SUBJECTIVE SENSE OF TIME

Introduction

Time is inseparable from psychoanalysis. Like Ariadne's thread, it guides us through the labyrinth of the analytic process. We don't know how long the journey will last, but once it begins, time starts to unwind. Processes unfold, and time itself—like a red thread—keeps reminding us of its presence.

Every aspect of psychoanalysis is linked to time: development, fixation, delayed gratification, object constancy, the analytic setting, and the timing of interpretations. One of its central concepts—transference—replays the past in the present. This helps us understand patterns and meanings, and opens the possibility for change. Time, then, gains even deeper psychological significance.

This raises a simple yet profound question: what is time, really?

In nature, time seems cyclical—day turns to night, seasons return. Later, calendars and clocks appeared, followed by standardized time—a cornerstone of civilization. Our bodies, too, adapted, developing an internal rhythm—a biological clock.

But our experience of time is shaped less by these outer cycles than by our inner, subjective sense—a fluid perception that links past, present, and future. At some point in evolution, the psyche emerged not just to react, but to anticipate. And anticipation depends on memory—on preserving the past to imagine what lies ahead. In this way, the mind tries to outrun time, to resist one of its basic laws: irreversibility.

So we can speak of two kinds of time: objective time, which belongs to external reality, and subjective time, which psychoanalysis seeks to explore.

As I was preparing this presentation, I felt a familiar anxiety and found myself wondering—what time am I actually in? The past—because something behind me is pushing me forward? The present—though I'm already thinking ahead? Or even the future—like the White Queen in Lewis Carroll's book about Alice—but how, if it hasn't happened yet, and I can't know what it will be?

That question—if we know our time is limited, why do we so often act as if it isn't?—is what led me here. Why do we procrastinate, repeat our mistakes, rush through life as if to catch up—yet still feel like we're losing time? And if we are losing it, what would it mean to live it meaningfully?

I took a brief look at how time is perceived within the psyche, guided by the insights of Freud, Abraham, Loewald, and Nissen. But to understand its paradoxes, we first have to go back to where the sense of time begins— in the earliest bond: between infant and mother.

How does a sense of time begin to develop?

When we observe very young children—especially infants—it's clear they have no concept of time. What dominates is the immediate need for gratification; there is no past, present, or future.

The earliest roots of time perception lie in bodily rhythms: heartbeat, breathing, hunger. These create sensations of intervals, which quickly enter the emotional relationship with the mother. What begins as biological becomes psychological. As Arlow (1990) noted, the first sense of continuity arises from the gap between need and gratification.

When a hungry infant is fed and soothed, it experiences a sense of fulfillment and happiness. Freud called this state "oceanic omnipotence"— world appears full and harmonious—there is no sense of time, only an eternal present, timelessness, omnipotence, and no awareness of vulnerability or death. Freud referred to this as primary narcissism**.**

But satisfaction ends, hunger returns. If the mother is absent, tension rises. The once "good object" appears in fantasy but can turn "bad" with prolonged absence. If unresolved, fear and rage take over; the infant may regress, identifying with the bad object. This leads to a catastrophic, timeless experience.

In this way, the mother conveys both time and timelessness. Through repeated interactions, the infant internalizes her rhythm—forming a basic sense of time.

As development continues, each new stage reshapes how time is felt, but this is where the foundation of temporal perception is formed.

Psychic structures and time

Time is difficult to define. It is first and foremost a feeling—we sense it, but struggle to explain it. Perhaps that's why Saint Augustine, when asked what time is, famously replied: "If no one asks me, I know. But if I try to explain it, I do not."
This captures something essential: our experience of time is both intimate and mysterious. In this part of the presentation, I will look at time through the lens of psychic structures—how it forms, how it functions, and how it is experienced in our inner reality.
Many of the core ideas about psychic time, and time as part of the psychoanalytic setting, come from Freud. Although he never explored time directly, he developed two models of mental functioning that help us understand how we perceive and process time.

Id and time

Gilles Deleuze, in *Difference and Repetition*, wrote that "Freud supposes the unconscious to be ignorant of three important things: Death, Time and No."
In his 1915 paper on the unconscious, Freud stated:
"The processes of the system Ucs are timeless... they are not altered by the passage of time." He linked this timelessness to the id.
But what does it mean to say the unconscious is timeless?
Carl Abraham offered a perspective: the unconscious seems eternal and unchanging—a primordial core, untouched by loss or irreversibility. It is the source of instincts that repeat themselves tirelessly, indifferent to external time. What enters the unconscious remains preserved, as if outside history.
So what is the unconscious, then?
A timeless, inexhaustible space—constant, repetitive, self-renewing. It represents the core of psychic life, immune to change because it doesn't need adaptation. Everything else in the mind is layered upon it.
Interestingly, Freud later (in 1940) suggested the id isn't entirely outside time. He noted that it contains our hereditary and biological past, hinting at a connection to deep, evolutionary time—not linear, but cyclical and supra-individual.
We might imagine the unconscious as a bubbling cauldron, where nothing disappears, and everything repeats—outside chronological order, but not outside meaning.

How can we imagine the unconscious as being timeless?

Freud explored unconscious processes by analyzing symptoms, free associations, slips of the tongue, and accidental actions—but he gave special importance to dreams, calling them the "royal road to the unconscious."
In dreams, unconscious content appears indirectly—through symbols, displacement, and condensation—because direct expression is blocked by internal censorship. Despite this disguise, dreams reveal unconscious conflicts and desires.
Though a dream may seem to follow a linear story, this structure is imposed by the mind. It reflects censorship, not real chronology. In truth, linear time collapses—memories from different periods appear side by side. What matters is not sequence, but associative connection.
Freud said the id communicates through simultaneity, not causality. Dreams take us back to a primitive mode of thinking—not a return in time, but a shift in psychic structure: from logical order to a symbolic world of images and emotions.
Nissen expands this idea: in the unconscious, logic appears as simultaneity; causality arises from juxtaposition or transformation. Opposition and contradiction coexist, and similarities merge into hybrid

forms. For example, in a dream, a tree might bear both apples and pears—simultaneously full and empty. This reflects primary process thinking, which contrasts with the secondary process, governed by logic, memory, and linear time.

Dream example

Let's take a dream example. A patient dreams that a lame rabbit is chased and caught by a fox. He recalls watching a nature film in which a rabbit was running from fox—but the film didn't show whether rabbit was caught. The dream completes the sequence: the rabbit is caught.
Nissen explains that the unconscious does not represent causality directly. Instead, it uses succession of images. First comes the rabbit, then the fox catching it. The mind imposes temporal order, making the dream appear logical, even though its underlying logic is symbolic and associative.
In reality, the unconscious may hold both images simultaneously: a rabbit fleeing and a fox pursuing. These coexist, but the dream's secondary revision strings them together, constructing what looks like a cause-and-effect sequence. It could just as easily unfold differently—perhaps the rabbit escapes again.
This shows how the unconscious replaces external reality with psychic reality. The day residue only becomes meaningful when it connects with unconscious material. If it stirs up deeper anxieties—say, fear of castration—then the fox may symbolize the father (or the analyst), and the rabbit, the dreamer. In this way, the dream becomes a symbolic expression of powerlessness, perhaps related to earlier punishment or paternal authority.

A similar process takes place in psychoanalysis. Through free associations—unfolding not in linear time, but through associative connections, we get closer to Unc.
Already in his first model, Freud wrote that when repression fails and the pressure from the id becomes too strong, unconscious material breaks through and manifests as a symptom. This reflects the pleasure principle, which seeks immediate satisfaction — for example, the eyes may become unable to see when there is something one does not want to see. A compromise arises — the unconscious desire finds expression—disguised as a symptom.
These are illustrations of how the unconscious links the id with timelessness.
But how does the mind begin to organize time, rather than remain in this timeless mode? For that, we turn to the ego.

Ego and time

Freud wrote that consciousness is closely related to the perception of time — the experience of time begins to develop alongside the emergence of consciousness. According to the structural model, this process is linked to the formation and development of the ego. Freud (1933) famously stated, *"Where id was, there ego shall be"* — meaning that the primary process, characteristic of the id, must gradually give way to the secondary process, which is based on logical thinking, delay of gratification, planning, and reality testing.
B. Nissen insightfully links the emergence of the sense of time to the infant's early relationship with the mother.
He describes a moment when the infant's internal discomfort intensifies, creating a sense of threat. The mother, attuned to the infant, unconsciously resonates with her own childhood fears and absorbs the infant's distress. The tension subsides—but something shifts. The infant senses a new quality in the mother's response, experienced as "other." This marks the beginning of the "non-self"—an early trace of consciousness.
Later, when objects become linked to words, the process of symbolization begins. Experiences gain temporal and spatial meaning, no longer confined to the immediate present. This transition signals the entry into the secondary process: memory, association, and narrative begin to emerge. Within this symbolic structure, the ego gradually forms—capable of reflection, differentiation, and integration.

As Carl Abraham notes, Freud saw primal repression as the beginning of psychic time. It marks a basic distinction between "before" and "after," creating the root of individual history. Consciousness absorbs fleeting impressions; the unconscious preserves what is repressed—unchanging and enduring.
Freud asked: Does time arise from consciousness itself? Or from the need for inner change? Or is consciousness simply affected by time through contact with reality? And is it through consciousness that personal identity begins to form?
In a 1940 letter to Marie Bonaparte, Freud wrote:
"When consciousness awakens, we perceive the internal flow of time and subsequently project it into the external world."
Thus, temporal experience emerges from within, not just as a reaction to outer events. Elsewhere, he linked our sense of time to the discontinuous functioning of the Preconscious-Conscious (Pcpt–Cs) system.
Freud also wondered:
Does the awareness of time involve the whole ego—or only its conscious part?
Since the ego has unconscious layers and shares a common origin with the id, he speculated about a transitional zone—a psychic space between timelessness and temporal flow.
This unconscious ego may contain an intermediate temporality: it regulates instincts, structures dreams, and adapts to rhythms—forming a core nucleus of psychic time, responsible for sense if inner stability.
Meanwhile, the conscious ego engages with time as a process—changing, reflecting, becoming. In this way, the ego encompasses both continuity and transformation. Time becomes not just an outer measure, but a principle of inner organization, linking the conscious and the unconscious into a living, evolving self.

Nissen's Perspective on time

Nissen observes that Freud, when writing about time and consciousness, often used abstract language and rarely made a clear distinction between different mental systems—particularly the Perceptual-Conscious (Pcpt–Cs) system. To address this, Nissen emphasizes the importance of differentiating between levels of consciousness and highlights three distinct registers:

1. The Unconscious (Ucs), which represents psychic reality and functions according to timeless principles;
2. The Perceptual-Conscious system (Pcpt–Cs), which registers immediate impressions and momentary perceptions;
3. The Preconscious-Conscious system (Pcs–Cs), which enables the structuring of time, awareness of cause and effect, and the sequencing of events. This is the system most closely aligned with the reality principle.

Nissen raises a central question: does the Pcpt–Cs system perceive time in terms of past, present, and future—or does it only perceive the present? In other words, what kind of temporal experience does this system represent?

To illustrate, he offers an example: a rabbit runs out of the bushes, followed by a fox. The Pcpt–Cs system registers this sequence—first the rabbit, then the fox—allowing for a basic sense of "before" and "after." But the entire scene is still experienced as one present moment. The reflective ego is not yet engaged. Still, unlike in the unconscious, the subject perceives external reality.
Now imagine a different scene: a lame rabbit is running toward its burrow while a fox chases closely behind. The fox is faster. In this moment, attention and judgment come into play. We estimate speed, we feel suspense, we might tremble for the rabbit or hope for the fox. Here, past, present, and future are all evoked: the fox approaching represents the present, shaped by past experience; the rabbit's burrow becomes a symbol of hope, pointing toward a potential future.
In this version, consciousness is not just perceiving—it is anticipating. This reflects the activity of the Preconscious-Conscious system, where time is no longer immediate and fragmented but integrated into a sequence of meaning.

Thus, only the Pcs–Cs system, with its more advanced ego functions, allows for a full experience of temporal flow—where past, present, and future are connected into a coherent story. The Pcpt–Cs system, in contrast, registers only the immediacy of the moment, which becomes part of structured time only later.

Loewald's Perspective on time

Early psychoanalysis focused on the id, viewing psychic life as determined by the past, with the future as mere repetition—a kind of psychic determinism. Loewald challenged this, proposing that inner life moves between two poles: the pull of the past and the draw of what lies ahead.
Time, for Loewald, is not linear but a dynamic interplay between past, present, and future. One pole is eternity—a timeless state, described in philosophy as nunc stans, or in psychology as total immersion in the present. It may arise during ecstasy, deep emotion, psychosis, or early infancy, when the boundary between self and other is not yet formed.
The opposite pole is fragmentation—when time breaks into disconnected moments, seen in depersonalization, derealization, or narcissistic collapse. A person may feel numb, detached, and lost in an alien world.
These are extremes. In daily life, time is woven—past, present, and future constantly interact and reshape each other. In analysis, this is visible in transference: the present relationship evokes the past, but also transforms it. For example, a female patient talks about her relationship with her mother. After experiencing a warm relationship with the analyst, she recalls the difficult relationship with her mother. But as she begins to feel better, she also remembers the good things she received from her mother—that it wasn't all bad. She becomes more capable of understanding her mother and differentiating between the two experiences, integrating both the "bad" and the "good" aspects of the mother into one whole person. The past no longer seems so tragic. Her overall sense of self improves.
Loewald notes that dreams, day residues, and unconscious wishes are not separated by time, but coexist and influence each other. In a healthy psyche, time flows in multiple directions.
But in fragmentation, this coherence is lost. Moments become isolated, like unconnected words.
Conversely, when time collapses into eternal now, meaning dissolves by fusion, not disconnection. Repeat a word enough times, and it loses meaning—the same can happen with time.
These states aren't chosen consciously. The mind's integrative function works silently. In OCD, time may fixate on a single loop; in fragmentation, it may even open space for creative transformation, if integration remains possible.
"Carl Abraham viewed mental states such as *nunc stans* and fragmentation as existing 'outside of time'. However, Nissen challenged this view, arguing that *nunc stans* is not beyond time in the same way as the unconscious, because it retains a connection to the reality. Since it does not belong to the Pcs-Cs (Preconscious–Conscious) system, where linear time functions, Nissen proposed that these states are best described as pertaining to the Pcpt-Cs (Perceptual–Consciousness) system."

Superego and time

When we describe this entire psychic construction—from the unconscious, through the material perceived by the Pcpt-Cs system, which accumulates in the preconscious or in ego memory—a natural question arises: how does the future appear within this structure? How is it psychically imagined? What determines our internal relationship with what is yet to come?
As we have already discussed, this is influenced by unconscious conflicts that are repeated without awareness, as well as by the ego's thinking and memory. However, a particularly significant figure here becomes the superego.
When speaking about the future, it often seems as though we already know it or can imagine it. One is reminded of Alice's conversation with the White Queen from Lewis Carroll's *Through the Looking-Glass*, in the chapter *Wool and Water*:

The White Queen appears completely disoriented—her shawl slipping, her hair tangled, and she keeps repeating “bread and butter” like a frightened child. Though she calls herself a queen, she admits she has been trying to dress herself for two hours. Alice offers to help her.
The Queen, delighted, exclaims:
“I’m sure I’ll take you as housemaid! Twopence a week, and jam every other day.”
To this, Alice replies, laughing:
“I don’t want you to hire me—and I don’t care for jam.”
“It’s very good jam,” says the Queen.
“Well, I don’t want any today.”
“You couldn’t have it if you did,” the Queen explains. “The rule is: jam tomorrow and jam yesterday—but never jam today.”
When Alice objects, “It must come to ‘jam today’ sometimes,” the Queen simply answers,
“No, it can’t. Today isn’t any other day, you know.”
Alice finds the whole thing confusing. The Queen kindly explains,
“That’s the effect of living backwards. The advantage is, one’s memory works both ways.”
Alice admits,
“Mine only works one way. I can’t remember things before they happen.”
To which the Queen replies,
“A poor sort of memory that only works backwards.”
When Alice asks what she remembers best, the Queen responds:
“Things that happened the week after next. For instance—the King’s Messenger is in prison, being punished: and the trial doesn’t even begin till next Wednesday. And of course, the crime comes last of all.”
Alice asks,
“What if he never commits the crime?”
“That would be even better!” the Queen beams.
Alice objects that it’s unfair to punish someone without guilt, but the Queen insists:
“Were you ever punished?”
“Only for things I actually did,” Alice replies.
“Exactly! But if you hadn’t done them, it would have been better—and better—and better!” Her voice rises with each “better” until it ends in a squeak.
Suddenly, the Queen starts screaming:
“My finger’s bleeding!”
Alice asks,
“Have you pricked it?”
“Not yet—but I soon shall!” says the Queen, explaining that the brooch is about to come undone. Moments later, it does, and she pricks her finger.
“That accounts for the bleeding,” she says calmly. “Now you understand how things happen here.”
When Alice wonders why she isn’t screaming now, the Queen answers,
“I’ve done all the screaming already. What would be the use of repeating it?”
As morning breaks and the crow disappears, Alice says,
“I’m so glad it’s gone. I thought it was the night coming on.”
The Queen, unable to feel the same way, replies:
“I wish I could manage to be glad! Only I never can remember the rule.” She envies Alice’s ability to be happy “whenever you like.”
Alice confesses she feels lonely in the woods and starts to cry. The Queen, distressed, begs her to stop:
“Consider what a great girl you are. Consider what a long way you’ve come today. Consider what o’clock it is. Consider anything—only don’t cry!”
Alice laughs through her tears and asks,
“Can you really stop crying just by considering things?”
The Queen answers firmly:
“That’s the way it’s done. Nobody can do two things at once. Let’s consider your age—how old are you?”

Alice replies,
“Seven and a half exactly.”
The Queen responds,
“You needn’t say ‘exactually’. I can believe it without that. Now I’ll give you something to believe. I’m just one hundred and one, five months and a day.”
Alice protests,
“I can’t believe that!”
“Can’t you?” says the Queen sympathetically. “Try again: draw a long breath, and shut your eyes.”
Alice laughs:
“There’s no use trying. One can’t believe impossible things.”
The Queen replies,
“I daresay you haven’t had much practice. When I was your age, I always did it for half an hour a day. Why, sometimes I’ve believed as many as six impossible things before breakfast.”
Just then, the brooch comes undone again, and the Queen’s shawl flies across a little brook. She chases it, arms outstretched, and catches it triumphantly.
“I’ve got it! Now you shall see me pin it on again, all by myself!”
Alice follows politely, asking,
“Then I hope your finger is better now?”

Alice and the White Queen: A Psychoanalytic Perspective on Time and Superego

In this passage, Alice meets the White Queen, who behaves in a disoriented, childish, and irrational manner. Their conversation centers around time, memory, and reality. The Queen introduces the idea of “living backwards,” where memory works both ways and events unfold outside the normal order.
Even the chapter title — *Wool and Water* — suggests a world of paradoxes and contradictions. Water symbolizes the unconscious, desire, sexuality; wool evokes a thick protective layer, like a second skin — shielding very sensitive and fragile inside.
When the Queen asks Alice her age, Alice answers: “Seven and a half exactly.” The Queen corrects her, saying there’s no need to be so precise, but then offers an even more detailed answer that she is: “One hundred and one, five months and a day ‘exactually’” Like everything in this chapter, she is a walking contradiction.
According to Freud, Alice is in the latency phase of psychosexual development — a period when children begin school, learn to read and count, and start to orient themselves more clearly in space and time. Oedipal impulses have been repressed, the ego is growing stronger, and the superego is beginning to form — though still in development. The future feels distant; the ego ideal is only just beginning to take shape.
But how does the Queen experience time? She is so old that the future and present may blur into the past. Or perhaps it only *seems* like she is 101 years old — after all, when does one begin to feel old? At 60? 40? Or even 25? Time perception is subjective. The Queen appears to be a grown woman behaving like a confused child. How does our sense of time shift once half our life is behind us? When something has already happened, there is no illusion left to soften it. What then becomes of the superego? Shouldn’t it grow more flexible with age?
But if this scene is Alice’s dream, perhaps the Queen is how Alice imagines her mother or another authority figure — aged and rigid, even if in reality she might be only thirty-six.
The Queen represents a caricature of the superego — as seen through the eyes of a child. To children and adolescents, adult rules can seem absurd, stupid, or even cruel. Since the entire story unfolds as Alice’s dream, the Queen may reflect an introjected superego — a maternal, grandmother‘s or teacher figure, rigid and disoriented. In this scene, the Queen appears lost, with a hairbrush tangled in her hair, and unable to dress herself despite trying for two hours. Alice, in contrast, behaves like a functioning ego — reflective and helpful.

The Queen declares a peculiar rule: *"Jam yesterday, and jam tomorrow — but never jam today,"* emphasizing how good the jam is. She avoids pleasure in the present, choosing instead to live in the past or future. Alice and the Queen understand "tomorrow" differently. Alice believes that tomorrow eventually becomes today, but the Queen insists that "tomorrow" is always a other day — never now. The superego promises pleasure only in the future, contingent on being good — but it never delivers it.

This reminds me of a patient who spends hours preparing lectures, organizing slides, and planning to go out with friends only once everything is "done." But it's never *done* enough — the moment to relax never arrives. Like the Queen, he lives in endless preparation, always waiting for a tomorrow that never comes. He hopes psychoanalysis will help him one day sit at a bar relaxed with friends and finally enjoy jam *today*.

Alice, on the other hand, still has a relatively intact ego. Perhaps she hasn't experienced trauma like the Queen. She doesn't yet understand how one can live that way — trapped in self-imposed rules. She senses that the Queen is lonely, isolated, and miserable. The Queen even offers Alice a job as a maid — as if she had no one else at all.

The Queen claims she remembers events that happen "the week after next." For her, memory functions in reverse: punishment comes before the crime. Alice, by contrast, understands memory as we do — the bad deed comes first, the punishment follows. The Queen lives in fear, in a paranoid world like authoritarian regimes, where guilt precedes action. It reminds one of a well-known Russian phrase:"Give me the man, and I'll find the crime."

She already feels guilty. She screams *before* pricking her finger — a classic obsessive-compulsive defense. And when the prick actually happens, she's silent — which surprises Alice. Perhaps, like the punished criminal, she now feels relief. According to Hartocollis, anxiety arises when the future holds a threat but change is still possible. Depression sets in when the future feels fixed and unchangeable. The Queen seems depressed. The future has become the past.

The superego is largely unconscious. Freud identified the ideal ego, the ego ideal, and the superego as three stages of development. Loewald wrote that the superego, despite appearing rigid, is a fluid structure capable of regression. In his point of view, only a minority of people possess a truly mature superego. The Queen's superego seems rigid, and unable to evolve.

She admits she cannot feel joy because she's "forgotten the rule." She panics at Alice's tears, denying the sadness of separation. She quickly distracts her: *"Consider your age! Consider anything!"* – do something, keep busy, don't feel. And when Alice doubts the Queen's claimed age, the Queen shows sympathy. She tried to help Alice, invites to close her eyes and *try* to believe, recalling how she once trained herself to believe "six impossible things before breakfast." The Queen has no access to authentic emotion — she learned to feel what she *should* feel, not what she *does* feel.

A mature relationship with time rests on authenticity — the ability to accept reality as it is, both internally and externally, regardless of narcissistic wounds. Loewald wrote that an authentic person integrates their past, lives in the present, and imagines a future. The way someone experiences time reflects — and shapes — their unconscious desires, conflicts, and defenses. The more fragile the psyche, the more disrupted time becomes.

The Queen's world is strange, absurd, even amusing — and yet painfully familiar. It reminds us how often we, too, live this way.

Conclusions

In this talk, I've explored how subjective time is formed and functions within the psyche.

Freud first described the unconscious as timeless, linking time in the psyche to repetition and insight— where the past shapes the present, and understanding enables change. Hans Loewald expanded this idea by describing two poles of temporal experience: nunc stans, the eternal now, and fragmentation, where time breaks down. Bernd Nissen brought further nuance by distinguishing between layers of consciousness. He showed how time becomes meaningful through memory, which links past, present, and future into a personal narrative.

Still, time in psychoanalysis resists clear definition. Much of what we know is metaphorical or clinical—based more on observation and intuition than objective proof. There's no single theory of how time "works" in the mind. But this opens room for reflection—and dialogue.

From a psychoanalytic view, time isn't something we control—it reflects how the mind organizes experience. The analytic process helps realign our inner "times," which may explain why we repeat patterns, avoid endings, or fear change. Recognizing this helps us respond with more compassion—toward ourselves and others.

Ultimately, time is deeply subjective. And in that light, analysis—like Ariadne's thread—can guide us back: to ourselves, to an inner home.

To eat jam today.

Thank you!

Literature:

- Abraham, K. (1991). *The sense and concept of time in psychoanalysis*. In *Selected Papers on Psychoanalysis*. New York: Basic Books. (Original work published 1911/1921)
- Arlow, J. A. (1959). The structure of the déjà vu experience. *Journal of the American Psychoanalytic Association, 7*(3), 611–631.
- Arlow, J. A. (1966). Depersonalization and derealization. In R. M. Loewenstein et al. (Eds.), *Psychoanalysis: A general psychology* (pp. 456–478). New York: International Universities Press.
- Arlow, J. A. (1984). Disturbances of the sense of time. *Psychoanalytic Quarterly, 53*, 13–37.
- Arlow, J. A. (1986). Psychoanalysis and time. *Psychoanalytic Quarterly, 55*, 507–527.
- Bion, W. R. (1962). *Learning from experience*. London: Heinemann.
- Carroll, L. (1871). *Through the looking-glass, and what Alice found there*. London: Macmillan.
- Deleuze, G. (1994). *Difference and repetition* (P. Patton, Trans.). New York: Columbia University Press. (Original work published 1968)
- Freud, S. (1915). The unconscious. In *The Standard Edition of the Complete Psychological Works of Sigmund Freud* (Vol. 14, pp. 159–215). London: Hogarth Press.
- Freud, S. (1930). Civilization and its discontents. In *The Standard Edition* (Vol. 21, pp. 59–145). London: Hogarth Press.
- Freud, S. (1940). An outline of psychoanalysis. In *The Standard Edition* (Vol. 23, pp. 141–207). London: Hogarth Press.
- Hartocollis, P. (1972). Time as a dimension of affects. *Journal of the American Psychoanalytic Association, 20*(1), 92–108. https://doi.org/10.1177/000306517202000105
- Loewald, H. W. (1962). Superego and time. *International Journal of Psychoanalysis, 43*, 264–268.
- Loewald, H. W. (1972). The experience of time. *Psychoanalytic Quarterly, 41*(3), 364–386.
- Nissen, B. (2001). Über den Zeitbegriff in der Psychoanalyse. *Forum der Psychoanalyse, 17*(2), 115–130.
- Nemirovskaja, M. A. (2003). *Развитие чувства времени: психоаналитическая точка зрения*. Москва: Институт Общегуманитарных Исследований.
- Winnicott, D. W. (1960). The theory of the parent-infant relationship. *International Journal of Psychoanalysis, 41*, 585–595.