

Not Just a Hobby: Worldbuilding and Its Potential Uses in the Classroom

Szeyuen Qi
nico.qi@outlook.com

ABSTRACT

Worldbuilding—the creation of fictional worlds through maps, storylines, and timelines—is usually treated as an extracurricular hobby. In this paper, I argue that it could also support comprehension, retention, and interactivity in the classroom, when educators prioritize cohesion, realism, and quality over quantity. The focal artifacts are three projects that I developed in my free time outside formal education and that exemplify the possibilities of worldbuilding in education. The first artifact, “A Quick Demonstration”, is a thirty-minute doodle that illustrates how even a brief exercise may engage geographic and historical reasoning. The second artifact, Atrica, is a map detailing a snapshot from a tense geopolitical time period taking a few days. The third artifact, Laticika, is a timeline-oriented chronicle with mainly writing and supplementary diagrams and maps to enhance comprehensibility done over a week. Through an artifact-centered autoethnographic self-study and reflexive thematic analysis, I show how the worldbuilding process exercises, challenges, and elevates historical knowledge, critical thinking, reasoning, and human geography. I propose how worldbuilding can be utilized in the classroom, provide design samples, assessment criteria, an adaptable task template, and advice for equitable participation. This case suggests that worldbuilding may bridge youth interests and disciplinary learning by making imagination accountable to geographic evidence and explanation.

INTRODUCTION

Geography education invites learners to grapple with a difficult intellectual task: connecting human and physical processes across space, time, and scale. In an era of accelerating climate disruption, uneven development, and contested knowledge, this integrative task is even more imperative. Students like me are expected to interpret complex socio-ecological systems, evaluate tradeoffs, and imagine futures that are both plausible and just. Yet classroom routines often fragment these connections into separate topics—“physical geography,” “human geography,” “government and politics,” “world history,” “biology”—and integration becomes a rhetorical aspiration rather than an assessable learning outcome. As the National Research Council has argued, spatial thinking is an integrator across domains, but it requires deliberate practice with representations and reasoning processes that connect patterns to explanations (National Research Council, 2006).

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In this paper I examine one pedagogy that sits at this intersection—worldbuilding (the process of creating imaginary worlds)—and argue that it can function as an integrated pedagogical approach to secondary geography education when it is organized around coherence, evidence-bearing representation, and revision. Here I use worldbuilding to mean the deliberate construction of an internally coherent world—its landscapes, climates, settlement patterns, economies, cultures, and conflicts—through a coupled set of artifacts (e.g., maps, timelines, and chronicles). For me and many other teens, worldbuilding remains primarily an extracurricular hobby and rarely appears in formal geography or environmental curricula. However, worldbuilding can be treated as a disciplined learning design that can complement high school geography and related secondary courses by making integrative reasoning visible and assessable through linked artifacts and iterative critique. Three guiding research questions frame the analysis: How does youth worldbuilding, developed as an extracurricular hobby, mobilize geographical and environmental reasoning across space, time, and society? What affordances and constraints arise when worldbuilding is treated as evidence-rich learning rather than as “just creativity,” particularly for secondary learners? And what design principles can support worldbuilding as an integrated pedagogical approach in secondary geography and environmental classrooms, including assessment and equity considerations?

To explore these claims, I draw on a worldbuilding project created by me, a high school student—Laticika. Laticika was developed as an extracurricular interest over approximately one week and includes a multi-era written chronicle, a base map, political maps, and event diagrams. I will also draw on two other projects that will serve as supplementary material. I analyze how these projects appear to mobilize disciplinary reasoning, and I translate those insights into a classroom-adaptable design and assessment approach for secondary geography and environmental education. After this introduction, I situate worldbuilding within research on geographical imagination, learning through design, and mapping technology as a medium for inquiry. I then describe my materials and methods, present thematic results from the Laticika case, and discuss implications for secondary classroom design, assessment, and equity.

LITERATURE REVIEW AND CONCEPTUAL FRAMING

Worldbuilding as imaginative design for disciplinary learning

Worldbuilding offers a structured way to turn narrative into an assessable geographic artifact. In media studies, worldbuilding has been theorized as the construction of a coherent setting that can support many stories, not the mere decoration of a single plot (Wolf, 2012). In educational contexts, this matters because a “world” can be treated as a model: a system with rules, constraints, and relationships that can be interrogated. This aligns with constructionist traditions that emphasize learning through building public objects that invite reflection and critique (Papert, 1980). The value of such objects is not just motivational; it is epistemic. They externalize thinking so it can be examined, revised, and discussed. Importantly, worldbuilding is not simply “creative writing with maps.” It is a design activity in which learners must make choices about what counts as a constraint, what is variable, and what counts as evidence. In many classrooms, students are encouraged to treat environmental processes as “hard

constraints” (e.g., climate regimes, hydrology, terrain) and social arrangements as “conditional constraints” that must still be made plausible (e.g., institutions, norms, governance). This framing mirrors broader arguments in speculative design and design fiction: futures and alternative worlds are useful not because they predict, but because they create artifacts that provoke analysis of present assumptions (Bleecker, 2022; Dunne & Raby, 2013; Facer, 2011).

Mapping, power, and futures: worldbuilding as a socio-technical practice

I believe worldbuilding to be a socio-technical geography practice: a form of spatial knowledge-making in which learners use tools, representations, and narrative conventions to design an internally coherent world, while simultaneously negotiating what counts as evidence, what counts as a constraint, and whose perspectives are centered. In this view, worldbuilding is not simply “creative writing with maps.” It is a patterned practice organized through artifacts (maps, timelines, chronicles, diagrams), technologies (digital drawing tools, GIS, generative systems), and social decisions (categories, boundaries, names, and narratives) that together shape how a world becomes legible and actionable.

The “technical” dimension of this practice is inseparable from spatial thinking. Spatial thinking research emphasizes that reasoning is often mediated by representations—maps, diagrams, and models—that make relationships visible and manipulable (National Research Council, 2006). In geography education, mapping tasks support relational reasoning when learners must articulate how variables interact across space (Favier & van der Schee, 2014). Worldbuilding intensifies this representational work because maps function as working models rather than illustrations: learners must decide how terrain, climate, hydrology, and mobility constrain settlements and economies, and they must revise the world when representations reveal contradictions. The world “works” only when spatial patterns cohere with causal explanations.

At the same time, the socio-technical framing foregrounds that mapping and world-design are never neutral. Critical cartography argues that maps are selective, value-laden representations that participate in the production of social reality (Harley, 1989; Wood, 1992). Crampton and Krygier (2006) shift attention from map objects to mapping practices, including whose knowledge is legitimized and whose is marginalized. For education, this means worldbuilding is an opportunity to teach power through making: students can examine what their map categories enable and foreclose, how boundaries become naturalized, and how legends encode political stories. Worldbuilding makes these choices unavoidable because learners must decide what their map will privilege—states, ecoregions, trade routes, hazards, sacred sites, or Indigenous territories—and these decisions become curricular choices made by students, open to critique and revision. This socio-technical perspective also clarifies why worldbuilding is pedagogically distinct from many sandbox or game-based learning implementations. Rather than solving problems inside a ready-made world, learners design the world that generates the problems. This shift foregrounds the production of spatial arrangements and invites explicit reasoning about centrality and periphery, infrastructure and movement, risk and vulnerability. A fictional setting does not detach learning from reality; it can make assumptions visible and therefore assessable—so long as tasks demand explicit justification and reflection.

Taken together, these literatures suggest that classroom worldbuilding can be conceptualized as a hybrid socio-technical practice: a cartographic reasoning task, a making activity that foregrounds youth authorship, and a critical inquiry into representation and power. The gap, however, is that worldbuilding has rarely been examined as a geography-specific pedagogy where maps are central evidence and assessment criteria explicitly target spatial, temporal, and socio-environmental reasoning. The following sections therefore examine how worlds created by a casual worldbuilder, me, operate as geographic models, and what that implies for design and assessment in geography and environmental education.

MATERIALS AND METHODS

This study uses an artifact-centered autoethnographic self-study: my creative work and reflections are treated as the case material, and I occupy the dual role of worldbuilder and researcher. Autoethnography connects personal experience to wider cultural and analytical questions (Chang, 2008; Ellis, Adams, & Bochner, 2011), while analytic autoethnography emphasizes explicit researcher visibility, reflexivity, and a commitment to theoretical analysis (Anderson, 2006). I use this approach to examine how my own extracurricular worldbuilding artifacts encode geographic reasoning; I do not treat my experience as representative of all youth worldbuilders.

The first artifact, A Quick Demonstration, was a doodle taking no more than thirty minutes, including basic brainstorming and generation. It depicts two dominant states: New Norvinium in the north and Sotar Corpallis in the south. New Norvinium combines semi-arid pastoral-nomadic societies with an agricultural society on the northern coast, while Sotar Corpallis is a compact agricultural power with improved crop rotation, a larger population, frequent disease outbreaks, and peasant dissatisfaction. Vast disputed territories separate their densely populated centers and frequently exchange hands, discouraging development and investment. Although the world remains rough, creating it required me to apply ideas from history, geography, biology, political systems, and patterns of human settlement while respecting self-imposed technological and cultural limitations. The artifact demonstrates three basic steps in worldbuilding: brainstorming an idea, generating a first product, and refining contradictions or missing details through later iterations. See Figure 1.

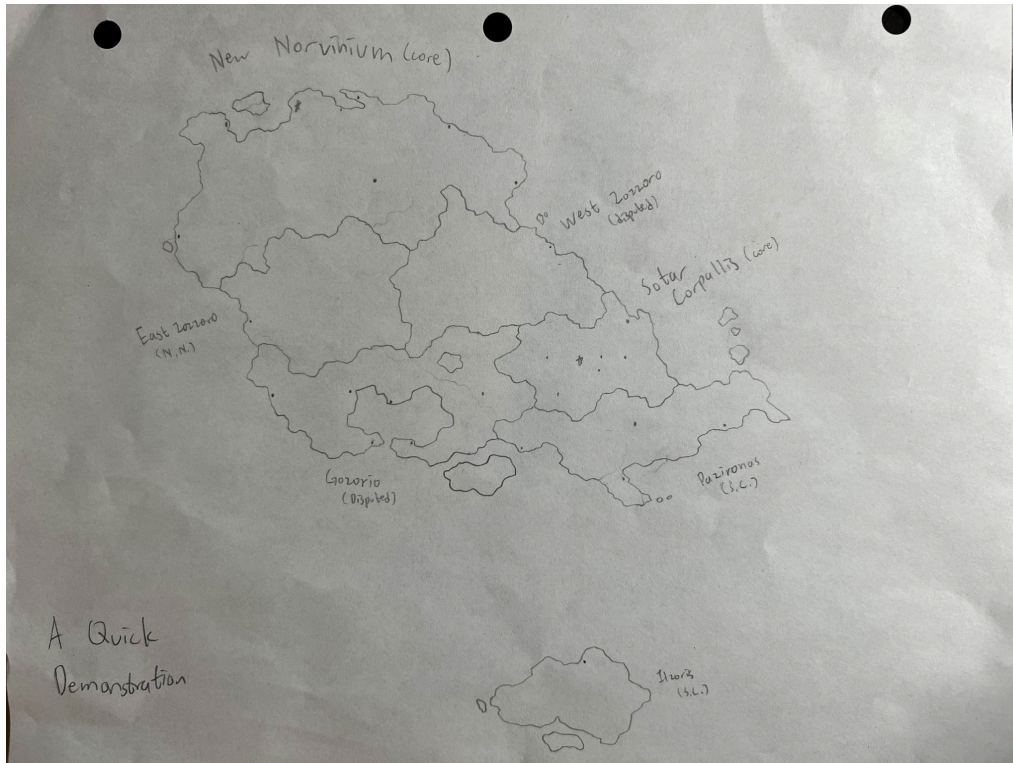


Figure 1. A Quick Demonstration base map

The second artifact, Atrica, was developed over a few days and contains more detailed maps. The continent can be divided into three broad areas: a neutral and extremely cold North, a West organized around a large defensive alliance of nation-states, and an East dominated by the dystopian Wang Dynasty. The world is anchored in natural geography in the north, specialization in the west, and history in the east. Its overlapping regional narratives repeatedly required further explanation when an initial idea conflicted with another constraint. For example, a powerful northern empire seemed implausible in a nearly uninhabitable climate, so I added constantly erupting volcanoes that generate enough heat for settlement. Brainstorming took less than ten minutes, generation of the base map took a few hours, and refinement continued for days through supplementary writing and ethnicity and infrastructure maps. Across versions, major features such as coastlines and borders stabilized while religions, ethnicities, cities, and roads became more detailed. See Figure 2.

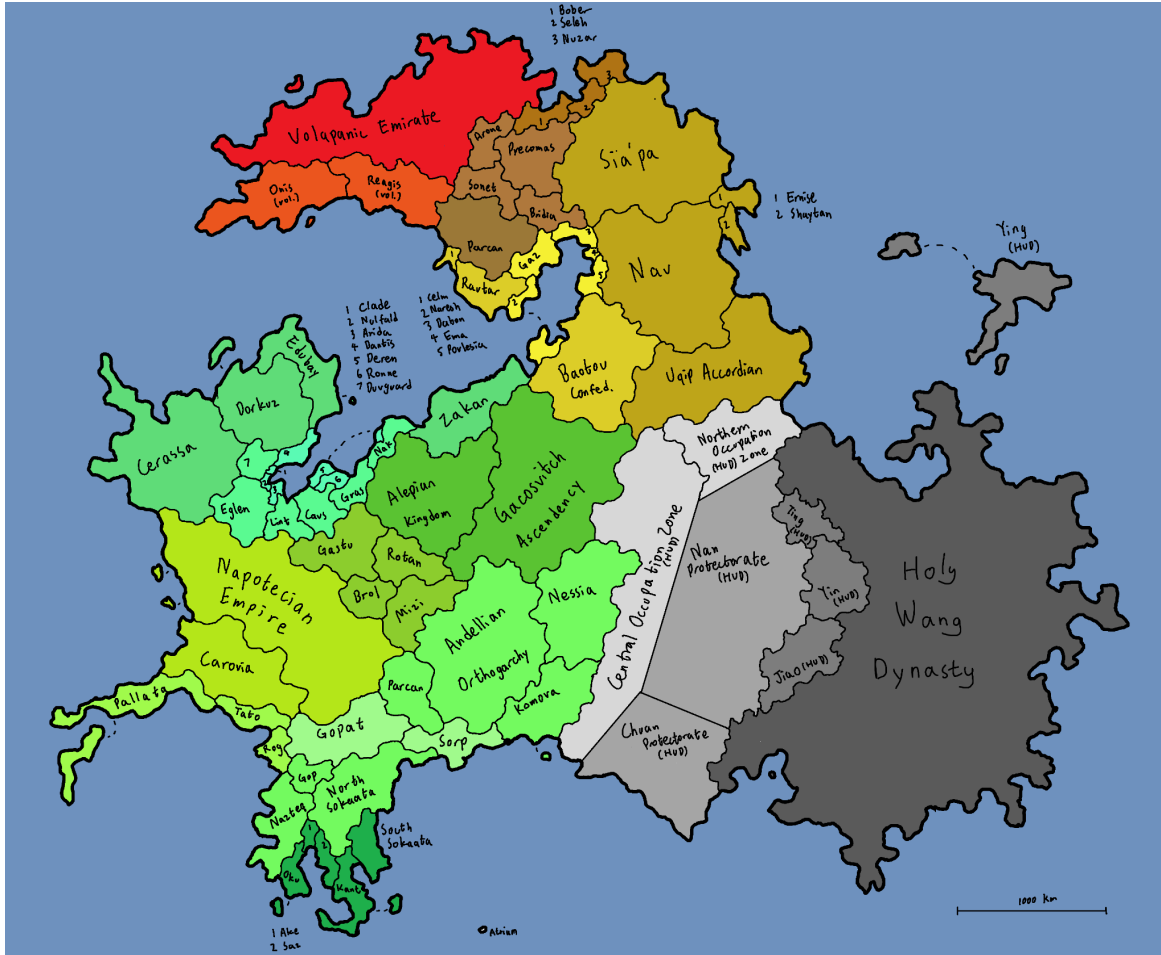


Figure 2. Atrica base map

The third artifact, and the one that this paper will most refer to is *Laticika*. It is unique in that it includes extreme environmental contrasts (e.g., cold northern regions and an arid southern zone) and took a week to iterate it into a satisfactory state. The world is anchored by several large-scale constraints that remain stable across iterations, including a northern ice barrier, a southern scorched desert, and a small habitable region. These environmental conditions function as world-defining parameters rather than background scenery: they structure where settlement is viable, what corridors of movement are plausible, how resources and infrastructure are distributed, and where sociopolitical conflict tends to concentrate. This artifact, instead of being restricted to a single time frame, spans multiple centuries and relies more on writing than the other two. As the world developed, its geography, settlement patterns, and territorial dynamics were elaborated across multiple eras, resulting in a connected artifact set through which decisions about environment, space, and society can be traced.

The primary materials for analysis are creator-generated artifacts that document the evolving world across media and time: (a) a written chronicle organized by historical eras and major turning points; (b) a base

map representing terrain, coastlines, and major regions; (c) political maps showing territorial configurations and shifting boundaries; and (d) event maps/diagrams summarizing conflict sequences and spatial movement. The chronicle is not a single linear narrative but an era-based account of historical change, marking transitions such as collapse, dispersal, regrouping, and renewed territorial struggle. The map set evolves from a stable physical base toward layered political representations, while event diagrams translate narrative episodes into spatial sequences—routes, corridors, front lines, and key sites of conflict—making movement and territorial contestation legible. After the three creative projects have been completed and selected for this study, I wrote retrospective analytic memos produced during the formal analysis phase. These memos recorded observations, emerging interpretations, and cross-artifact comparisons (e.g., points where narrative claims, mapped constraints, and timelines aligned or diverged).

In addition to documenting interpretation, the memos capture moments where contradictions became visible—for instance, when settlement placement did not align with terrain constraints or when movement routes implied by the chronicle required additional spatial justification—prompting revision and representational refinement across the artifact set. Since this project spans a longer time span than *Africa*, the brainstorming and generation phases began on paper, as an analog sketch, before moving to a digital program for refinement. Early maps were drafted by hand to explore coastlines and regional structure, then redrawn digitally as layers were added (terrain, settlements, boundaries, and conflict routes) for easier insertion and greater detail. Over time, for refinement, the workflow increasingly resembled a cartographic “versioning” process: stable environmental structures were preserved while boundaries, routes, and conflict zones shifted to maintain coherence with the developing timeline. This iterative, multimodal workflow is analytically important because each translation between media requires decisions about symbolization, scale, and what counts as information worth keeping, revising, or discarding.



Figure 3. Laticika base map and regional configuration (representative artifact).



Figure 4. Event map translating narrative conflict into spatial reasoning: “The Desert War (p1).”

Within this autoethnographic design, I conducted a reflexive thematic analysis (Braun & Clarke, 2006) across the artifact set and retrospective memos. The analysis iterated between close reading of the chronicle, inspection of maps and diagrams, and comparison across versions to identify how coherence, evidence, and causality were constructed through worldbuilding practices. Coding proceeded in three steps. First, I generated initial codes by attending to recurring geographic constructs and reasoning moves embedded in the artifacts (e.g., climate and terrain constraints; settlement viability; mobility corridors and chokepoints; resource access and flows; territorial control; migration and displacement; scale shifts; and representations of conflict). Second, I used cross-artifact comparison to examine how these constructs were linked across narrative, map layers, and timelines—for instance, how changes in the chronicle corresponded to revisions in boundaries or routes, or how mapped constraints generated narrative explanations of conflict and governance. Third, I clustered codes into higher-order themes that describe worldbuilding as a reasoning practice rather than as a purely expressive activity, emphasizing (1) coherence-making through integrative systems thinking, (2) mapping as evidence for environmental and political reasoning, and (3) temporal–historical causality constructed through era-based narrative and

iterative revision. Figures 3 and 4 provide representative examples of the core artifacts used in the analysis: a base map establishing the project's spatial structure and an event diagram translating conflict narrative into movement-and-territory sequences.

Because I created all three artifacts and conducted all coding myself, no second coder independently checked the codes or themes, and the sample includes no outside worldbuilder. The resulting themes are therefore reflexive interpretations of my own artifact set rather than independently validated or broadly generalizable findings. They are intended to generate design propositions for future classroom and comparative research, not to establish measured learning effects.

RESULTS

The analysis yielded three interrelated themes that I interpret as illustrating how an extracurricular worldbuilding project mobilizes geographical reasoning: coherence-making through integrative systems thinking, mapping as evidence, and temporal–historical causality built through an era-based chronicle for *Laticika* and iterative revision for all three artifacts. I read the chronicle and maps not as creative products alone, but as traces of problem-solving that may make aspects of reasoning visible.

Coherence through integrative systems thinking

From the outset, *Laticika* demanded synthesis because the goal was not a plausible single scene but a coherent system. The world seed of *Laticika* began with a planet marked by extreme contrasts: a northern ice wall, a southern scorched desert, and an “Uninhabited” territory framed as a small livable piece of a large uninhabitable planet. These initial constraints required me to integrate across environmental, spatial, and social variables. Across *Laticika*, the inhabitable areas consistently emerged as edge-worlds—coastal corridors and borderlands positioned between hazardous interiors and more stable coastal zones. This spatial structure, established in the base map, reappears in later political maps and in the chronicle's description of movement and conflict, which I interpreted as evidence that environmental constraints were treated as stable features rather than as flexible background. *Atrica* is similar to this with a more traditional style closer to Earth, being a continent surrounded by water rather than by an Ice Wall to the north and Charred Wastelands to the south.

The coherence requirement was especially visible when new social and political elements were introduced. When a new faction appeared in the chronicle, it was not simply added as narrative color; its viability had to be reconciled with climate regimes, terrain access, and the existing settlement network. In several instances, the introduction of a political group implied new mobility patterns and new territorial claims, which then required corresponding changes in the map set (e.g., updated borders or newly marked corridors). Similarly, when wars or large-scale conflicts entered the timeline, the event diagrams and annotated maps translated these narrative developments into spatial and logistical sequences: the implied locations of front lines, the corridors through which forces could plausibly move, and the terrain bottlenecks that would concentrate encounters. In this way, conflict episodes consistently generated

representational “work”: they prompted additions and refinements to routes, strategic locations, and boundary configurations.

Across *Laticika*, coherence functioned as an internal accountability mechanism because contradictions became legible when artifacts were placed side-by-side. Comparing the base map, political maps, and era-based chronicle for *Laticika* and *Atrica* both revealed points where the world had to be reconciled—such as when a settlement or political center appeared in a region that the physical map portrayed as highly constrained, or when the chronicle described rapid movement that conflicted with the world’s hazardous interior and limited corridors. These moments were typically followed by revision, either through changes to the representation (e.g., adjusting routes, adding intermediate sites, or reworking boundaries) or through narrative explanation (e.g., specifying technologies, alliances, or resource and environmental conditions that made the movement or settlement plausible). Overall, the *Laticika* and *Atrica* cases show coherence not as a static property achieved once, but as an ongoing integrative reasoning practice, sustained through repeated alignment between environmental constraints, settlement distribution, mobility, and sociopolitical change.

Mapping as evidence: environmental, spatial, and political reasoning

In my reconstruction of the creative process, maps served as a primary thinking technology in *Laticika* and *Atrica* and as a medium through which I stabilized and tested claims about the worlds. I began with a prototype base map and then iterated through digital versions as the world grew more detailed. Across versions, the base map remained a relatively stable scaffold with only minor changes, while later layers—settlements, political regions, and event sequences—were repeatedly revised to align with narrative developments. I therefore interpret the resulting map set functions as a partial record of reasoning: rather than illustrating a completed story, the maps register how environmental constraints, movement possibilities, and territorial arrangements were progressively specified and reconciled.

For *Laticika*, the physical geography of the base maps constrained human geography across the project. Features such as the northern ice wall, the southern desert region, and the extensive “Uninhabited” interior were treated as enduring spatial conditions that organized settlement distribution and patterns of inhabitation. In the base map, settlements were clustered toward coastal corridors and the margins of the “Uninhabited” zone, and this pattern remained consistent as additional details were added. Later political maps built directly on this settlement logic: territorial control concentrated along traversable corridors and resource-supporting zones rather than spreading uniformly across space. In the chronicle, mobility and vulnerability repeatedly followed these physical patterns, which I interpreted as evidence that environmental constraints functioned as causal drivers within these artifacts rather than as arbitrary aesthetics. For *Atrica*, physical geographies similarly constrained human society, such as populations settling around volcanos in the freezing north or around oases in the Nan desert due to necessity, with different environments influencing their societies but not determining them; powerful societies can emerge from less hospitable landscapes, but it is rarer.

Second, for *Laticika*, event maps and diagrams operated as analytical representations of movement and conflict. By drawing routes, arrows, front lines, and annotated locations, I translated narrative events into

spatial arguments: who could reach where, by what corridor, and at what cost. These diagrams often condensed complex story sequences into a few spatial elements—movement paths, chokepoints, and contested locations—making the underlying logic of conflict legible. In several instances, the mapwork functioned as a plausibility test: once movement was drawn, certain narrative outcomes became difficult to sustain without adding intermediary sites, specifying alliances, or redefining constraints (e.g., the passability of a border region or the presence of a transport corridor). In this way, the event diagrams did not simply represent conflict; they structured it by forcing narrative claims to be expressed in spatial and logistical terms.

Third, mapping repeatedly created occasions for scale reasoning through oscillation between whole-world representations and focused, tactical representations. At the global scale, maps emphasized macro-regions, climate zones, and large territorial divisions, enabling reasoning about broad spatial organization and the relative positioning of major groups. At the tactical scale, battle maps and event diagrams foregrounded localized movement, specific corridors, and strategic bottlenecks, enabling reasoning about how conflict unfolds through terrain and infrastructure. Moving between these scales required re-defining units of analysis—cities, provinces, fronts, biomes—and revealed how explanations change when scale changes. For example, a border that appears crisp at the global scale becomes a contested zone at the tactical scale; a “region” that seems homogeneous at the world scale becomes differentiated by corridors, obstacles, and localized resources when examined up close.

Historical reasoning through causal timelines

Across the chronicle for Laticika, historical change is organized through era markers and causal transitions, turning narrative into an account of socio-environmental transformation over time. The Laticika chronicle is organized as a multi-era timeline that repeatedly uses era markers to explain why political and environmental conditions change. Rather than presenting events as isolated episodes, the chronicle frames turning points—collapse, dispersal, regrouping, and renewed conflict—as transitions that require explanation. One representative transition narrates dispersal and re-emergence as a response to catastrophe and scarcity: Pre-Emergence / Calamity describes collapse and dispersal that fractures governance; Re-Emergence describes communities regrouping along survivable corridors, with conflict intensifying where resources and movement routes overlap. Even in compressed form, this structure performs analytical work by linking environmental constraints (corridors), mobility (routes), and political change (fractured governance and territorial conflict). Across the chronicle, era framing functions as a mechanism for causal organization: each era summarizes conditions, while transitions specify the pressures that make new conditions plausible.

Within this temporal structure, several episodes illustrate causal chaining as a recurring pattern of reasoning. A resource shock triggers migration; migration produces territorial re-alignment; territorial re-alignment reshapes identities and governance; and governance choices intensify conflict. These “because” relations are not limited to a single storyline but appear across different eras and factions, which I interpreted as evidence that causal explanation operated as a central requirement of world coherence. Importantly, these causal chains are spatially anchored: migration pathways align with mapped

corridors and hazards, territorial changes correspond to political maps, and conflict sequences are summarized through event diagrams. The artifacts therefore work together to translate narrative causality into geography: causes and consequences are expressed not only in text but also through movement, boundary shifts, and spatial concentration of risk and opportunity.

The timeline also functioned as a constraint on consistency because it created a cumulative record. Unlike a single narrative episode that can overlook earlier claims, the multi-era chronicle accumulates commitments about what happened, where, and under what conditions. This accumulation made contradictions increasingly visible as the project expanded. For example, when later-era narratives implied settlements, routes, or territorial control patterns that the maps did not readily support, these mismatches became prompts for revision. In the artifact set, revisions appear both representationally (adjusting routes, adding intermediate locations, refining boundaries) and narratively (clarifying the conditions that make a movement or settlement plausible, specifying why a region becomes contested, or redefining the stakes of scarcity). In this way, revision was not incidental polishing but a recurring response to cross-artifact inconsistency—an observable feature of the worldbuilding process.

DISCUSSION

From extracurricular worldbuilding to high school geography and environmental education

Importantly, this bridge works not because fictional worlds replace real geographies, but because they can serve as a structured rehearsal space for geographic reasoning. Fictional framing can generate what I call productive distance: students may feel freer to explore climate disruption, migration, conflict, and justice in a world they author, without the fear of “getting the facts wrong” about a particular real region. In Laticika, for example, extreme climate contrasts and hazardous interiors created a strong need to reason about constraints and corridors: where settlement is feasible, how movement is organized, where political authority concentrates, and why conflict intensifies at particular chokepoints. In Atrica, extensive intertwined regions with very different climates require knowledge on how civilizations operate in different environments and their interactions with each other. The world is invented, but the reasoning is recognizably geographic. This distance can be especially valuable for high school learners, who may be simultaneously developing disciplinary confidence and navigating sensitive contemporary issues. When the world is fictional, students can test hypotheses, revise assumptions, and argue about tradeoffs while maintaining a degree of emotional and political safety.

Designing and assessing classroom worldbuilding for secondary learners

Assessment is where creative pedagogy often fails. When criteria are vague, students either try to guess what the teacher wants or default to aesthetics, and teachers struggle to justify grades beyond subjective impressions. My interpretation of the Laticika case suggests a different possibility: because worldbuilding produces linked artifacts (maps, timelines, chronicles, event diagrams), it can be assessed through the quality of reasoning that those artifacts make visible. In other words, assessment can focus on how students explain and revise a socio-ecological system, not on whether their world “looks cool.” This shift

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is essential if worldbuilding is to function as a viable pedagogy in high school geography and environmental education.

To make worldbuilding assessable without reducing it to artistic polish, assessment should foreground reasoning and revision. Building from my findings, I propose four classroom-friendly criteria, adaptable to different course emphases:

(1) Coherence. Do environmental and social claims fit together across map, timeline, and narrative? Coherence is not about realism; it is about internal accountability. A world does not need to resemble Earth, but it must remain consistent with its own constraints. This criterion directly targets the integrative systems thinking observed in Laticika: the ways climate, terrain, settlement, movement, and political authority must align. It also encourages students to treat contradictions as productive—something to resolve rather than ignore.

(2) Evidence through representation. Do maps and diagrams function as arguments rather than decoration? This criterion addresses a common classroom pitfall: maps that are visually elaborate but conceptually thin. In Laticika, the base map constrained settlement logic, political maps anchored territorial claims, and event diagrams translated conflict into movement sequences. In classroom settings, students can be asked to explicitly cite their own map features as evidence—e.g., “This corridor explains why trade concentrates here,” or “This fertile region explains the powerful states here.” The goal is to make representation do epistemic work.

(3) Geographic concepts. Are disciplinary concepts used to explain patterns? Worldbuilding can easily become a collection of isolated facts (“my world has deserts and kingdoms”). This criterion pushes students toward explanation: scale, diffusion, territoriality, resilience, interdependence, uneven development, and human–environment interaction become tools for interpreting why patterns exist. Importantly, concepts can be treated as a flexible menu aligned with course goals: an environmental science class might emphasize systems, feedback loops, and risk; a human geography class might emphasize territoriality, mobility, and inequality.

(4) Reflection and revision. Is the student’s process documented, showing how critique and constraints led to changes? The Laticika artifacts reveal that revision was not cosmetic; it was triggered by contradictions across maps and timeline, and by critique that demanded explanation. In classrooms, requiring a short “revision log” or design memo can make learning visible even when the final product is uneven. This criterion also rewards persistence and intellectual honesty—students earn credit for identifying and resolving problems, such as those found in *A Quick Demonstration*, not for presenting a flawless world on the first try.

Together, these criteria reframe worldbuilding as accountable model-building. They do not privilege artistic talent or access to advanced software. A student working with pencil-and-paper maps can still demonstrate coherence, evidence-based reasoning, conceptual explanation, and reflective revision. This matters for equity: if teachers grade primarily on aesthetics, they unintentionally reward prior exposure to

digital tools and design conventions. By grading on reasoning, teachers can expand participation while maintaining rigor.

A practical implication is that worldbuilding should be structured as a sequence of checkpoints rather than a single final submission. For example, a classroom unit might require (1) a base environmental map with constraints named; (2) a settlement and infrastructure layer with justification; (3) a political map or governance plan with territorial reasoning; (4) a short timeline with at least one causal transition; and (5) an event diagram that translates one narrative episode into movement and conflict logic. Each checkpoint invites critique and revision, and each artifact becomes assessable evidence of reasoning. Such staging reduces the risk that students spend most of their time on surface detail without building causal structure.

Connecting worlds

A common worry is that fictional worlds detach learning from reality. My position is the opposite: fiction can be a bridge when teachers explicitly design comparative moves. The key is not whether the world is real, but whether the reasoning practices are transferable. In classroom translation, teachers can structure transfer through deliberate comparison between invented and real geographies. Students can ask: if my world has a vast desert and a large oceanic basin, what analogues exist on Earth? What real cases show similar constraints—polar frontiers, arid borderlands, mountain corridors, or resource shocks? What happens when a resource corridor is disrupted, or when climate conditions intensify? Such prompts push students to translate between two kinds of evidence: the internal evidence of their world (maps, timelines, causal explanations) and the empirical evidence of real-world cases. In this sense, worldbuilding can function as a “model-based rehearsal”: students practice building and testing geographic explanations in a simplified setting and then apply those explanatory moves to complex real contexts.

This comparative move also supports critical thinking about categories and power. When students design borders, name regions, or label spaces as “empty,” they can see how representational choices create political meanings (Harley, 1989; Crampton & Krygier, 2006). Worldbuilding thus becomes a rehearsal space for critical geographical literacy—provided that teachers surface the politics rather than leaving it implicit. For example, a fictional label such as “Uninhabited” can be interrogated: uninhabited to whom, and by what evidence? What histories do “empty” maps enable? Similarly, crisp borders can be questioned: what forms of violence, negotiation, or erasure are hidden when contested frontiers are represented as stable lines? Is there even a sharp transition between state control and foreign territory? These questions are not external add-ons; they are intrinsic to the act of world-making. When addressed explicitly, they help students learn that maps do not simply depict reality—they help produce it.

CONCLUSION

This paper has argued that worldbuilding can be more than an extracurricular interest: it can function as an integrated pedagogical approach to secondary geography education when it is organized around coherence, evidence-bearing representation, causal history, and revision. My interpretation of the Laticika case suggests how a high school worldbuilding project mobilized integrative human–environment

reasoning, treated mapping as evidence, and constructed temporal–historical causality through an era-based chronicle and iterative revision across linked artifacts.

At the same time, this study has limitations. It is centered on one youth creator’s extracurricular project and does not report measured learning outcomes from a classroom implementation. My claims are therefore interpretive and design-oriented, and the case is unusually complete for adolescent worldbuilding. Classroom implementations may not reach the same level of elaboration, but the reasoning practices I identify—coherence checks, representational evidence, causal chaining, and critique-driven revision—can be scaffolded at smaller scales. A second limitation concerns the boundaries of fiction and the social risks of representation. Fictional distance does not automatically prevent harm, and worlds can reproduce racialized, gendered, or colonial assumptions. However, these aspects in worldbuilding can lead to investigation of the origins and effects of such assumptions: What are the effects of these assumptions on the structures and effectiveness of the societies and peoples in those worlds? This underscores the need to teach worldbuilding critically, with critique structures that surface power and representation, encourage refinement and inquiry, and make ethics part of geographic explanation.

Future work should include classroom pilots in secondary geography and environmental courses, ideally in partnership with teachers, to examine how different scaffolds shape participation and learning. These pilots could compare a single region with a full globe, analog-first with digital-first tools, and different peer-review or teacher-feedback protocols. Comparative cases across multiple youth worldbuilders would also clarify which reasoning practices are common and which are specific to my own process. Such research could test the learning possibilities proposed here rather than assuming that an extracurricular practice will transfer automatically into every classroom.

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