

# Cognitive Mapping and the Aesthetics of Liberation: Towards a Critique of the Postmodern Notion of Space

Gianna Katsiampoura<sup>1</sup>, Andreas Kargopoulos<sup>2</sup>, Kostas Skordoulis<sup>1</sup>

<sup>1</sup>Department of Pedagogy and Primary Education, National & Kapodistrian University of Athens, Athens, Greece

<sup>2</sup>Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece

Email: [katsiaioan@primedu.uoa.gr](mailto:katsiaioan@primedu.uoa.gr), [andkargopoulos@gmail.com](mailto:andkargopoulos@gmail.com), [kskordul@primedu.uoa.gr](mailto:kskordul@primedu.uoa.gr)

**How to cite this paper:** Katsiampoura, G., Kargopoulos, A., & Skordoulis, K. (2026). Cognitive Mapping and the Aesthetics of Liberation: Towards a Critique of the Postmodern Notion of Space. *Advances in Applied Sociology*, 16, 265-276.

<https://doi.org/10.4236/aasoci.2026.164017>

**Received:** February 20, 2026

**Accepted:** March 30, 2026

**Published:** April 2, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

This paper employs conceptual analysis to examine how Fredric Jameson's materialist critique of postmodernism (1991) reframes space as socially produced and politically consequential. Drawing primarily on Lefebvre's theory of the production of space (Lefebvre, 1991), Harvey's materialist geography (Harvey, 1989) and Vygotsky's social interactionist account of cognition, we argue that the concept of "socially produced space" enables a move beyond the limits of postmodern spatial thinking. We further show that Jameson's schema of "cognitive mapping"—understood as the aesthetic and political practice of orienting oneself within the disorienting "hyperspace" of late capitalism—offers a productive framework for spatial learning and meaning-making in educational contexts. This paper does not adjudicate debates in the physics of spacetime, nor does it advance empirical claims about classroom practice; it is a theoretical argument connecting critical spatial theory to emancipatory educational possibility. We conclude that cognitive mapping is ultimately a call for radical transformation of the social conditions of today.

## Keywords

Cognitive Mapping, Fredric Jameson, Space, Postmodernism, Late Capitalism, Critical Spatial Theory, Historical Materialism

## 1. Introduction: The Centrality of Space

Spatial understanding is fundamental to cognition and to human beings' orientation within their physical and social world. While much research has focused on the relationship between spatial ability and achievement in mathematics and sci-

ence, the deeper question of how space itself is conceptualised—and what political implications follow from different conceptualisations—has received less systematic attention in educational scholarship. This paper addresses that gap by tracing the theoretical lineage from classical epistemologies of space, through postmodern spatial thinking, to Jameson’s Marxist critique and his emancipatory concept of cognitive mapping.

Spatial conceptualisations in Western curricula have been largely shaped by a Euclidean paradigm that treats space as a measurable, rational, and objective system. Newtonian space reinforces this by asserting space’s independence from the observing subject; Kantian space, by contrast, insists that space is not a feature of absolute reality but a “form of sensibility” constitutive of subjective experience. This paper moves beyond this classical dichotomy to examine how, in the context of postmodernity, the analysis of space shifts from its physical properties to its social interaction, and further still, to its social production.

Three theoretical moves structure our argument. First, we situate the debate within a broader epistemological shift: cognition is not passive intake but active, social interaction—a position associated particularly with Vygotsky’s social interactionist framework. Second, we examine how Jameson’s materialist critique of postmodernism, informed by Lefebvre and Harvey, reconceives space as politically produced and contested. Third, we argue that Jameson’s concept of “cognitive mapping”—the aesthetic practice of achieving orientation within the “hyper-space” of late capitalism—can function as an emancipatory framework for spatial learning. The paper proceeds as follows: Section 2 outlines the epistemological context of social interactionism and spatial cognition; Section 3 examines postmodern accounts of space and their critique; Section 4 traces Jameson’s Marxist alternative; Section 5 develops the concept of cognitive mapping; and Section 6 draws implications for education. We note that this paper does not adjudicate debates in the physics of spacetime, though the history of those debates provides important background context addressed briefly in Section 3.

## 2. Social Interactionism and the Epistemology of Spatial Cognition

There is a tendency in current thinking to embrace a broader view of space, to see space and shape within a context of social experiences. One of the specific outcomes of the modern curriculum suggests that learners need to be able to describe and represent experiences with shape, space, time and motion, using all available senses. This apparent shift is consistent with a global epistemological paradigm move towards recognizing that cognition is an active and complex process of social interaction.

The core epistemological principles that underpin this shift can be summarized as follows:

- Knowledge is actively constructed by the learner, not passively received from the environment;

- The function of cognition is adaptive. This process organises one's experiential world; it does not discover an independent, pre-existing world outside the mind of the learner;
- The cognition process is not personal and insular, but one that relies on social interaction.

The notion that cognition is an active process and not a passive intake of information expresses a clear contrast with traditional didactic and expository teaching based on the metaphor of “teaching as transmission of knowledge”. In traditional theories of knowledge, the learner is seen as a passive recipient of knowledge, the “knowing subject” conceived as a “pure” entity without any interaction with the social, cultural and political environment.

Recent research accepts that learners develop understanding, ideas and beliefs about the natural world outside the “formal” learning environment, long before they are formally taught. Learning occurs over a continuum and develops on the basis of continued reflection and evaluation within one's own experiential context—it is a process of continuous modification and adaptation, in which the learner's new understandings are formed on the basis of his or her own prior knowledge and experience.

This social dimension of cognition is strengthened by Vygotsky's work, which identifies language as a key component in the cognition process (Vygotsky, 1978). When considering the formation of concepts, Vygotsky argues that real concepts are impossible without words, and that thinking in concepts does not exist beyond verbal thinking. The central moment in concept formation, and its generative cause, is a specific use of words as functional tools. For Vygotsky, all cognition is grounded in social interaction; individual cognitive development is always already mediated by the cultural and linguistic tools of the social world. This insight is crucial for understanding how learners construct spatial meaning: space is not given to the individual in isolation but is made meaningful through socially mediated language and practice.

Social interaction theory thus provides a useful framework for understanding spatial conceptualisation within a social context. It recognises that past experiences, presuppositions and perceptions are central to the cognition process and reinforces the notion that beliefs (within a socio-cultural context) influence the construction of meaning. An individual's worldview—what Schaffer describes as fundamental to his or her conceptualisation of space (Schaffer, 2001)—is not formed in isolation from social relations but through them. This epistemological orientation prepares the ground for the theoretical claim that space itself, not just our knowledge of it, is socially produced.

### 3. Space in Postmodern Theory and Its Critics

#### 3.1. The Postmodern Antithesis

The emphasis on spatial analysis has emerged from a much wider debate within the social sciences and particularly from the work of Marxist geographers in the

mid-1970s. These new geographers challenged the privileged position accorded to temporality in social theory, insisting on the necessity of a more dynamic conception of space. Space had always been assigned a secondary position in relation to time: temporality is history, it is dynamic, the site of the dialectics, the potential for change and transformation, the historical possibility of revolution. Space, on the other hand, had always been seen as static and inert—simply given, a neutral category, an emptiness which is filled with objects. The new geographers challenged these conceptions, insisting that space is not given but produced. Socially produced space, or spatiality, is not inert and static but is itself constitutive of social relations: spatial relations and spatial processes are in fact social relations taking a particular geographical form.

The theoretical proclamations of postmodernism, especially its critique of science, became very influential in recent decades. Three contextual causes can be identified for these developments. First, new social movements grew since the 1960s—including black liberation and feminist movements—which perceived themselves as ignored by traditional politics and developed their own forms of social critique. Second, political disappointment with neoliberal capitalism and failures in the global south created a climate of pessimism that facilitated theories criticising previous certainties. Third, the identification of science with the most menacing aspects of technology (the atomic bomb, genetic engineering, ecological destruction) generated pressure for novel theoretical tools.

The epoch of Postmodernity, with its own economic, political, and cultural ideals and practices, was proposed by such thinkers as Jean-François Lyotard, Jean Baudrillard, and Jacques Derrida, each from distinct theoretical positions. Lyotard famously defined postmodernism as “incredulity towards metanarratives”, arguing that the grand legitimating stories of modernity—Enlightenment, Marxism, science—had lost their credibility (Lyotard, 1984). Baudrillard took a different route, arguing that in the age of simulacra, the distinction between representation and reality had collapsed, producing a hyperreal world of signs without referents (Baudrillard, 1994). Derrida’s deconstructive project, meanwhile, questioned the stability of the binary oppositions on which Western reason rests. While these thinkers differ markedly in their methods and conclusions, they share a suspicion of totalising frameworks and a foregrounding of difference, fragmentation, and linguistic mediation.

It is important to acknowledge that postmodernism is not monolithic. There are significant internal differences between, for instance, the linguistic idealism of some variants and the more politically engaged work of feminist and postcolonial theorists who also operate under the broad postmodern umbrella. The critique developed in this paper targets specifically the theoretical tendency toward radical relativism and the rejection of social totality, not the critical insights that postmodern theory has generated regarding power, difference, and marginalisation.

Modern theory, rooted in Enlightenment principles of reason, progress, and universality, posited the world as explicable through universal laws applicable to

all people at all times. Postmodern theorists reject this: they view society as something that can no longer be explained as functioning truly in one way for all time and being. For postmodernists, the universalising claims of modernity mask the power interests of those making them, effectively silencing other nations, other classes, other genders, and other races (Meiksins-Wood & Bellamy-Foster, 1997). In place of totalising, universalising theories or “metanarratives”, postmodernists advocate micro-theories or studies of micro-politics that favour multiplicity, plurality, fragmentation, and indeterminacy.

Whereas originally the transformation of space was a constitutive feature of modernism, by the late 1980s it had become the constitutive feature of postmodernism. Modernism was seen as essentially temporal, the site of history, narrative, and memory—and therefore the potential for change. Postmodernism became the site of pure immanence, immediacy, stasis, and above all a disorienting and disempowering realm of space.

### 3.2. The Physicalist Critique: The Science Wars as Background

A secondary but relevant thread in this intellectual landscape is what came to be known as the “Science Wars”. This debate functions in our argument not as a central concern, but as a contrast case that clarifies the specific character of Jameson’s materialist critique: unlike the physicalist critics, Jameson does not simply defend science against postmodern relativism but offers a dialectical alternative that takes the social production of knowledge seriously while retaining a commitment to historical materialism.

In 1994, Paul Gross (a biologist) and Norman Levitt (a mathematician) published “Higher Superstition: The Academic Left and Its Quarrels with Science” (Gross & Levitt, 1994), which incorporated a sharp attack on postmodernism in academia. The authors named their target as the “Academic Left”: a diverse community incorporating sociology of scientific knowledge, cultural studies of science, postmodernism, literary theory, feminist critiques of science, and radical environmentalism. Their main charges were that this “Academic Left” was undermining the credibility of science by arguing that social factors play a role in determining what is accepted as true; that it was advancing an unacceptable form of relativism, claiming that knowledge and even reality are socially produced through interaction rather than independently given; and that this irrationalism threatened both science and society.

In 1996, the journal *Social Text* published a special issue in response, which inadvertently included a hoax article by physicist Alan Sokal, who subsequently revealed his deception. The scandal generated “Fashionable Nonsense” (Sokal & Bricmont, 1998), a critique of the misuse of scientific concepts by poststructuralist philosophers. The Science Wars thus illustrate the genuine tension between scientific realism and the constructivist epistemologies associated with postmodern thought.

We note that this paper does not adjudicate these debates. The Science Wars

debate is relevant here as background that illuminates why a materialist—rather than either a scientific realist or a postmodern relativist—account of space is needed. Jameson’s approach, as we argue in the following section, accepts that space is socially produced without abandoning the claim that social totality is real and representable.

## 4. Jameson’s Materialist Critique: Space as Cultural Logic

### 4.1. Jameson’s Understanding of the Postmodern

It is in the light of the continuing debate between postmodern theory and its critics that we turn to one of the most influential scholars of our era: Fredric Jameson. Jameson’s theory must be read as a system that operates dialectically between the cultural characteristics of postmodernity and the economic force of multinational capital. While Jameson’s practice is to analyse specific cultural texts, he integrates them within a broader Marxist theory (Jameson, 2016).

Jameson borrows two important aspects of his theoretical approach from Ernest Mandel’s *Late Capitalism* (1978): first, a periodisation within the stages of capitalism; and second, the view that the “late” or “third stage” of capitalism is in fact a purer form of capitalism than that available to Marx. Jameson makes a periodisation of the history of capitalism by linking different cultural styles to different stages of capitalist development: realism, modernism, and postmodernism are the cultural levels of market capitalism, monopoly capitalism, and multinational capitalism respectively (Jameson, 1991).

Jameson characterises the postmodern as a cultural logic connected to the economic system of late capitalism. Capitalism rearranges the social significance of the cultural object by destroying the value of activity intrinsic to its creation: the cultural object under capitalism no longer contains value as social activity but is defined in terms of its market value. As this process of commodity reification increases, all forms of labour and production are consumed by market relations.

Jameson argues that the economic base of multinational capitalism has a fundamental relation to the cultural objects of the superstructure, yet the relation between these two is not to be found within the object itself. The economic base does not directly generate effects within the object but affects society in its production and reception of the object. This dialectical understanding distinguishes Jameson’s Marxist approach from both crude economic determinism and postmodern culturalism.

### 4.2. Time, Space, and Spatiality

Crucial to Jameson’s understanding of the postmodern is the transition from a temporal logic to a spatial logic in postmodernism. The spatialization of time is a result of the destruction of the temporality of the subject. Time is an organising system, a continuity within which the subject may situate him/herself as a unitary individual. In postmodern society, where temporal continuity is broken down, time implodes into a perpetual present: “Our relationship to the past is now a

spatial one.” (Stephanson, 1988) Space becomes the crucial key to understanding our place within the cultural logic of late capitalism.

Postmodernism is endowed with a certain type of conceptual space which Jameson terms “hyperspace”: the inability of the subject to locate him/herself physically and spatially within a world that is in itself mappable. Hyperspace is a cognitive condition of the subject directly related to our physical environment, describable as the incapacity of our minds to map the great global multinational and decentred communicational network in which we find ourselves caught as individual subjects.

The analysis of produced space connects to Lefebvre’s (1991) unitary theory of space, which brings together physical space, mental space, and social space—or what Lefebvre calls the perceived, the conceived, and the lived. Spatiality, on this account, is differential, conflictual, and contradictory. Henri Lefebvre called for a unitary theory of space which insists that space is not given but produced, and that spatial relations are in fact social relations taking a particular geographical form. David Harvey (1987, 1989) extended this insight through his account of “flexible accumulation”, showing that the accessibility, appropriation, domination, and production of space have been crucial to the development of modern capitalism, and that time-space compression has produced the disorienting “loss of place-identity” that characterises contemporary experience. More recently, Harvey (2012) has extended this spatial critique in “Rebel Cities”, arguing that the urban arena has become the primary site of both capital accumulation and anti-capitalist resistance—the city is where the contradictions of late capitalism are most viscerally experienced and where the collective struggle for spatial justice is most urgent. Edward Soja (2010), in “Seeking Spatial Justice”, similarly argues that spatiality is not merely a backdrop to social life but a constitutive dimension of justice and injustice, and that any emancipatory project must therefore take explicitly geographical form.

A manifestation of this view is to be found in one of the seminal texts of post-modern theory, “Learning from Las Vegas” by Robert Venturi, Denise Scott Brown and Steven Izenour (1972). This book on architecture proposed an architecture of the “ugly and ordinary” by using popular and commercial building styles as examples for an architecture in opposition to the dominating modern and functionalist architecture. The geographical expression of this is the urban sprawl, as it has grown organically in the automobile-oriented culture of the United States.

### 4.3. The Cultural Object and the Geopolitical Unconscious

For Jameson, the cultural object becomes the meeting place of psychology and sociology. We are, Jameson (1988) argues, in a state of spatial and social confusion. We find ourselves within a system so large that our only way to re-orient ourselves, to find our social positioning and class relations, is to fall back upon a method of mapping ourselves spatially. Cognitive mapping is, therefore, a neces-

sary ideological principle which society must utilise in order to figure its way out of capitalism.

This attempt to represent the social totality despite its fragmentary and diverse nature constitutes what Jameson calls the “geopolitical unconscious”. A cultural text that attempts to represent an unrepresentable society and then fails—getting lost and caught up in representing the unrepresentable—nonetheless makes progress. As Jameson argues, it is at the point where we give up and are no longer able to remember which side the characters are on that we have presumably grasped the deeper truth of the world system (Jameson, 2015).

The political possibility of postmodern culture will be transferred into a politics of alliance where different social groups fight together upon common issues, reverting to class. For Jameson, politics will be actualised within the new social movements, where culture as a political tool will “make an inventory of the variable structures of ‘constraint’ lived by the various marginal, oppressed, or dominated groups”. It is therefore within the failure of postmodern culture—its attempt to totalize a relatively untotalizable social system—that postmodern culture paradoxically succeeds.

## 5. Cognitive Mapping as the Aesthetics of Liberation

Part of the passage out of the logic of postmodernism will be the way in which the subject will relocate him/herself within this fragmentary culture. The key lies in what Jameson calls cognitive mapping.

Jameson holds that “the conception of space that has been developed here suggests that a model of political culture appropriate to our own situation will necessarily have to raise spatial issues as its fundamental concern. I will therefore provisionally define the aesthetic of such a new (and hypothetical) cultural form as an aesthetic of cognitive mapping” (Jameson, 1991: p. 51).

Jameson’s cognitive mapping is essentially a modernist strategy employed in a postmodern setting. For Jameson, a cognitive map is “that mental map of the social and global totality we all carry around in our heads in variously garbled forms” (Jameson, 1999). As a metaphorical example, Jameson refers to Kevin Lynch’s “The Image of the City” (Lynch, 1960), which showed that urban alienation is directly proportional to the mental unmappability of local cityscapes. Lynch showed that people find it easier to navigate some cities than others, primarily because of the rivers or mountains that border some cities, and/or their prominent landmarks which allow inhabitants to draw more accurate mental maps. Jameson expands this idea to the larger cognitive map we have of our world, linking it to Althusser’s formulation of ideology as the imaginary representation of the subject’s relationship to his or her real conditions of existence. The incapacity to map socially is, Jameson concludes, as crippling to political experience as the analogous incapacity to map spatially is for urban experience. Robert Tally Jr. (2014) has influentially developed this dimension of Jameson’s work, arguing that the cognitive mapping project is best understood as a form of “dialectical criticism”: the

effort to situate individual cultural objects within the totality of the social system, thereby restoring a sense of historical and spatial orientation that late capitalism systematically obscures.

Cognitive maps are functionally, though not structurally, equivalent to a cartographic map. They are complex, highly selective, abstract, and generalised representations in various forms. Jameson calls for forms—texts, objects, landmarks - that will make it possible for the individual to find their place within the postmodern world of late capitalism. These cognitive maps, interior and mental although not necessarily physical, will allow the individual, and by extension humanity, the power to resist the dangers of late capitalism.

Fredric Jameson's offer of a form of cultural politics based on the practice of cognitive mapping is presented as an attempt to fulfil Marx's demand to "do the impossible" within the contemporary conditions of cultural production: to think the development of postmodernism positively and negatively all at once; to grasp the demonstrably harmful features of capitalism along with its extraordinary dynamism simultaneously within a single thought, without attenuating any of the force of either judgement (Jameson, 1991: p. 47).

Thus, cognitive mapping is ultimately a call for radical transformation of the social conditions of today. It is not a retreat into private orientation but the collective, political project of re-establishing our understanding of where we stand in relation to the social totality, without which no progressive politics is possible.

## 6. Implications for Spatial Learning and Education

The theoretical framework developed in the preceding sections has concrete implications for spatial learning and education. If space is socially produced—not merely a neutral container for events—then spatial learning cannot be reduced to the acquisition of geometric or navigational skills. It must encompass the ability to understand, critique, and ultimately transform the social relations that produce the spaces in which we live. This argument has been developed independently in recent educational scholarship: Ford (2016), synthesising Lefebvre's spatial theory with Marxist educational thought, argues for a "revolutionary political pedagogy" that foregrounds the production of space as a site of learning and struggle; while Middleton (2014), drawing on Lefebvre's broader corpus, has developed a series of "spatial histories" of educational theory that reveal how pedagogical thinking is always already shaped by spatial assumptions. The present paper contributes to this line of inquiry by connecting Jameson's cognitive mapping specifically to the question of what it means to learn spatially under conditions of late capitalism.

Drawing on the account of cognitive mapping as an emancipatory aesthetic and political practice, we identify three interrelated pedagogical implications:

First, spatial learning should be explicitly critical. This means learners are not simply asked to describe or represent space, but to investigate who produces space, under what conditions, and to whose benefit. In classroom terms, this might involve learners analysing how urban spaces (parks, shopping centres, transport

networks) are designed and controlled, whose interests they serve, and what alternative spatial arrangements are possible. Evidence of learning, on this account, is the learner's capacity to articulate the social and economic forces that shape a given space, not merely to reproduce its geometric properties.

Second, classroom tasks should incorporate what Jameson calls the cartographic impulse: the attempt to produce representations of a social totality that is too large and complex to be directly perceived. This might take the form of mapping exercises in which learners not only produce physical maps but "social maps"—visual or narrative representations of power relations, economic flows, or cultural boundaries in their communities and beyond. The goal is not accuracy in a technical sense but orientation: helping learners develop a sense of where they stand in relation to larger social structures. Evidence of learning here is the learner's ability to connect local spatial experience to broader social and economic processes.

Third, drawing on Vygotsky's insight that all cognition is socially mediated, spatial learning should be structured as a collaborative social practice. Learners should work together to construct and contest spatial representations, using language to negotiate meanings about space. This entails designing tasks in which spatial understanding is constructed dialogically—through debate, storytelling, mapping in groups, and the critical examination of existing representations of space (maps, architectural plans, urban photographs). Evidence of learning is the quality of the learner's participation in these dialogic processes and the sophistication of the spatial accounts they are able to articulate with and through others.

These three implications—critical analysis, cartographic representation, and collaborative meaning-making—do not constitute a complete pedagogical programme. This paper is a theoretical argument, and the translation of these principles into specific curricula, assessment instruments, and teaching sequences would require further empirical and design research. Nevertheless, they identify the direction in which a Jamesonian framework points educational practice: toward spatial learning as a form of political literacy.

## 7. Conclusion

This paper has traced a theoretical arc connecting three interrelated domains: the social interactionist epistemology of cognition (particularly Vygotsky's account of language and concept formation), the theories of socially produced space developed by Lefebvre, Harvey, and Jameson, and Jameson's concept of cognitive mapping as an emancipatory aesthetic and political practice.

The central argument is that postmodernism's characteristic spatial disorientation—what Jameson calls "hyperspace"—is not merely a cultural phenomenon but the experiential expression of late capitalism's restructuring of social relations. Cognitive mapping names the practice of achieving orientation within this disorienting space: the collective, political project of constructing representations of a social totality that is too large and complex to be directly perceived but nonethe-

less real and consequential.

For education, this has both epistemological and political implications. If cognition is social and space is produced, then spatial learning must be understood as a form of social practice—one that is never politically neutral but is always implicated in the reproduction or contestation of existing social relations. An educational programme informed by Jameson's cognitive mapping would aim to develop learners who can not only describe and navigate space, but also understand it as produced, analyse whose interests it serves, and imagine and work toward alternatives.

We conclude that cognitive mapping is ultimately a call for radical transformation of the social conditions of today: a framework that connects the epistemology of learning, the social theory of space, and the politics of emancipation into a coherent, if necessarily incomplete, programme for spatial education.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

### References

- Baudrillard, J. (1994). *Simulacra and Simulation*. University of Michigan Press.  
<https://doi.org/10.3998/mpub.9904>
- Ford, D. R. (2016). *Education and the Production of Space: Political Pedagogy, Geography, and Urban Revolution*. Routledge.
- Gross P. R., & Levitt, N. (1994). *Higher Superstition: The Academic Left and Its Quarrels with Science*. Johns Hopkins University Press.
- Harvey, D. (1987). Flexible Accumulation through Urbanization; Reflections of Postmodernism in the American City. *Antipode*, 19, 260-286.  
<https://doi.org/10.1111/j.1467-8330.1987.tb00375.x>
- Harvey, D. (1989). *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Blackwell.
- Harvey, D. (2012). *Rebel Cities: From the Right to the City to the Urban Revolution*. Verso.
- Jameson, F. (1988). Cognitive Mapping. In C. Nelson, & L. Grossberg (Eds.), *Marxism and the Interpretation of Culture* (pp. 347-357). McMillan.
- Jameson, F. (1991). *Postmodernism or, the Cultural Logic of Late Capitalism*. Verso.  
<https://doi.org/10.1215/9780822378419>
- Jameson, F. (1999). Cognitive Mapping. In A. Kumar (Ed.) *Poetics/Politics: Radical Aesthetics for the Classroom* (pp. 155-167). New York University Press.
- Jameson, F. (2015). *The Ancients and the Postmoderns: On the Historicity of Forms*. Verso.
- Jameson, F. (2016). Marxist Criticism and Hegel. *Publications of the Modern Language Association of America*, 131, 430-438. <https://doi.org/10.1632/pmla.2016.131.2.430>
- Lefebvre, H. (1991). *The Production of Space* (Trans. D. Nicholson-Smith). Blackwell.
- Lynch, K. (1960). *The Image of the City*. MIT Press.
- Lyotard, J. -F. (1984). *The Postmodern Condition: A Report on Knowledge*. University of Minnesota Press. <https://doi.org/10.2307/1772278>

- Mandel, E. (1978). *Late Capitalism*. New Left Books.
- Meiksins-Wood, E., & Bellamy-Foster, J. (1997). *In Defense of History: Marxism and the Postmodern Agenda*. Monthly Review Press.
- Middleton, S. (2014). *Henri Lefebvre and Education: Space, History, Theory*. Routledge. <https://doi.org/10.4324/9780203070666>
- Schaffer, M. (2001). Worldview Theory and the Conceptualisation of Space. In A. Rogerson (Ed.), *Proceedings of the International Conference 'New Ideas in Mathematics Education'* (p. 223). The Mathematics Education for the Future Project.
- Soja, E. W. (2010). *Seeking Spatial Justice*. University of Minnesota Press. <https://doi.org/10.5749/minnesota/9780816666676.001.0001>
- Sokal, A., & Bricmont, J. (1998). *Fashionable Nonsense*. Picador.
- Stephanson A. (1988). Regarding Postmodernism—A Conversation with Fredric Jameson. In A. Ross (Ed.), *Universal Abandon. The Politics of Postmodernism* (pp. 3-30). University of Minnesota Press. <https://doi.org/10.2307/827806>
- Tally Jr., R. T. (2014). *Fredric Jameson: The Project of Dialectical Criticism*. Pluto Press. <https://doi.org/10.2307/j.ctt183p5xw>
- Venturi, R., Scott Brown, D., & Izenour, S. (1972). *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*. MIT Press.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.