

# Stephen Kern: The Culture of Time and Space: 1880-1918 (1983)

WHAT: Survey significant changes in the experience of time and space—>no specific cause; **“the affirmation of a plurality of times and spaces”** ; *Essential human understandings of time, space, direction, and form were radically transformed by technological innovations which undermined traditional hierarchies throughout society.*

- telegraph
- telephone
- railroad
- automobile
- cinema
- GMT

HOW: uses examples from literature, psychology, philosophy, technology, art

- repeat offenders: James Joyce and Ulysses, Proust and Marcel, Henry Bergson concept of time, Emile Durkheim's studies of social organization, Freud, Picasso, Futurists

WHY: Kern wants to crack these routine interpretations of time and space, expand the corpus, and “expose fresh surfaces and attribute those contributions to the precise models of time or space that are appropriate” ; Kern compares this to a similar contemporary crisis in the 1980s: energy crisis; the late 19th and early 20th C had a crisis of abundance—>“there was little talk of running out.”

My clever things:

- Kern ignores concepts of race and gender in these experiences/shifts in conceptualization of space and time;
- Concept of plurality or perspectivism—there are as many different spaces as there are points of view

See here: [The Culture of Time and Space, 1880-1918 by Stephen Kern \(2003\)](#).

## THE NATURE OF TIME

World Standard Time created greater uniformity of *shared* public time but it also triggered theorizing about multiplicity of private times (moment to moment, between individuals, and among different groups)

Kern identifies 3 opposing views:

### 1. **time as homogenous or heterogenous**

- before 19thC no one challenged the notion of homogeneity of time
- uniform, public time invented at end of 19thC — railroads, telegraphs, and cinema (by the 20thC) all encouraged a uniformity of time to coordinate life in the modern world
  - Uniform time as the proper marker of duration and succession
  - Railroads first instituted uniform time
  - Efforts to rationalize public time were widespread: attempts in 1912 and on to arrange the calendar and then the days and weeks after it.
- debate generated by novelists, psychologists, physicists, and sociologists examined how individuals create as many different times as there are life styles, reference systems, and social forms = CONCEPTS OF PUBLIC TIME AND PRIVATE TIME

- Conrad's *Secret Agent* attempts to blow up Greenwich Observatory—>rebellion against a centralized political authority
  - *Dorian Gray* private time in conflict with public time
  - Marcel Proust—narrator's private time moves irregularly against public time
  - James' *Ulysses* modified traditional treatment of time (combining 24 years of Odysseus' travel to 16 hours of Leopold Bloom's life)—>interior monologues and authorial comments expand the temporal range = TIME AS HETEROGENOUS
- Time as relative
  - time as social; social origin of time from Emile Durkheim; time in general has a social origin; societies organize their lives in time and establish rhythms that become frameworks for all temporal activities
    - **Durkheim's idea of social relativity of time challenged the temporal ethnocentrism of Western Europe**
  - Pierre Janet studied temporal worlds of the mentally ill; different modes of perceiving time and space
- 2. **time as atomistic (static) or a flux (dynamic)**
  - Difficulties in capturing time and changes in time in art; time as atomized
    - Muybridge's chronophotography (horses in subsequent motions)
    - Futurist Bragaglia's photodynamism (basically, blurry pictures = perfect way to capture the fluidity of time)
    - Impressionistic time—> movement is always only captured in fixed time/moment per Gotthold Lessing
    - Cubists: successive view of art; presented time in art in a new way, but still not the experience of time
  - Time as dynamic - linked to human consciousness as a stream per William James in 1884, when he criticized David Hume's view of the mind as "agglutination in various shapes of separate entities called ideas"
    - each moment is linked to what comes before and after it; no single pace for mental life; "stream of consciousness" coined in 1890
  - Henri Bergson subscribes to this same theory; any moment of consciousness is a synthesis of an ever changing past and future that always flowed
    - time can be distinguished between relative and absolute knowledge
      - relative: impoverished knowledge that can be achieved by moving around an object or by coming to know it through symbols or words
      - absolute: experienced within; comes from intuition; **duree as fluid and having no spatial component**
    - Joyce's *Ulysses* complicates this "stream" metaphor; stream metaphor implies that it's a steady course in a fixed flow—>Molly Bloom's thoughts defy conventional measures of time, pace, and direction
- 3. **time as reversible or irreversible**
  - challenges to our understanding of historical time as fixed and irreversible; novelists, artists, and intellectuals challenged this traditional feature
  - invention of electric light and cinema generated this challenge
    - electric light blurred divisions between day and night; routines of day and night subject to modification
    - cinema played with temporal phenomena and its uniformity and irreversibility

- novelists noted the challenge of presenting the passage of time; *Ulysses* interrupted the forward movement of narrative time (Bloom would describe a tangent or string of memories within what seems like seconds but are actually about 50 pages in the text; then the narrative picks up seconds later in the story)
- Freud noted modifications on the continuity and irreversibility of time—>unconscious mental processes are “timeless”
- Einstein challenged the irreversibility of public time

Takeaway: 2 kinds of time were being considered—private and public time; private time had a more fluid texture; public time is ordered; **the thrust of the age was to affirm the reality of private time against that of a single public time and to define its nature as heterogenous, fluid, and reversible.**

## The Past

Thinking about the past centered on 4 major issues:

1. the age of the earth
  - scientific challenges and explorations into the age of the earth gives drastically oscillating scale; ***patterns of development through vast stretches of time***
    - Comte de Buffon said it was at least 168,000 years old (1770s)
    - Charles Lyell estimated the age of the earth as limitless—> geological formations created by a gradual process still in action (1830)—>critiqued Cuvier’s “catastrophism”
    - Darwin (1859) with evolution; theory stretched out slightly and estimated the age of the area he studied at over 300 million years; evolution happened more rapidly in earlier periods
    - Lord Kelvin (1862) argued it was not more than 20 million based on the cooling rate of the earth
2. impact of past on the present
  - technological advances such as the phonograph and cinema/photography (later on) changed the way people experienced their personal past and collective past of history
    - Phonograph recorded voices; used by Vienna scientific archive
      - James Joyce’s Leopold Bloom fantasized being able to hear someone long after death
    - Cinema—>increased the level of detail and accuracy of memories of the past; “objectivation of our memory function”
    - photography and restoration of architecture as analogous: protection of historical documents and areas/monuments; threats of reckless urban growth
      - Proust’s church and Simmel’s architectural ruins show two opposing views of “ruins”—>Proust’s church evoked memories of childhood and the drama of history; Simmel saw ruin as “resolution of the tension between two moments in time”; “all the uncertainties of change in time and the tragedy of loss associated with the past find in the ruin a coherent and unified expression.”
      - persistence of the past and impact on the present
  - ORGANIC MEMORY: belief that memory exists in living tissue as a “cumulative residue of voluntary movements and bodily processes”
    - Henry Maudsley (1867) believed that memory exists in every part of the body even in the nervous cells
    - German psychologist Ewald Hering (1870): every living cell contained the memory of the

experience of the entire series of its parent cells and even those of former generations" ; akin to Samuel Butler's *Life and Habit* (1878)

- Bergson's *Matter and Memory* (1896): every movement leaves traces that continue to affect all subsequent physical or mental process
    - cf. Dracula's organic persistence of the past (in the blood runs centuries of blood from ancestors)
    - Insistence on continuity; the past persists as recollection—>the past inscribed in mental images; emphasized that all past experiences are interconnected to the present
      - "Human consciousness is not the tranquil passage of discrete ideas imagined by the associationist psychologists; rather, it is a thunderous action of memories that interlace, permeate, melt into, drag down, and gnaw on present experience" (43).
    - **Bergson on time: duration is a at every moment a composite of each successive moment and is therefore continuous.**
  - William James also saw this continuity—>past has a dynamic relationship to the present; but saw that there is a spatial difference in recent memories and distant ones
  - Edmund Husserl: past remains in the consciousness but in a changed form; compared it to listening to music—>past melody fades and you hear the present note in that context.
    - distinguishes between recollection (chases the order of original events) and retention (fixed in experience)
  - **They all differed on the impact of the past on the present: Husserl (no comment); James (full life was elaborated with the fringes and halos of memory); Bergson (positive effect as a source of meaning, freedom, identity, or beauty)**
  - PSYCHOANALYSIS: Joseph Breuer's patient—Anna O. memory, forgetting, and the role of childhood incorporated in this scientific practice
    - FREUD: distant past—that of childhood—matters the most; argues that all memories are retained; akin to Darwin's contention that remnants of the past are inscribed in organic matter—>Freud says every memory leaves a trace and shapes psyche reputations and revisions throughout life; KANT argues that every action of perception has a temporal structure; stamped by time
  - All this emphasizes the historical significance of this kind of inquiry; scientific basis for philosophical inquiry;
3. value of that impact: how we know ourselves in time; the past is important component of the present self
- Dilthey: insists on historical nature of all knowledge—> "memory enables us to integrate experience in a series of ongoing syntheses which we begin to understand as we analyze our past, future, and changing present"
  - Bergson: we gain absolute knowledge through our experience of duration; absolute knowledge acquired through intuition is essential in living the good life; we must integrate the past in the present to be free.
  - Proust: "Only through the perspective of time passed and time regained can we come to understand the past and enjoy its retrieval." The present is too confusing and our intellect is useless to grasp and discern the essentials of reality.
  - Long tradition of Enlightenment philosophers in the 19thC: Comte, Hegel, Darwin, Spencer, and Marx —> philosophies, nations, social systems, or living forms are a result of vestiges of

all that have come before; new meaning to life without God

- **but countercurrents show that this can be paralyzing; people are unable to move forward when consumed by the past; Nietzsche's Thus Spoke Zarathustra**
  - see Joyce's Stephen Daedalus: limits and dangers of memory; memory preserves his identity; "history is a nightmare form which I am trying to wake" --> THIS IS ONE OF THE NETS IN PORTRAIT OF THE ARTIST!
  - Futurists had the most passionate repudiation of the past
4. most effective way to recapture the past that has been forgotten
- passive approach by Proust (memory springs up by chance; memory experienced *discontinuously*; there's shock and pleasure)
  - active approach by Bergson, Freud, and Henry James
    - Freud: psychotherapy calls for active hunt for unconscious psychological processes
    - "reconstruction of life in time that breaks through and then breaks down self-mystifications and defenses"

## The Present

Simultaneity of experience made possible by wireless telegraph (1864); telephone (1867) first for business and later for "broadcasts"

- "telephonic journalism" in Budapest regulated subscribers' lives, focus the entire city on a single experience; and invaded their privacy with an emergency signal for breaking news
- Max Nordau notes the expansion of individual knowledge and geographical horizon-->but notes eventually injury to the nerves (PARTY POOPER!)
- Cinemas/Theaters and photographic montage as techniques; contrast editing or intercutting gave versatile techniques to display or evoke simultaneous experiences
  - Futurists LOVED this (radio, cinema, and poetry experiments)
  - Joyce's "Wandering Rocks" episode: 19-section montage--> Joyce recreates the unity of the city and simultaneous activity: multiple accounts of characters, repetition of action, multiple appearance of an object; cavalcade that travels throughout the city;
- the present has been "thickened"
- time feels faster; space more collapsed in abstract ways

## The Future

- new technologies provided a source of power over the environment and suggested ways to control the future;
  - streamlining of factories: Ford's assembly line and Taylorism (accelerated production by increasing the predictability of workers' movements; plus workers can't change the order of actions to complete the work)
    - Taylorism applied science to the engineering of process and management--> SCIENTIFIC MANAGEMENT
- Active mode of the future also brought: imperialism and prospect of European ascendancy throughout the world
  - spatial expressions of the active mode of the future: annexation of space, movement of people and goods, expansive ideology of imperialism
- The world rushed ahead: science fiction writers became popular; ambivalent reactions
  - Wells saw catastrophe and degeneration for most of his novels between 1890 and 1902; further stratification of society
    - echoes Mary's vision of growing division between classes (Eloi and Morlocks)

- echoes Marx's vision of growing division between classes (L101 and 10100K3)
- fin-de-siecle preoccupation with degeneration; Max Nordau's *Degeneration*
- Socialist revolutionaries saw the future as the triumph of socialism
  - For Marx, workers embodied the future: "action was to come from class consciousness generated out of struggle with the present."
- George Sorel: workers' deception of a mythical future will produce the future

## SPEED

Debate about the meaning and value of speed

- Taylorism and Futurism, new technology, new music, and cinema = world is rushing; but pace of former lives slowed
  - generated sentimental elegies about the past;
  - speed not always uniformly accelerated; unpredictable

## THE NATURE OF SPACE

- technological advances like the railroads, telegraph, telephone, and cinema reoriented nations' concepts of space; information became instantaneous and broadly available; spaces are collapsed more abstractly by cinematic techniques such as the "close up" (Think of Benjamin's point here about the revolutionary effects/purposes of camera techniques); increased intimacy between audience and object/actor;
  - potential threat of new transportation and communications technology to aristocratic society of Austro-Hungarian Empire—>Francis Joseph didn't allow electric lights,
  - telephone **eclipsed distance between people and classes**; "They make all places equidistant from the seat of power and hence of equal value"
    - "Telephones penetrate and thus profane all places; hence there are none in churches."
  - large sweeps toward democratization—>crowding of people led to new status of urban setting of the bourgeoisie;
- in art: singularity of perspective is rejected; impressionism in the late 1800s, and later to Cubism, Surrealism, and Dadaism-->rejected notions of single interpretations;
  - perspectivism: multiple perspectives exist
  - "affirmation of positive negative space" (background (which is considered negative space) is also as important as foreground (positive space))
  - coincided with the rise of the bourgeoisie
  - created new ways of seeing and rendering objects in space and challenged the traditional notion of its homogeneity
  - MODERN ART IS NO LONGER CONTENT WITH SLAVISHNESS TO THE RULES OF SCIENTIFIC PERSPECTIVE.
- in literature: different perspectives — space is subject to changing perspectives, thoughts, and feelings and suffer the unceasing transformation of things in time.
- Emerging modes of space had extensive social, political, and religious manifestations
  - leveling of hierarchies; restructuring of forms and contraction of social distance—>energized a general cultural challenge to all outmoded hierarchies
  - artists and intellectuals challenged the conventional hierarchical ordering of objects
- Loss of sacred

## DIRECTION

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