Ilyenkov 1977) – although, in the mundane world, the second speaker might, after the fact, causally link their reply (the said, done) to what has been said before. The two are

Figure 3 The Early Phase of the Encounter Between Sammy Yatim and the Constable James Forcillo

0		(([police arrive]$_a$))
1	Fo:	[drop]$_b$ the ↑knife.
2		(0.7)
3		drop the ↑knife.
4		(1.3)
5	Y:	[no]$_c$ ((*head shake*))

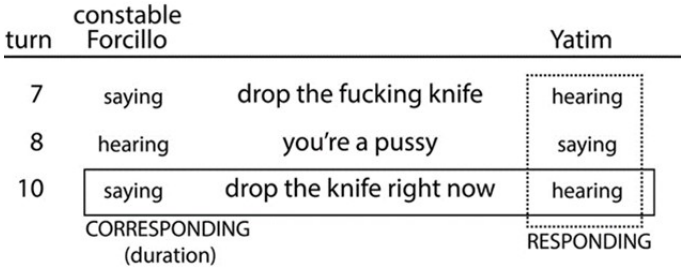
6		(0.3)
7	Fo:	drop the fucking ↑knife=
8	Y:	=[you're a pussy].
9		(0.3)
10	Fo:	<drop, theknife, right no:w>
11	Y:	you're a pussy
12		(0.6)
13		you're pussy
14		(0.8)

phases of the same event of *responding*; and they exist in the experience of participants, though in the form of listening-speaking for one (Yatim) and speaking-listening for the other (Forcillo). In most everyday situations, there is no additional interpreting involved simply because of the lack of time. An interpretation of what has been *said* requires the *saying* to have come to an end. But even the interpretation of a simple figure consisting of 2–4 adjoined squares (as in a Tetris game) takes more than 1.5 seconds (Kirsh and Maglio 1994). As the transcription (Fig. 3) shows, such extended pauses are rare. *Responding* begins before the *content* of a preceding saying can be grasped. Schütz (1932, 28) knows about this impossibility to grasp the ongoing event when writing that "the connection between unfolding behavior and meant sense [gemeinter Sinn] is impenetrable, unclear, imprecise, uninterpretable, not explicit, but confused."

How any *saying* (or any other form of action) affects the situation is available only after it has concluded. Thus, if we think of the word "drop" as one micro-event and "the fucking knife" as another one, then the second one arises in and out of the first. They are not two independent elements, as linguists or interactional sociologists may take them to be, that may be seriated in a particular form to constitute a phrase. Even speakers are unable to comprehend what they are saying and doing until after these micro-events are completed, which means that they *grasp* the contents of their own thinking

(the thought) only after the fact (James 1890; Merleau-Ponty 1945), not in the least because of the co-evolutionary nature of the events of speaking and thinking (Vygotsky 1987). The same concerns the recipient of the saying (here Yatim), who is in fact better thought of as witnessing the *saying* in and through his hearing. But he can grasp what has been said only after the saying has ended. He is responding before any interpretation could have formed – for even if he had had the time to formulate an anticipation of what Forcillo is going to say, there would have been uncertainty about just exactly what was going to come at him.[11] Thus, the micro-event of perceiving immediately following the reply in turn 8 (i.e., the hearing in turn 10) is part of the act of responding; it is its last phase. Therefore, not only does any *said* (content of a speaking turn) fail to reflect the reality of a continuously unfolding world, but also any individual *saying* is an integral part (phase) of an irreducible event. Any individual saying (doing) can be understood in terms of it being the middle phase of a more extended event, the earlier phase describing from whence and out of which it had been arising and the later phase describing its contribution to the evolution of what has been happening. Together these phases determine an *irreducible* event. This fact is exemplifying what also has been said about thinking: it originates in the environment and returns to the environment (Ilyenkov 1977).

Figure 4 An evental perspective on the exchange involving the constable Forcillo and the streetcar passenger Yatim



From an analytic perspective, therefore, each phase of the event of *responding* (Fig. 4) derives its sense from its role as part in a whole. We cannot understand the role and function of what Yatim articulates aloud in turn 8 without also taking into consideration its origin in the earlier saying and doing and the saying and doing that it is giving rise to. By focusing on responding, which here involves, in a first abstraction, two individuals, our analysis retains the plenitude of the event rather than reducing it to individual entities, including

[11] Readers who find this argumentation difficult to accept should view a tape that they have never seen before and do so at one-quarter speed. Stop it anywhere, including in the middle of a word or phrase, and attempt to predict what will be said next.

the individuals, what they have said, what their interpretations are, and so forth.

The representation in Fig. 4 also highlights that a turn does not merely exist of what someone is *saying* but that in fact that is accompanied and intersected by a *concurrent hearing*. I denote this unit by means of the evental phase of *corresponding* (Fig 4.). Corresponding is a form of transaction and consists of the intersection and co-occurrence of different forms of actions (viewed as events rather than acts) involving different individuals. The intersection of the two concurrent phases of the event is a requirement for it to be of relevance to the exchange event as a whole. If Forcillo's saying and Yatim's hearing in turn 7 did not intersect, the former would be just another sound occurring in the same duration. This is the core of Whitehead's formalization of the analysis of the world in terms of events. In the representation (Fig. 4), only two streams of events associated with the main protagonists are shown. But there are other events that can be and are perceived that are relevant to how the situation unfolds. For example, the police officers are seeing what Yatim is doing (stepping toward the door) or not doing (dropping the knife). From the perspective of what Forcillo is experiencing there and then – rather than what he might say days, months, or years after – the presence of the other officers, the completed evacuation of the streetcar, and other aspects of the unfolding happening are being present – though we must not speculate about this if there is no evidence for their pertinence in and to the situation.

The two evental forms of *responding* and *corresponding* manifest the two different forms of extension characteristic of events. Together they describe how in the situation, the experiences of two individuals come to be enmeshed. In the encounter, each family of events is formed and changed in its course.

4. The End of Causal Descriptions and Explanations

An important aspect of an event is that it has extension. One of the forms of extension leads us to a pluralistic world (James 1909). Two events, such as those associated with the living bodies of constable Forcillo and Sammy Yatim, bear a relation because, as seen in Fig. 4, there is an event that is common to both: the sound – e.g., transcribed as "drop the fucking knife" – simultaneously resonating in the vocal organs of the former and in the ears of the latter. From the viewpoint of experiencing, although the sound event might be characterized as existing objectively, it will not be so in the conjunction of the physiological and mental events contributing to the making of each participant. In the evental (transactional) perspective, each person is understood as a family of events, which includes "those other external things that make important contributions to this mode of our perception" (Whitehead 1927,

23). As part of the family of events constituting the person, the same sound event thus is different depending on the family of events in which it is part.

The representations used here (Fig. 2, 3) only include a transcription of the sounds and some still images. They omit many other parallel evental phases that occur in the same duration. We do not – and cannot ever – know how these may have appeared in the percipient events associated with the different actors. But the existing videos reveal that the air was filled with the sounds of the sirens, and the flashing blue light from the police cars gives us a feel of an emergency. This and the unstoppably unfolding situation at the two sides of the front entry door of the streetcar, which increasingly took on an air of crisis, are not well or even plausibly accounted for in after-the-fact renderings of what has happened. The latter forms of rendering also suffer from the fact that they are produced through the lens of how an event has turned out. Thus, the evening would have been very different if Yatim had dropped the knife, said "all okay, I am just fucked up at the moment," and let himself be taken into custody. Or, the evening would have been different if Yatim had only been hurt by the shots to the extent of subsequently recovering, constable Forcillo might have been praised for his courage and might have anticipated his next promotion. The second important extensional aspect shown thus exhibits how micro-events (phases of larger events) relate when one arises in and out of another, and thus how a situation *escalates*. Because a subsequent speaking arises in and out of an antecedent one, it is not independent from it, and the latter constitutes the condition for the former rather than being the (independent) cause thereof.

An important concept in the sociological literature has been the notion of agency, which works together in a dialectical conjunction with the structure available to the social actor (Sewell 1992). The notion of agency is problematic because it fails to account for humans as beings that are as much subject and subjected to events as they are agential subjects thereof (Roth 2016). For example, the constable Forcillo not only is the agential subject of the uttered phrase "drop the fucking knife" but also is undergoing his own speaking and thinking both of which he is able to grasp (as wholes, facts) only after these have terminated. He – as much as Yatim – does not know beforehand what is going to arise in the course of the evening. If they had known, they might have acted very differently. Thus again, what will have happened – the dying of Yatim – cannot be causally reduced to Forcillo, even though what subsequently is ascribed to him as his saying and doing in the course of the evening will have unfolded into the death of Yatim.

Taking an evental perspective – as exemplified in Dewey's analysis of the death associated with a gunshot – we might also ask why stop the investigation into the responsibilities with the question who pulled the trigger of the gun where the bullets in Yatim's body originated? Why not pursue the research a little further – as this would be done in the airline industry following

a crash (e.g., Roth 2018a) – and ask questions including: Why was Forcillo on duty that night? Who assigned him for *that* beat rather than another? What did the other officers do (to stop him)? Why was Yatim on this streetcar rather than another? What training did Forcillo receive to deal with situations in which participants are wielding a variety of weapons? What was the impact of the onlookers' presence on the event? All of these events implied in the questions also are part of the conditions out of which arose what was happening on that night.

It has been suggested that sociology has a blind spot when it comes to the time and temporality of social life, with an exclusive focus on parsing "social reality into fixed entities with variable qualities" (Abbott 2001, 183). In contrast, Abbott has been advocating a form of sociological method in which time and temporality characteristic of events are central, that is, a method in which stories, narrative, and generalization in terms of stories play a central role (Abbott 1983, 1984). On the surface, it might therefore appear that what I am advocating here is no or little different to what this sociologist has presented. However, this is not so. Narratives are characterized by plots, which have actors and their actions; these plots provide for a narrative coherence between antecedents and the after-the-fact known consequences or outcomes: "By means of the plot, goals, causes, and chance are brought together within the temporal unity of a whole and complete action" (Ricœur 1984, ix). Narratives therefore are antithetical to the transactional approach that takes the actors' view, who do not know the whole and complete action (event). Thus, although Abbott (2001, 32) declares himself to be Whiteheadian and grounds his work in others important to my own work (e.g., G. H. Mead and H. Bergson), in my reading, his focus on *narrative* can be distinguished from the approach presented here. The two approaches can be characterized in terms of time and temporality that Ricœur (1984, chap. 3) refers to as mimesis$_2$ and mimesis$_1$, respectively (e.g., Roth 2018c; Roth, Tenenberg, and Socha 2016). Mimesis$_1$ refers to the social world as witnessed and situationally understood by the actors themselves, who have no way of knowing what will be even seconds hence – that is, in the way that Sammy Yatim and James Forcillo. Mimesis$_2$ is a narrative abstraction of events, accounted for in terms of "stories [that] have a unity and coherence analogous to that of variables" (Abbott 1983, 131). Such stories are constructed after the fact and are characteristic of *an* experience, a complete whole as opposed to in-situ witnessing and experiencing (Roth 2018c). *An* experience has a known end, which shapes the form in which the narrative establishes the relative contributions of agency and structure to the plot. The narrative of the event in and around the streetcar provided by a prosecutor would be of this type of account, which inherently is established because the end (Yatim's death) is already given and to be accounted for.

5. Coda

In this text, I present a way of realizing a transactional approach to the analysis of data deriving from violent events. Transaction involves an epistemological stance that differs from the self-actional and interactional ones that also underlie the various forms of constructivism. The form of analyzing realizes the methodological program of transactional research articulated by Dewey and Bentley (1949/1999). As a researcher concerned with *understanding* what was happening is more important to me than assigning responsibilities and blame. I do realize that such an approach might not be palatable to the courts or to public opinion more interested in castigating someone to satisfy existing law or a (familiar, popular, vulgar) sense of vengeance. Reports on aircraft accidents might in this sense constitute a (scientifically) more advanced approach, because they often recognize the many different "factors" that are antecedents of a crash event – which might include a particular pilot's training, the pilot's skills including "situation awareness," the forms of training available in an airline (airline company, its policies), the state of a particular piece of equipment (supplier), the number of redundant pieces of equipment in the aircraft (manufacturer), the weather, instructions from the tower, and so forth (cf. Roth 2018a).

The proposed approach may not come easy to those new to it, for it requires moving from describing events in terms of actors and their actions to what is happening and to events. The crux of the matter arises from the nature of our (Western) languages, which are based on some subject-action-object structure. As Nietzsche (1922) recognized, (epistemologically) more appropriate is the rendering of an event in terms of events – realized in some aboriginal languages, where animals might be characterized and named in terms of what they are doing. Even though I recognize that something needs to be done in the short term to prevent one person to shoot (rob, hit) another, such as sequestering the person responsible in the traditional sense of the law, from an epistemological viewpoint it appears to me more honest and a better ground for how to improve on society to take the transactional perspective.

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Appendix A

The following video recordings were included in the production of the case study. Access verified May 3, 2021.

1. Surveillance camera 1: https://www.youtube.com/watch?v=65hIoeMXe00
2. Surveillance camera 2: https://www.youtube.com/watch?v=THQbEHCZD-c
3. Surveillance camera 3: https://www.youtube.com/watch?v=976jxp0RELQ
4. Surveillance camera 4: https://www.youtube.com/watch?v=FGvdn-Pow1oE

5. Video (audio transcription): https://www.youtube.com/watch?v=GpXwxMx4EJE (no longer available)
6. Video (audio source): https://www.youtube.com/watch?v=lG6OTyjzAgg
7. Security camera: https://www.youtube.com/watch?v=xyMUyv_vf1k
8. Four-channel combined (streetcar live audio and dispatch recordings with compiled videos): https://www.youtube.com/watch?v=7WaQjdV-gv0

Appendix B

The transcription conventions follow Jefferson (2004)

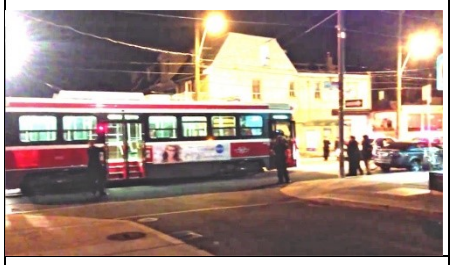
	latching
(0.3)	time in seconds
°get°	Softer than surrounding talk
knIFE	capitals mark louder talk
[ ]	brackets indicate beginning and end of overlap of talk
(taser)	dubious word
(?)	undecipherable word
(.)	pause less than .1 seconds
>theknife<	right/left carats, speeded up
<drop the>	left/right carats, slowed down
no:w	underscored letter followed by colon marks up-down contour
drop-	dash marks cut-off
pow!	shot from pistol
leftF	left foot
drop	underlined first letter of word indicates whole word is punched up
the̩	dot below letter signifies shortening of the sound
;.,?	punctuation marks intonation contour of phrase: slightly falling, strongly falling, slightly rising, strongly rising
*on*ly	italics mark emphasis
↑↓	step up, down in pitch
[taser]	overlap of talk and image frame (a)
pow!	gunshot sound
Fo, Y, Fl	Officer Forcillo, Yatim, and Fleckstein
O1, O2, O?	Unidentified officers

0		(([police arrive]$_a$))
1	Fo:	[drop]$_b$ the ↑knife.
2		(0.7)
3		drop the ↑knife.
4		(1.3)
5	Y:	[no]$_c$ ((*head shake*))

6 (0.3)
7 Fo: drop the fucking ↑knife=
8 Y: =[you're a pussy].
9 (0.3)
10 Fo: <drop, theknife, [right no:w>
11 Y: [you're a pussy
12 (0.6)
13 you're pussy
14 (0.8)

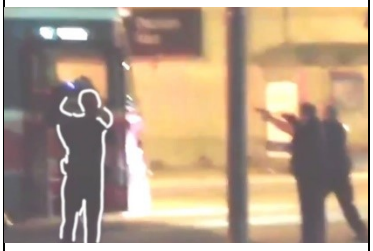
15 Fo: dro::p- thḛknl:Ve
16 Y: you're a fucking [pussy]
17 (0.5)
18 you're a pussy]
19 Fl: [are you the *on*ly one on(th)
20 (2.9)
22 O1: drop it.
23 O2: drop? ↓it.
24 O? [drop it

25 Fo: [drop the ↑knIFE]a,b
26 ?? [drop the ↑knife
27 Y: everyone's a pussy]
28 ?? [drop-
(.) >thḛknife



29 (0.5)
30 Fl: I'm getting out of the way
31 (0.5)
32 Fo: we need a sergeant with a [taser]
33 (1.9)
34 ↑drop ↓the ↑knife.

35 (0.6)
36 Y: no (?)
37 (2.2)
38 Fo: you take one step in this direction and I'm going to shoot you [*right* now].
39 (1.1)



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