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From cinema to the lab: Psychological experiments as liminal affective technologies

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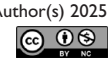

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Abstract

This commentary provides an assessment of the article "Analysing movies to rethink the psychology of time" written by Paul Stenner and Tania Zittoun. Their article makes a relevant contribution to expanding our understanding—and potential use—of time in psychology through a re-working of Bakhtin's concept of chronotopes. The authors move beyond the conventional distinction between minor and major chronotopes by recovering Bakhtin's classification of chronotopes into *created*, *creating*, and *creative* ones. In doing so, they employ this classification to describe the time-space experience of engaging with art, with a particular focus on appreciating films. This commentary aims to (1) situate the authors' contribution within the broader psychological literature, (2) extend their chronotopic analysis to the appreciation of classic experiments in psychology, and (3) discuss its potential for research practice. Overall, I conclude that experiments in psychology—like aesthetic objects—can function as liminal affective technologies that construct distinct configurations of time-space whilst claiming to reveal timeless truths.

Keywords

Bakhtin, chronotopes, liminality, Milgram, temporality

Introduction

In their article, Stenner and Zittoun reflect on the notion of time in its togetherness with space by drawing on the concept of chronotopes (i.e., time-space configurations). Chronotopes are—according to them—"nothing less than a form for experiencing time" (Stenner & Zittoun, 2025, p. 3). First, they introduce Bakthin's traditional distinction

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between major/minor chronotopes and recover his—less known—distinction of chronotopes into *created*, *creating*, and *creative* ones. Second, they apply these distinctions to analyse the relationship between individuals—as appreciators—and aesthetic objects. This relationship includes aesthetic objects (e.g., a novel) that create peculiar forms of time-space (e.g., the time and space within a novel), take place within a culture at a given time and space (e.g., the historical time-space in which this novel is written), and are appreciated in a specific devised time and space (e.g., reading it in the underground wagon, while commuting to work). In particular, the authors reflect on our engagement with films by drawing on five works directed by Christopher Nolan (e.g., Tenet [T], Inception [I], Memento [M], Prestige [P] and Oppenheimer [O]; TIMPO); which offer a unique opportunity to render time and space visible through non-linear storytelling. In doing so, they highlight how TIMPO films are all characterised by a disruption of time and space—what they describe as a chronotope of permanent liminality—where the protagonist exists between their past and future selves, "no longer" and "not yet". First, in the films, this chronotope involves the creation of a marginal space beyond the mundane where this disruption takes place (e.g., motel rooms, airports, Los Alamos etc.). Second, it involves an enduring time of passage in which the traditional order of things is suspended, disrupted, and repeated (e.g., Lennie's anterograde amnesia). Through the framework of liminality (Greco & Stenner, 2017), the authors read TIMPO films as a liminal affective technology, allowing the appreciator to witness extra-ordinary forms of spatio-temporal experiences, and potentially transform "the appreciator's relation to the social world by re-entering those forms into ordinary life" (Stenner & Zittoun, 2025, p. 29).

In a way, the authors show that these films hold a second-hand transformative potential through the creation of a vicarious experience of liminality; we indeed all have in mind films that have "changed" our lives and ways of seeing things. In other words, our engagement with art can create an occasion in which ordinary life is suspended, is doubled by the performance of a virtual world, and generates unusual, affectively charged experiences associated with distinctive perceptions of sociality, time, and space (Stenner & Greco, 2018).

Building on Stenner and Zittoun's approach to engagement with arts, I here propose extending this chronotopic analysis to reflect on how we engage with another fundamental domain of human culture: that of science. I am doing that for three reasons. First, according to Bakhtin, science—together with art and daily life—is one of the three main domains of human culture (Marková & Novaes, 2020). Second, like films, experiments can be relevant to further exemplify how engagement with chronotopes informs the conceptualisation and use of time in psychology: "psychologists can learn a great deal about how to conceptualise and recognise distinctive spatial forms or shapes of time by engaging with film" (Stenner & Zittoun, 2025, p. 3). Third, also science—like art—has a transformative potential, other than having the ambition to describe and predict the world: it contributes to world-making (Power et al., 2023).

Then, just as films offer a window into temporal experience within art, an analysis of psychology research practice—here considered as a form of science—may reveal distinctive patterns of how we construct and inhabit time-space configurations in scientific knowledge production and appreciation. I will hereby focus on experiments and will do

so for two reasons: (1) experiments are the most popular method of inquiry in psychology (Power et al., 2023; Rizzoli et al., 2019), and (2) similarly to films—especially classic experiments in psychology—can be seen as a form of re-presentation, where everyday life is suspended in time and re-produced in a precise dramaturgical space—the laboratory; not with the declared aim of amusing an audience but to test the relation between controlled independent and dependent variables (Zimbardo, 1999). As Zimbardo (1999) himself notes, the "joy" of being a social psychologist is to test an idea in a:

> high controlled, elegantly orchestrated laboratory experiment [. . .] *dramatic* [emphasis added] renderings of intellectual issues. The instructions serve as dialogue for the experimenter, research assistants, and confederates; their appearance and dress as the *costumes* [emphasis added]; and the physical arrangement of the laboratory *space* [emphasis added] as the stage sets. What remains is the *improvisation* [emphasis added] of the naïve research participant. If the theory or underlying reasoning is correct, then that improvisation is the predictable event, the dependent outcome, the "data". (pp. 135–136)

To illustrate my analysis of psychology research practice, I focus on one particularly influential and "dramaturgical" case in social psychology: Milgram's (1963, 1965, 1974) obedience studies. These experiments provide a unique opportunity to examine the chronotopic dynamics of research practice in psychology. They not only have a well-documented history of their own—with numerous replication attempts, reinterpretations, and discussions (see Kaposi, 2022)—but they have also captured the imagination of audiences far beyond academia. For instance, Milgram's studies were documented on film (e.g., *Obedience*, Milgram, 1965), and Milgram himself consistently expressed interest in using audio and video to communicate psychological ideas to a wider audience (Millard, 2014); as shown in his reflections on how *Candid Camera* resembles experimental situations and can—in turn—serve as a social psychology demonstration (Milgram & Sabini, 1979).

Moreover, like Nolan's TIMPO films, Milgram's studies are structured as a processual unfolding of time: participants move through a series of sequential tasks and escalating conditions, allowing us to observe how temporal and spatial configurations evolve and exert pressure across the course of the experiment. Overall, this will serve to assess Stenner and Zittoun's (2025) contribution to the psychology of time and to extend their analysis to research practice in psychology. Thus, I will start by situating their contribution within the broader psychological literature.

Situating the Article: Time in Its Togetherness with Space

Although Stenner and Zittoun's article is not a systematic critical review of time in psychology, I share their view that psychology has a problematic relationship with temporality, often conceptualising it in a narrow and reductive manner. Despite important theoretical contributions by figures such as William James, Alfred North Whitehead, and George Herbert Mead—who approached time as processual—mainstream psychology has largely reduced time to its Newtonian notions of absolute time and space; where time is "recorded in terms of an equally definite and absolute time" (Stenner & Zittoun, 2025, p. 2). In experimental psychology for instance, time has appeared in relatively few forms:

as an independent variable (e.g., age, generation, temporal distance, etc.), as a dependent variable (e.g., reaction time measured in milliseconds), as a control variable (e.g., retention intervals in memory experiments), or as something that is perceived differently across individuals (as in Zimbardo's time perspective inventory; Zimbardo & Boyd, 1999).

In sum, the predominant tendency in psychology seems to test cause-effect relationships with assumed timeless, a-contextual, and ahistorical validity. Moreover, from Wundt's introspective method, asking participants to press buttons to identify perceptual thresholds, to contemporary psychology, where differences in reaction times linking stimuli with positive/negative attributes uncover implicit prejudice (Greenwald et al., 1998), time is uncritically employed as an objective proxy for identifying hidden mental processes or contents.

However, there have been old and recent calls in social psychology to redirect our attention—as researchers—towards the notion of time and its impact on knowledge production. First, Gergen's (1973) seminal work called for reconsideration of the historical and contextual validity of psychological knowledge, arguing that knowledge changes over time (e.g., through feedback loops) and space (e.g., across different cultures). This critique has been recently reinforced by the more recent WEIRD and de-colonial critiques in psychology showing that published research holds limited epistemic validity across the globe, ultimately culminating in different forms of epistemic violence and injustice (Henrich et al., 2010; Reddy & Amer, 2023; Teo, 2010). Fifty years later, Power et al. (2023) re-highlight the importance of the past, noting that people are now "now post-Freudian, post-behaviorist, and post-Milgram, and increasingly post-cognitive, post-priming, and post-nudging" (p. 382), whilst extending Gergen's argument to include the future. In fact, they restate the importance of adopting a processual and developmental perspective to the analysis of individuals' action (Greco & Stenner, 2017), arguing that people live in many futures—imagining or craving them—and are actively involved in their construction.

Thus, in these critiques, time—emerging in the forms of past and future—plays a significant role in the construction of reality, ultimately showing that social phenomena are not merely given and stable entities but are rather the result of ongoing processes of construction taking place within different temporalities.

However, even within this literature there are limitations, and here Stenner and Zittoun's article makes a crucial contribution. First, psychology typically maintains an artificial separation between time and space. Second, even when acknowledging the importance of a process ontology, researchers often reduce it to an untroubled linear progression where the past pushes action forward and the future pulls action from the present (Power et al., 2023).

Yet, temporality can be profoundly non-linear, and there has only been a minority of works addressing time as non-linear. For instance, as shown in the study of ADHD (Stenner et al., 2019), the past can be reconstructed from the vantage point of an emergent present, containing both revocable and irrevocable elements. In other words, temporality here moves backwards, with the present illuminating and reconfiguring the past—e.g., receiving a late ADHD diagnosis prompts reconsideration of past actions and relationships. Moreover, the past-present-future dynamic can be interrupted by enduring suspensions (i.e., liminal hotspots), when/where individuals get stuck in transition: they

are no longer what they used to be but not yet what they will become (Greco & Stenner, 2017). For instance, as shown by studies on the vegetative state (Zulato et al., 2021, 2023, 2025), individuals can remain stuck in their transition between life and death for a long time, enduringly alive but unaware. In this situation, their carers live with them in a suspended present and have to make sense of it against the backdrop of a meagre future. To overcome this, carers draw on the past and they reconstruct the patient's personality by recovering the patient's past biography (Zulato et al., 2025). Thus, when suspended, temporal linearity can be reversed; with the past—and not the future—pulling action forward. This also shows that time—rather than being an individual dimension—is always relational: namely, reconstructed in self-other relations. Again, in the case of ADHD, it is within the self-other dialogue—e.g., with significant and professional others—that interpretations of present symptoms lead to a reinterpretation of the past (Stenner et al., 2019). Likewise, in the case of patients in a vegetative state, it is a shared past between carers and patients that is mobilised to reconstruct the present (Zulato et al., 2025). This dialogical definition of time is reinforced by Stenner and Zittoun's article, echoing Giorgi's (2010) critique that even "phenomenological" approaches tend to individualise time.

In sum, Stenner and Zittoun take an important step forward in advancing our understanding of temporality in psychology, helping to fill significant gaps in the literature. What remains underexplored in psychological theory and practice, in fact, is the irreducible relation between time and space. This goes together with a thorough consideration of the non-linear nature of temporal processes (e.g., the chronotope of permanent liminality). As shown, psychological temporalities go beyond the familiar succession of past, present, and future and can involve enduring in-between, transformative moments of rupture that unfold in liminal or marginal spaces; when/where we find ourselves suspended between temporalities and spaces. These moments of enduring suspension are becoming more and more frequent (Szakolczai, 2017) and—as we have seen in the article under examination—they can be devised through creating specific aesthetic objects. I now examine how this can also be extended to the appreciation of classic experiments in psychology.

Experimental Psychology and Its Chronotopic Genres

Following Stenner and Zittoun's application of Bakhtin to film, we can think of experimental psychology as a genre in itself, with its major and minor chronotopes. Just as "Greek Romance" and the "Adventure Novel of Everyday Life" exist as literary genres, psychology—and its methods—has developed, consciously or less consciously, characteristic ways of organising time and space, ultimately determining both the nature of the psychological phenomena under investigation and how we understand them. For instance, the major chronotope in experimental psychology could be the positivistic genre of the "discovery", where researchers seek natural laws governing human interaction and behaviour, accumulating and contributing to a broader pursuit: the discovery of truth (Guba & Lincoln, 1994). This truth can be seen as universal across time—what was true yesterday is also true today—and space—what is true for a specific context is also assumed to be true for all the others. Note that despite numerous critiques of universality (Henrich et al., 2010; Power et al., 2023), there is still a large portion of published

research neglecting this problem or treating a lack of replication as a rigour crisis (see Baucal et al., 2020) rather than seeing it as the normal consequence of the spatio-temporal specificity of knowledge.

Thus, we can say that—chronotopically—experimental psychology takes place in a time-space of non-time and non-space. The major chronotope of discovery might be characterised then as "isolated momentary causation"—a spatiotemporal configuration where human cognition and action are abstracted from biographical and historical time, disembodied, confined to controlled spaces, and reduced to discrete stimulus-response sequences (Basso & Herrmann-Pillath, 2024).

Within this major chronotope, we can also identify a constellation of minor chronotopes that "energise and give body" to the otherwise abstract structure of the research process, each unfolding through its own distinct spatio-temporal configurations (Stenner & Zittoun, 2025, p. 5). The "literature review" chronotope, for instance, is a peculiar moment in which researchers synthesise temporal and geographical distance by summarising past findings over time and across disparate spaces to ultimately assess what is allegedly "known" now, thereby identifying a "gap" to be filled in the immediate future by the planned or reported research. The "pre-registration" chronotope on open science platforms marks a present commitment towards the future: here, hypotheses and methods are designed and decided upon, anticipating results and "freezing" our vision of the future. Most crucially, the "laboratory" chronotope emerges as an extraordinary space-time where everyday life is suspended and re-produced under controlled conditions: participants' actions take place within the walls of a university (typically a basement) and are channelled into scripted procedures, where temporality is segmented into conditions, blocks, and tasks (see Latour & Woolgar, 1986).

These minor chronotopes, while appearing to represent neutral methodological steps, embody specific assumptions about the nature of time, space, and knowledge production. We can interpret them as creating what Bakhtin might call the "architectonics" of the experimental genre—the structural framework that gives shape to how psychological phenomena are conceived, investigated, and understood. Note that within experimental social psychology there are also distinct sub-genres, as Zimbardo observes when contrasting his preferred "situational" studies with what he considers the more dull and unadventurous experiments of the dominant "social cognition" tradition, in which participants merely press buttons on computer screens or imagine hypothetical scenarios and report how they would react (Zimbardo, 1999).

Following Stenner and Zittoun (2025), to fully grasp how these chronotopes operate in practice, however, we need to move beyond the major/minor distinction and examine how experiments exist simultaneously as *created* objects (the designed experimental scenario, their results, and dissemination), within *creating* contexts (the historical moment of their production), and through *creative* encounters (the lived experience of the experimental session).

Created, Creating, Creative Chronotopes in Psychology

The first main theoretical contribution of Stenner and Zittoun's paper lies in discussing Bakhtin's chronotopes beyond the major/minor distinction and recovering his tripartite

framework of *created*, *creating*, and *creative*. This allows them to identify three distinct but interrelated spatio-temporal dimensions that describe our engagement with aesthetic objects. In line with my aim of highlighting the potential contribution to psychological practice, I ask then: moving from aesthetics, how might this framework shed light on our engagement with experiments in psychology?

Created chronotopes are, as Stenner and Zittoun note, "formed images [that] cannot themselves create, but are products of an actual process of creating" (p. 8). In experimental psychology, for example, the *created* chronotope encompasses the constructed world of the experiment itself, with its spaces, procedures, instructions, tools, materials, stimuli, scripts, and roles that constitute the experimental scenario. Following this experimental staging, the participant's "improvised" actions also become part of the *created* scene (Zimbardo, 1999), so that the final *created* scene combines carefully orchestrated events with the spontaneous behaviour of real participants. Consider Milgram's obedience study as an example. The *created* chronotope here includes the form of material composition, such as the form of the material physical space: the experimental setting across its various conditions—from the presence of walls separating the "learner" and "teacher" in adjacent rooms to situations where they were placed in the same room. It also includes what might be called the architectonic form of the content: the event that the experimenter seeks to stage for the participant, namely the scenario of a learning experiment taken to an extreme, thus allowing to observe the conditions under which participants obey or disobey. As in Stenner and Zittoun's *Pietà* example, not only the Pietà is made of marble but the marble is sculpted in a way that expresses its tragic content. Thus, the created scene of Milgram's studies involved specific tools and technologies to express this content, such as the shock generator with its ascending voltage labels, the predetermined script of protests from the "learner" (e.g., complaints about pain, pleas to stop), and the standardised prompts from the "experimenter" (e.g., "Please continue"; "The experiment requires that you continue", etc.). This *created* chronotope is then characterised by its subsequent results (the participants' "improvisation"), collated together and reified through graphs, tables, and discussions. As in novels, the experiment—through its dissemination—creates a specific time and space. So Milgram's experiment—disseminated in the forms of multiple papers and a monograph but also videos and documentaries—created a specific space where obedience was realised, under precise conditions, and with the presumption of atemporal validity.

Creating chronotopes refer to the "actual historically formed world" beyond the experiment, within which experiments emerge and acquire meaning. As noted elsewhere (Baucal et al., 2020; Gergen, 1973), experiments do not take place in a vacuum but reflect the values, preoccupations, and ambitions of their historical time and socio-cultural context. The proliferation of obedience and conformity studies in the aftermath of World War II, for instance, reflected the specific concern of understanding how totalitarian systems could emerge in Western / Global North societies.

Creative chronotopes are then the "threshold between the actual creating world and the created world" (Stenner & Zittoun, 2025, p. 8). Stenner and Zittoun define this chronotope as a devised "spatio-temporal enclave" in which everyday life is suspended to enable an occasion of encounter between the author—here the "experimenter"—and the appreciator(s). Actually, compared to films—and other aesthetic objects—in

experiments the appreciator is multiplied. On one level, the participants (e.g., the "teacher" in Milgram's) are the appreciators who respond to what is staged and "fill in the gaps" with their own improvisations. On the other, there is also the scientist observing, recording and writing up the results in scientific papers, and—in turn—an audience of scientific/lay appreciators beyond the experiment. As I will outline in the following section, in this liminal space/time of contemplation, this external audience of "appreciator(s)" can undergo a similar experience to that of research participants. Thus, the experimental situation creates another space/moment in which everyday life (e.g., the *creating* world) is deliberately suspended and reproduced under controlled conditions. In fact, in this situation, both experimenters and participants step out of their ordinary routines to take part in the experiment. Read through the lens of liminality (Greco & Stenner, 2017), this process may be marked by a series of rites of separation—such as the newspaper advertisement, a rigged draw, role assignment, and the reading of instructions—followed by the liminal phase of the experimental task, and ultimately reintegration into ordinary life through a rite of reincorporation, such as the debriefing session.

Experiments as a Chronotopic Drama?

The second contribution of Stenner and Zittoun is that—through a thematic decomposition of TIMPO films—they uncover five themes describing different time-space configurations. Again, these themes can be applied to the reading of certain experiments in psychology. In particular, this is true for the chronotope of permanent liminality, describing the protagonist's experience of being preoccupied "with problems connected to the experience of space, and especially of time" (Stenner & Zittoun, 2025, p. 17). This is indeed one of the main features in many classic experiments, where the participant might feel trapped in a paradoxical time and space previously devised by the experimenter.

The chronotope of permanent liminality first involves the creation of a "high-pressure" time where the "hero"—here the research participant—is confronted with obstacle after obstacle "against the clock".

In Milgram's experiment, for instance, we find a *created* chronotope characterised by time pressure. Here, the experiment architecture consists precisely in the repetition of tasks and orders, where a seemingly similar action—e.g., pushing a button—acquires psychologically different meanings at each successive stage through increasing voltage. Participants tend to simply follow the instructions without any moral conflict until reaching the 150-volt shock; when the learner first explicitly demands to be released ("I refuse to go on") (Kaposi, 2017). This escalation then is not merely quantitative (increasing voltage) but qualitative: each shock represents a subtle and deeper commitment to a course of action with gradually intensifying concrete—and moral—consequences, from hurting to potentially causing death. At this 150-volt moment, the participants find themselves stuck in a liminal hotspot: caught between conflicting demands.

In Milgram's framing, participants were caught between the demand of the experiment's authority—pushing to continue—and the demand of the learner—pulling to stop. Participants were then suspended between their morality (knowing that hurting others is wrong) and the request of "scientific" authority, but at the same time caught between past and future selves: they are no longer innocent, as they have already administered a

considerable number of shocks—but not yet completely guilty, as they haven't upped the voltage yet. Kaposi (2017, 2020), however, offers alternative explanations of this hotspot. Rather than a clear-cut conflict between authority and morality, he suggests that participants navigate an even more paradoxical moral field. Here, the dilemma appears intermittently—arising from the learner's protests but paradoxically undermined by the learner's silence; thus, leaving the participant caught between conflicting interpretations: whether there is a genuine request for help or not.

Beyond their disrupted experience of temporality, participants also display a troubled relationship with space. In the experiment, for instance, the chronotope is characterised by a set of spatial arrangements, from being separated by walls—which makes the situation more ambiguous and difficult to interpret—to sharing the same room with the learner and engaging in direct physical contact with them. This sense of stuckness is therefore embodied, with participants potentially threatened and scared by what is an illegitimate authority, and they may feel physically trapped within the walls of the laboratory (Nicholson, 2011). Thus, the choices made in that space are intelligible—and perhaps possible—only within the devised enclave of that paradoxical experimental situation (Kaposi, 2017).

Continuing the analogy with Stenner and Zittoun's thematic decomposition, we can also note that "the hero's trouble with time" is – in the *created* world of the experiment – doubled for the appreciator. Just as Nolan's films create temporal disorientation through their non-linear structure, Milgram's experimental design generates a parallel temporal disruption. The escalating voltage creates an architecture of mounting tension that participants experience directly, whilst later appreciators experience this temporal disruption vicariously; e.g., through Milgram's papers, videos, and documentary (*Obedience*, 1965). Milgram, himself a documentary filmmaker (Millard, 2014), constructed audio-visual narratives that allowed audiences to witness the very same unfolding temporal crisis and space constriction, creating what might be called a "doubled chronotope" where the participant's liminal experience becomes the viewer's contemplative encounter.

Then, also in Milgram's study, there is the central role given to chronotopic technologies, which alter and manipulate time-space (theme 3). This manipulation is here exemplified by different elements, such as the rigged toss of a coin—assigning the participant to specific roles and spaces in the experiment—and the shock generator itself. Like the dream machine in *Inception* or the time-reversing technology in *Tenet*, the shock generator is simultaneously productive and destructive—therefore fundamentally ambivalent (as in theme 4). For instance, it holds the potential of contributing to scientific knowledge on memory, while potentially destroying the moral integrity of participants and the physical wellbeing of the learner (or so participants believe).

Finally, as in theme 5, Milgram's experiment in its nature functions itself as a "liminal affective technology", having a crucial reflective dimension for its appreciators. As an appreciator myself—commenting on this paper—the experiment fosters a wider reflection on the nature and consequences of obedience; showing that—given certain conditions—possibly anyone could potentially cause death following orders. In the experiment, each technology also acts as an analogy of experiments overall. The first technology is the coin that assigns the "teacher" role, assigning the participant to a

liminal position where they are simultaneously experimenter and experimented-upon: administering shocks as part of the "scientific team", while themselves serving as the object of study whose obedience or disobedience is being measured. Like in *Hamlet*, Milgram staged "a play within a play" and the audience reading/watching the experiment can reflect on what the experiment does to the people—and potentially to us (Zittoun & Stenner, 2021). Thus, we can say that the experiment—as in Greek tragedy—holds a cathartic function. The second technology is—of course—the shock generator. This technology allows a further reflection on the knowledge of obedience predictors and the ethics of experimental practice itself (as discussed in the subsequent waves/comments on Milgram; see Kaposi, 2022). The latter reflection[1] is on the profound contradiction embodied by Milgram's experiment: it seeks to make an ethical statement—warning against blind rule following—but does so through unethical means—putting participants in discomfort and distress (Nicholson, 2011).

Discussion

This commentary has extended Stenner and Zittoun's chronotopic framework from films to psychological experiments, revealing how both function as liminal affective technologies that manipulate time-space configurations. Through the analysis of Milgram's obedience studies, I have shown how experiments can embody the same five themes that characterise Nolan's TIMPO films: (1) troubled temporal experiences, (2) doubled chronotopes for participants and appreciators, (3) chronotopic technologies (4) that are ambivalent in nature, and (5) an analogy between technology and the film itself as liminal affective technology.

First, this extension aimed to highlight Stenner and Zittoun's significant contribution to how we can conceptualise time and space in psychology, through highlighting practical implications for research practice in psychology. Overall, chronotopes further challange the field's persistent claim to discover timeless, universal truths. By recognising experiments as chronotopic dramas unfolding within specific *created*, *creating*, and *creative* chronotopes, we must acknowledge that psychological knowledge is inherently situated in time and space (Baucal et al., 2020; Gergen, 1973; Power et al., 2023). What we study, how we study it, and what we find are all shaped by the particular chronotopic configurations: the *creating* world of the experiment (taking place in precise time and space), the time and space *created* by the experiment, and the *creative* time and space where the appreciator encounters the experiment. Thus, time should transcend a merely Newtonian notion and operationalisation where it is only used as a variable or proxy for mental processes and should be seen in all its configurations.

Second, following from this point, Stenner and Zittoun allow us to spot a fundamental time-space paradox at the heart of experimental psychology: whilst claiming to reveal objective, context-independent laws of human behaviour, experiments actually construct highly specific spatio-temporal enclaves that generate their own distinctive forms of experience. The laboratory chronotope—suspending, disrupting, and doubling ordinary life—does not simply observe psychological phenomena but actively produces them. As discussed, Milgram's studies exemplify how participants navigated a carefully constructed liminal hotspot (Greco & Stenner, 2017) that made certain actions possible and

intelligible only within that experimental enclave. Thus, as noted by the authors, ignoring time-space can be viewed "as imposing their own chronotopic framework in which dependent variables are assumed to be the causal issues of independent variables" (Stenner & Zittoun, 2025, p. 28).

Third, recognising experiments as "liminal affective technologies" sheds light on their transformative potential beyond knowledge production. In this commentary, I have discussed how experiments—like films—can create occasions for vicarious experiences of liminality that can reshape how we understand ourselves and our social world, creating distinctive representations of "sociality, time, and space" (Stenner & Greco, 2018, p. 4). This works through creating extra-ordinary forms of spatio-temporal experiences that are witnessed by the appreciator, potentially transforming "the appreciator's relation to the social world by re-entering those forms into ordinary life" (Stenner & Zittoun, 2025, p. 4). Thus, psychosocial transformations are not only realised through a feedback loop (see Gergen, 1973) but also through the doubling of the "hero's"—here participant's—troubled experience with time and space. Experiments—therefore—can leave a trace. For instance, the enduring impact of studies like Milgram's lies not merely in their findings but also in their capacity to generate reflection on authority, morality, and the nature of scientific practice itself; this study indeed changed ethical practice in psychology. This suggests that psychologists might productively embrace, rather than deny, the dramaturgical and aesthetic dimensions of experimental work (if they abide by ethical practices, of course!). Actually, these dimensions should be a necessary feature to make experiments significant and transformative. Following Zimbardo's (1999) lines, I am sure that IAT experiments would not trouble one's experience with time (apart from the boredom of completing all the tasks!), thus leaving barely any trace on either the participant or a potential appreciator.

Beyond Milgram, this chronotope of permanent liminality can be found in many classic experiments. For example, when looking at Asch's conformity studies or Zimbardo's Stanford experiment, we find situations which similarly trap subjects in psycho-social tension between their own perceptual compass and that of others. Note that this tension is always psycho-social, emerging in the opposition between the self and the other, and between the self and society (Greco & Stenner, 2017; Zulato et al., 2025). In fact, as Stenner and Zittoun note, the chronotope of permanent liminality carries profound societal implications. In Milgram, participants confront choices that challenge conventional moral and legal frameworks, and—in turn—the preservation of social order; as moral conduct is fundamental against societal unsettlement. Thus, the shocks—like Oppenheimer's bomb—represent an individual tension (between the individual's morality and their own behaviour) but also a relational tension (between the individual and the "scientist") and a societal tension (between the individual and the values and norms that regulate our society).

Conclusions

In conclusion, just as Nolan's films reveal the constructed nature of temporal experience through their non-linear storytelling, examining Milgram's studies as chronotopic dramas reveals the constructed and transformative nature of psychological knowledge. Both films

and experiments, as forms of re-presentation, are liminal affective technologies that manipulate time-space. The difference lies in their declared purposes: where films openly acknowledge their role in creating extra-ordinary experiences, psychology has traditionally obscured the chronotopic dimensions of its practices behind claims to scientific objectivity. By making these dimensions visible, we open possibilities for more reflexive, transformative, and temporally sophisticated approaches to psychological research.

Of course, keep in mind that this commentary is not a comprehensive review of Milgram, and—in this—I have focused on the elements of the experiments that have dramaturgical characteristics. This does not necessarily apply to all experiments.

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Note

1. This reflection has been developed in dialogue with the first author of the commented paper, Prof. Paul Stenner.

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