



# Boundary Crossing in Hiroshima Oral History Education: Co-Constructing Sustainable Peace Practices through the Paintings of the Atomic Bomb Project

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## Abstract

Achieving Sustainable Development Goal 16 (SDG 16) requires the transmission of war memories through historical memory-oriented peace education. However, in oral history education, the experiential boundary between aging survivors and contemporary students poses a significant challenge. The specific learning mechanisms through which they overcome this boundary remain underexplored. Addressing this research gap, this study provides empirical novelty by elucidating these dynamic mechanisms, reframing the boundary as a catalyst for generating new meaning. Methodologically, a secondary analysis was conducted on two cases from the Paintings of the Atomic Bomb project in Hiroshima. For data analysis, the collaborative processes were interpreted using four learning mechanisms (identification, coordination, reflection, and transformation) drawn from boundary crossing theory as analytical indicators. The results demonstrated that simply listening to testimonies reinforces the intergenerational boundary. Crossing it necessitates the co-production of a shared artifact (a painting) alongside a clear operational goal. Mediated by this artifact, participants coordinate communication, proactively reflect on their respective roles, transform their perspectives, and co-construct a new historical narrative of peace.

[Pencapaian Tujuan Pembangunan Berkelanjutan 16 (SDG 16) memerlukan pewarisan memori perang melalui pendidikan perdamaian yang berorientasi pada memori sejarah. Namun, dalam pendidikan sejarah lisan, perbedaan pengalaman antara penyintas perang yang semakin lanjut usia dan siswa masa kini menjadi tantangan yang signifikan. Penelitian ini bertujuan menjelaskan mekanisme pembelajaran yang memungkinkan kedua kelompok tersebut melampaui batas pengalaman antargenerasi dan membangun makna baru secara kolaboratif. Dengan menggunakan analisis sekunder terhadap dua kasus dalam proyek *Paintings of the Atomic Bomb* di Hiroshima, penelitian ini menganalisis proses kolaboratif berdasarkan empat mekanisme pembelajaran dalam teori *boundary crossing*, yaitu identifikasi, koordinasi, refleksi, dan transformasi. Hasil penelitian menunjukkan bahwa sekadar mendengarkan kesaksian para penyintas cenderung memperkuat batas antargenerasi. Sebaliknya, pelampauan batas tersebut dapat terjadi melalui penciptaan bersama artefak berupa lukisan yang didukung tujuan operasional yang jelas. Melalui artefak tersebut, para peserta mampu mengkoordinasikan komunikasi, merefleksikan peran masing-masing, mentransformasikan perspektif, serta secara bersama-sama membangun narasi sejarah perdamaian yang baru. Dengan demikian, batas pengalaman antargenerasi tidak menjadi hambatan, melainkan menjadi katalis bagi terbentuknya pemahaman dan makna baru tentang perdamaian.]  
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## 1. Introduction

Achieving Sustainable Development Goal 16 (SDG 16): Peace, Justice, and Strong Institutions requires the transmission of memories from wars in the past. From this perspective, the intersection between the SDGs and history (or heritage) education has generated a substantial body of research that extends beyond merely teaching history [1], [2], [3], [4], [5], [6], [7]. Notably, Schultze-Kraft [6], examining peace education in post-conflict nations, argued that historical memory-oriented peace education, which incorporates the memories of victims, serves as a critical tool for realizing the SDGs and the United Nations' agenda for sustaining peace. Considering the historical marginalization of victims, listening to their voices is essential for accessing their memories [8].

In the critical discussion of historiography, oral history has attracted scholarly attention as a democratizing approach that incorporates the voices of minority and marginalized populations co-constructing historical narratives through interviews [9]. Defined as a method of orally recording individuals' recollections and life stories [10], oral history systematically documents personal narratives and contextualizes them within an academic framework alongside other primary sources. In this manner, it links public history (based on testimony) to academic history (typically presented in textbooks) [11], [12]. Consequently, it holds profound significance as an approach for preserving and comprehending thereby accumulating memories of specific, individual experiences and narratives across generations.

A comparative review of recent research in history education provides theoretical and empirical insights into methods for incorporating student engagement into oral history [13], [14], [15], [16], [17], [18], [19], [20]. On the one hand, theoretically, Martin *et al.* [13] emphasized the need to analyze oral history materials through the lens of historical perspective-taking and historical empathy, framing this approach within their oral historical thinking model. On the other hand, empirically, applying these concepts, a case study [14] in Argentina demonstrated that students engaging with oral history independently determined significant aspects and sources of new knowledge or analytical tools, thereby playing a decisive role in the co-construction of historical narratives.

However, cultivating this ideal co-constructive relationship with testifiers is challenging because a profound experiential and sociocultural disconnect exists between students living in a peaceful modern era and testifiers who survived a tragic past. As demonstrated by Bertram *et al.* [15], given that testifiers' narratives are inherently compelling and emotionally evocative, a persistent pitfall exists: students may uncritically internalize these testimonies as absolute truth, failing to maintain the epistemological distance required for critical analysis. Therefore, the most significant challenge in oral history lies in navigating the boundary that separates students from testifiers.

However, this boundary should not be viewed merely as a barrier that should be maintained for objectivity. Drawing on boundary crossing as the theoretical framework of this research, according to Akkerman and Bakker [21], boundaries between distinct sociocultural practices can impede ongoing activities and foster advanced learning as well specifically, the creation of new meaning when both parties cross these boundaries to engage in dialogue and collaboration. Bertram *et al.* [15] argued that a rigid boundary between students and testifiers in oral history reduces students to passive recipients of a testifier's narratives. Consequently, a process in which students and testifiers cross this boundary is required, reinterpreting past experiences within contemporary contexts to enable the co-construction of a novel historical narrative of peace. Designing collaborative spaces facilitated by this *boundary crossing* to cultivate an intergenerational sustainable community of peace practice is evidently the most essential function of history education in advancing SDG 16.

However, a significant empirical gap remains: the specific learning mechanisms through which boundary crossing practices and communities are generated remain underexplored in actual educational settings. Addressing this empirical gap, the primary objective of this study is to clarify these learning mechanisms. To address this objective,

this study examines the Paintings of the Atomic Bomb (PAB) project in Hiroshima a case that acutely exemplifies the intergenerational boundary crossing process [22]. It then poses the following research question: *In the context of collaborative oral history within the PAB project, how do testifiers and students cross the boundary between the past and present to co-construct a new historical narrative of peace and form a sustainable community of peace practice?* The novelty of the current study lies in its empirical elucidation of these dynamic learning mechanisms and its theoretical reframing of the boundary between testifiers and students in oral history as a catalyst for the generation of new meaning rather than as an epistemological obstacle.

## 2. Method

This study relies on the theoretical concepts of boundary crossing and boundary objects proposed by Akkerman and Bakker [21] to elucidate the mechanisms of boundary crossing practices between students and testifiers. According to them, a boundary is defined as a “sociocultural differences that give rise to discontinuities in interaction and action” (p. 139), while boundary crossing refers to the “process of establishing continuity in a situation of sociocultural difference” (p. 152). Boundary objects are artifacts that bridge intersecting domains during boundary crossing and are positioned as a crucial concept for elucidating learning at boundaries.

Based on a literature review on boundary crossing, Akkerman and Bakker [21] identified four learning mechanisms that occur during boundary crossing: identification, coordination, reflection, and transformation. Identification refers to an understanding of the nature of diverse, intersecting practices, while coordination involves the development of mechanisms and procedures that facilitate efficient cooperation among these practices even in the absence of full consensus among actors thereby generating routinized cooperative exchanges. Reflection entails the realization and articulation of differences between practices and gain new insights about one’s own and others’ practices, thus broadening one’s perspective. Finally, transformation refers to participation in the co-development of new practices that foster profound changes, culminating in the creation of a new, in-between practice (community).

Building on this framework, this study analyzes the boundary that emerges between students living within modern contexts and atomic bomb survivors with experiences of a tragic past. It examines the occurrence of boundary crossing practices between them mediated by the boundary object of the PAB through the lens of the four learning mechanisms proposed by Akkerman and Bakker [21].

Operating continuously since 2007, the Paintings of the Atomic Bomb (PAB) project is a collaborative initiative between the Hiroshima Peace Memorial Museum and the Creative Expression Course of the Hiroshima Municipal Motomachi Senior High School, wherein students spend six months to one year painting accurate, fact-based scenes of the atomic bombing based on numerous meetings with testifiers and historical materials to convey conditions at the time [23]. The completed paintings (222 artworks as of 2025) are donated to the museum to enhance public understanding [23], [24]. This project is clearly situated as an expanding instance of intergenerational boundary crossing [25] and historical memory-oriented peace education linked to the SDGs [26]. As the primary data source to examine this project, this study utilizes Masazumi Yugari’s *Heiwa no Baton* [The Baton of Peace] [27], which details interactions and collaborations between students and survivors. For brevity, this study focuses on two cases from this literature that most explicitly demonstrate the boundary crossing mechanisms: Case I involves a high school student producing a painting with a testifier as a memorial for the testifier’s deceased classmates, and Case II describes a student confronting the experiences of her grandfather, who serves as the testifier.

This study conducted a secondary analysis of these case studies through a qualitative, theory-driven approach. Initially, during the review of the text data, the author

recognized that the collaborative interactions could be explained through the theoretical lens of boundary crossing. Subsequently, the data from the two selected cases were systematically read, and the four learning mechanisms (i.e., identification, coordination, reflection, and transformation) were deductively applied as analytical indicators for coding. To ensure the reliability of the interpretation, the coding results and the application of the indicators were critically discussed and refined through peer debriefing with another researcher specializing in social studies education.

Furthermore, in interpretive studies, acknowledging the researcher's reflexivity is essential. The author specializes in History Education and the Design of Historical Learning Environments, with a research focus on developing and evaluating educational methods in schools and museums. Through this work, the author studies how students and historians can work together to apply historical knowledge to solve modern social issues, including collaborative learning with experts. Consequently, the data analysis in this study is not conducted from the standpoint of a completely neutral observer. Instead, the interpretations are intentionally guided by an educational and normative perspective—specifically, the aim to construct sustainable educational practices that transmit the memories of atomic bomb survivors to the next generation.

### **3. Results**

#### **3.1. Case I**

##### **3.1.1. Overview of the Practice**

Case I involves the practice of the PAB project by Student B, who produced an A-bomb painting with Testifier A as a memorial for the deceased classmates of the testifier. Testifier A went to the school pool seeking assistance in rescuing his best friend, who had been trapped under a collapsed school building. Overwhelmed by the horrific scene, Testifier A was unable to ask for help and was forced to flee, leaving his best friend behind. This experience left Testifier A with a deep sense of guilt for many years; it became a trauma so severe that he avoided mentioning the scene even when recounting his experiences. Under these circumstances, and driven by the strong desire to offer solace to the souls of his classmates who died young, Testifier A finally decided to participate in the PAB project.

Meanwhile, Student B initially joined the PAB project to seek personal growth and learning instead of solely producing an A-bomb painting. Initially, Student B was bewildered, unable to grasp the reality of the harrowing bombing experiences. However, instead of bearing the burden of this heavy theme alone, Student B adopted a personal approach by stepping back, objectively gathering information, and focusing on depiction. As the production progressed, Student B gradually internalized Testifier A's sense of despair over his classmates and best friend, becoming deeply immersed in the creation of her A-bomb painting as a memorial.

Through the process of jointly reliving the experience, despite an age gap of more than 60 years, Testifier A sought to bridge the intergenerational divide. He provided comprehensible explanations and offered guidance through monthly face-to-face meetings and detailed faxes. Consequently, within a few months, a perfect, tacit understanding (*a-un no kokyu*) developed between them, evolving into a passionate collaborative effort.

##### **3.1.2. Results of the Process Analysis**

The practice of Testifier A and Student B began with their confrontation with the overwhelming disparity between a tragic past and a peaceful present. According to the narrative data, Student B interpreted Testifier A's horrific past experiences as "similar to scenes out of a comic book," finding it "hard to believe that these terrible things really happened," and facing the challenge of "maintaining interest in an event that I had never personally witnessed." At this point, this study interprets that Student B clearly recognized the extent to which Testifier A's tragic past was isolated from and heterogeneous to her own daily life (identification).

In response to this disconnect, Testifier A attempted to coordinate (coordination) their communication using various methods. First, considering the intergenerational gap, Testifier A devised ways to convey the situation at the time. For instance, Testifier A adapted his explanations, noting, “stating the shockwave was faster than the speed of sound that they finally understand.” In addition, as Student B recalled, “Testifier A sent me faxes repeatedly. He provided dense and meticulous details about aspects that needed correction, saying ‘this part should be like this’.” This narrative demonstrates Testifier A’s relentless transmission of minute historical details. Consequently, as Testifier A expressed, “for the first month or two, her drawings were at a level that nearly made me sick of wondering what she was drawing. After about three months, however, we developed a mutual, unspoken understanding, and we were able to proceed with the work smoothly.” Thus, this study identifies that their collaboration evolved into a cooperative and routinized exchange.

These exchanges prompted Testifier A and Student B to reflect on their positionalities (reflection). Student B decided to “take a step back and understand it objectively,” focusing on “collecting as much information as possible and drawing it thoroughly.” Testifier A remarked that “the student became a full-fledged *testifier* herself,” calling the collaborative period “an irreplaceable time.” Analytically, Testifier A’s characterization of this collaboration as an *irreplaceable time* signifies a crucial reflection. Specifically, Testifier A’s role as a storyteller expanded from merely conveying a tragic past to nurturing the next generation as testifiers and contributing to their growth. Thus, while Testifier A and Student B shared the same boundary crossing process, their reflections regarding their respective roles deepened in distinct directions.

As a result, Testifier A and Student B completed “The Tragedy at the Poolside” (Figure 1). This artwork was made possible through the combination of Testifier A’s memory and Student B’s painting techniques. As both of them underwent transformation through their collaboration, the painting which was merely a boundary object ultimately materialized as a shared historical narrative. After completing the painting, Student B remarked,

Because of this project, I have become more sensitive to atomic bombs and nuclear weapons. From this perspective, I have been compelled to face the realities of the war and the atomic bombing, because they gave birth to present-day Hiroshima.

In this way, it is interpreted that Student B fundamentally transformed her awareness of the atomic bomb and peace. Meanwhile, Testifier A was forced to decline participation in the next PAB project following a new cancer diagnosis. Nevertheless, Testifier A declared,

I do not know how many more years I have left to live, but I intend to continue appealing as a living witness about how radiation goes against the path of human life and damages human beings to the marrow of their bones.

This narrative demonstrates that Testifier A is choosing a life that fulfills his role as a testifier more profoundly than ever.



Figure 1. The Tragedy at the Poolside  
(Reproduced from [24], p. 117).

### 3.2. Case II

#### 3.2.1. Overview of the Practice

Case II involves the practice of the PAB project by Student D, who confronted the experiences of her family member (grandfather), Testifier C, through an A-bomb painting. Arriving in the early afternoon at a surviving department store converted into a makeshift relief station, Testifier C witnessed a boy of his own age leaning against a wall, dead. The image of this boy was deeply imprinted in Testifier C's memory, recurring in dreams and becoming a profound trauma. Subsequently, Testifier C concealed his survivor status for many years. However, to convey the importance of peace, he initiated activities as a storyteller (*kataribe*) alongside his wife after the age of 80.

Student D was the granddaughter of Testifier C. Driven by the desire to assist in her grandparents' storytelling activities, Student D undertook the collaborative production of an A-bomb painting with her blood relative, Testifier C. However, given that Testifier C was a cherished family member, Student D constantly struggled with the conflict and awkwardness of "not wanting to revisit my grandfather's trauma and hurt him." Nevertheless, through persistent dialogue, Student D learned about her roots and deeply understood that she exists as an extension of the history that her family desperately survived.

#### 3.2.2. Results of the Process Analysis

The practice of Testifier C and Student D emerged from a context unique to families. Student D first developed an interest in Testifier C's past experiences during her elementary school years. When Student D tasked with creating a Peace Newspaper, Testifier C rejected her request. At the time, Student D felt, "Maybe I shouldn't ask my grandfather about the war or the atomic bomb." Reflecting on his state of mind at the time, Testifier C stated, "I think all survivors felt that way. Just being a survivor meant many couldn't get married, and many completely hid the fact that they were survivors, fearing their children might develop atomic bomb disease." Based on these narrative data, this study interprets that through this family episode, Student D recognized that Testifier C's experience during the atomic bombing was a trauma (boundary) that was not easily accessible (identification).

The boundary that emerged was gradually coordinated (coordination) as Testifier C began his storytelling activities, and Student D participated in the PAB project. The catalyst for Testifier C's storytelling was a perceived sense of crisis regarding the changing times:

The reason I didn't speak up until now was because Japan was peaceful .... But then, as time passed, more people failed to understand the importance of peace. This is no good. I thought that we, who know the horror and cruelty of war must pass it on.

In response, Student D, encouraged by the courageous actions of Testifier C and her grandmother, decided to participate in the PAB project:

I also thought that my painting could help my grandfather and grandmother's activities—even if only slightly. Therefore, I asked my grandfather to tell me about the scene that left the strongest impression on him.

Consequently, Student D became involved in the PAB project as part of her effort to engage with Testifier C's trauma.

However, after the project began, Testifier C and Student D struggled with the coordination of their boundary. At this stage, contradictory evidence emerged, presenting a potential negative case that temporarily stalled the boundary crossing process. Initially, Student D felt a psychological barrier unique to family. According to the interview data, she expressed, "constantly fighting my own feelings of not wanting him to remember these terrible things, not wanting to dig deep, and not wanting to hurt him." Furthermore, expressing her struggles, Student D said, "The more I thought about it, the less I understood. When he [Testifier C] would say things such as, 'this might be a misunderstanding. This part seems to be different too,' I was at a loss. The work would completely stall."

Analytically, this study interprets these data as an indication that familial closeness paradoxically reinforced the boundary, causing a temporary breakdown in collaboration. However, instead of abandoning the project, Student D devised practical strategies, such as "having him talk little by little when the rest of the family went out, and it was just the two of us." Ultimately, her reflection that "How far could I become my grandfather's eyes? I focused my mind entirely on this aspect" demonstrates a shift in approach. Testifier C and Student D advanced their collaborative work, proceeding without complete consensus in their recollections. Gradually, as Student D became Testifier C's eyes, they established cooperative and routinized exchanges.

These exchanges prompted profound *reflection* for Testifier C and Student D. For Student D, living during a peaceful modern era, the PAB project with her family became "an invaluable time to think about family, even while being shocked that my own relative had endured such a tragic experience." As a result, Student D gained a new perspective confirming her roots: "I am here precisely because my grandfather and grandmother desperately overcame that painful era and survived." Meanwhile, Testifier C perceived the process of his memories being reflected in Student D's painting as a new realization:

... this painting has clearly changed from that one that she first started drawing. But after this child began to consider and understand that every single person here had their own life, the expressions on the faces and hands of the injured began to show movement.

Interpreting these narratives, this study suggests that Testifier C recognized that by expressing the gruesome atmosphere of the scene known only to those who experienced it in the painting, Student D began to understand the horror and cruelty of war. Thus, this study infers that Testifier C attempted to fulfill his role as a family member by passing down his past to his granddaughter, transcending the mere provision of accurate information to a high school student drawing a picture. Through the shared process of creating their A-bomb painting, both arrived at distinct, profound reflections within the context of family bonds.

Consequently, Testifier C and Student D completed "The Eyes of That Child That Will Not Leave My Mind" (Figure 2). Despite being family, a significant boundary existed between

Testifier C and Student D due to Testifier C's trauma. However, through their collaboration in the PAB project, their relationship was transformed (transformation). The painting, serving as a boundary object that bridged their collaborative work, became a space for sharing irreplaceable family historical recollections while simultaneously culminating in a shared historical narrative, as depicted in the title of the painting. After finishing the painting, Student D said:

Since my involvement with the PAB project, I have come to view the war and the atomic bomb as issues connected to the present. I have come to consider them in relation to my own future.

Based on this narrative, this study interprets that she underwent a fundamental transformation in her consciousness, connecting the past to the future. It is highly plausible that Student D achieved this heightened sense of personal ownership through her engagement with the memories of her blood relative, Testifier C, which deepened her understanding of her roots. Conversely, health permitting, Testifier C continues his storytelling activities five or six times per month even now: "I believe it's important to keep conveying it." Therefore, this study concludes that Testifier C is choosing to dedicate his life to continuing the transmission of memories through dialogue, an experience that he shares with Student D, his granddaughter.



Figure 2. The Eyes of That Child That Will Not Leave My Mind  
(Reproduced from [27], p. 90).

To concisely summarize the findings across both cases, Table 1 presents an analytical matrix of the four boundary crossing learning mechanisms.

Table 1. Analytical Matrix of Boundary Crossing Mechanisms in the PAB Project

	Case I	Case II
Identification	Recognized an isolated, unbelievable trauma.	Recognized a protected, silent family taboo.
Coordination	Relentless faxes and physical metaphors ("faster than the speed of sound").	Cautious, private dialogue without full memory consensus.
Reflection	Reflected on objective depiction vs. subjective burden.	Reflected on family roots and personal existence.
Transformation	Both culminated in a co-constructed artifact and a life-long commitment to peace practice.*	

Prepared by the author based on Yugari [27].

\*The transformation mechanism resulted in a shared outcome across both cases.

#### 4. Discussion

In the oral history practice of the PAB project, students living within a peaceful modern era and testifiers who had lived through a tragic past crossed the boundary between them through the four learning mechanisms (i.e., identification, coordination, reflection, and transformation) proposed by Akkerman and Bakker [21]. During this process, communication did not merely occur face-to-face; instead, it was mediated by the PAB functioning as a boundary object. Ultimately, this boundary object materialized as a co-constructed artifact that represented a novel historical narrative of peace, and the testifiers and students involved in its creation formed a novel community that transcended their original positionalities.

Identification in the PAB project emerged during initial face-to-face communication. Specifically, if the students merely listen to the stories of survivors, they risk bearing a heavy psychological burden, which may paradoxically rigidify the boundary between the two parties. This phenomenon serves as a warning against the traditional passive listening approach, from a perspective distinct from the conceptual expansion of peace education proposed by Romano *et al.* [26]. Achieving genuine boundary crossing requires interposing a boundary object.

Coordination occurred during collaborative work mediated by the boundary object. It strongly functioned as a concrete operational goal (the task of painting) to elucidate the past, while accompanied by a more relationship-oriented goal supplementing the testifier's memory and caring for family. The first step toward moving away from passive listening requires a boundary object that bridges both parties and a clear task design that indicates possible actions, which are essential for boundary coordination.

Reflection emerged during the process of creating the boundary object. In both cases, the testifiers and students engaged in different reflections on their roles. Thus, students transitioned into a positive psychological state by proactively co-constructing a new peace narrative the A-bomb painting rather than being crushed by the tragic past.

Transformation was maximized when the new peaceful narrative, the painting, was completed. Furthermore, the testifiers also successfully collaborated with the students while confronting their traumas. Through the experience of co-construction, the testifiers and students transcended their original teacher and learner roles, respectively, to form a new community. Through this process, the PAB project exemplified the dynamic process through which an intergenerational sustainable community of peace practice is formed.

Based on these findings, structural design in oral history practice proves crucial. This study critically extends the argument by Bertram *et al.* [15] regarding the pitfall caused by the power of testimony. To avoid this pitfall and to overcome the overwhelming boundary, this study indicates that transcending the dyadic relationship between testifier and student is highly effective. Instead, the findings highlight the value of designing opportunities to co-create new knowledge by establishing a triadic relationship mediated by a boundary object. Through this triadic relationship, participants do not simply transfer past facts; rather, they engage in the process of co-constructing new values and meanings of peace tailored to

contemporary contexts. In doing so, they can form a sustainable community of peace practice that generates new narratives of peace that endure even after the testifiers pass away.

In historically war-affected areas like Hiroshima, the aging and decline of testifiers who can directly recount their recollections has become a severe issue [22], [25]. Given these circumstances, the continuous creation of sustainable communities of peace practice will become increasingly difficult. Therefore, there is an urgent need to design opportunities in which testifiers and students can cross boundaries and co-create new narratives of peace. The frontline for this endeavor is contemporary school education, which is predicated on connections within society. Toward the achievement of SDG 16, school history and social studies education must function as hubs that bridge the real world with the next generation, thereby contributing to the realization of sustainable peace.

However, it is important to avoid making universal claims based on these findings. As a critical discussion, it must be acknowledged that utilizing trauma-laden memories as boundary objects imposes a significant emotional toll, requiring careful pedagogical and ethical support. Furthermore, the transferability of this practice model has limitations. The PAB project is situated in the highly specific context of Hiroshima and involves students with specialized artistic skills. Applying this boundary-crossing model to general classrooms or different global conflicts will require careful contextual adaptation.

## 5. Conclusion

Intergenerational boundary crossing and the formation of a sustainable community of peace practice were achieved through four mechanisms. First, both parties recognized the boundary between a tragic past and the present (identification). Second, operational communication mediated by the boundary object (the Paintings of the Atomic Bomb) coordinated their relationship (coordination). Consequently, they independently realized the significance of the practice and increasingly exercised agency (reflection). Third, co-constructing new historical narratives of peace fundamentally shifted students' awareness and helped testifiers overcome their trauma, forming a new sustainable community of peace practice (transformation).

Building on these findings, this study theoretically reframes the boundary between testifiers and students in oral history as a catalyst for the generation of new meaning rather than as an epistemological obstacle. It demonstrates that communication should not be limited to a dyadic relationship; instead, it should occur through a triadic relationship mediated by a boundary object designated for co-construction.

Furthermore, as testifiers of war experiences continue to age and decline in number, this study highlights an urgent and critical mission toward achieving SDG 16: school education must serve as a hub that connects the real world with the next generation by intentionally designing boundary crossing learning spaces and opportunities for creating new knowledge.

However, because this study remains a secondary analysis of limited cases based on specific literature, the generalizability of the findings is constrained. To address this limitation, future research should address three main challenges: 1) conducting direct participant observations and interview surveys in actual oral history practice settings to enable empirical verification based on primary data; 2) conducting a comparative verification of how communication and learning mechanisms differ across practices that employ boundary objects of different media; and 3) applying the presented practice model to historical memory-oriented peace education that focuses on other war experiences and conflicts worldwide.

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