

MuseumsForward

Social acceleration, alienation, and the museum as remedy: how museum visits impact visitors' sense of connectedness to self, others, and world

Lucas Terry

Abstract

This study investigated the extent to which museum experiences enhance visitors' sense of connectedness to self, others, and the world. Using a mixed-methods approach combining Likert scale ratings and open-ended questions, museum visitors were surveyed to identify key dimensions of connectedness fostered through museum engagement. Emergent coding revealed that self-connection primarily manifested through self-reflection and learning experiences, as well as through personal history and memory activation. Connection to others was predominantly facilitated through social interactions within the museum space and through historical and intergenerational connections sparked by exhibits. Worldly connection emerged most strongly through historical and cultural perspectives in exhibits, particularly in helping visitors contextualize historical events such as the Japanese internment during WWII within global frameworks of power and human rights. The findings suggest that museums serve as multidimensional connective spaces that not only preserve artifacts but also actively facilitate meaningful connections across personal, social, and global domains. This research contributes to understanding museums as institutions that foster connectedness, with implications for exhibit design, visitor engagement strategies, and the broader social role of cultural institutions.

Keywords

Social acceleration; connection; alienation; exhibit design; resonance theory; well-being

Committee Chair

Lane Eagles;

Committee Members

Stone Addington; Cristina Lacomba

Accepted: June 13, 20205

Published: July 2025

Acknowledgments

I would like to express a well's worth of gratitude to Dr. Lane Eagles for her ceaseless support and encouragement. The cultivation of my interest and pursual of this project would not be possible without her unwavering support. I would like to extend my gratitude to my committee, Dr. Stone Addington and Dr. Cristina Lacomba, for their guidance never failed to steer my thoughts and efforts down rewarding paths.

I am indebted to my family. To my parents, thank you for your relentless love. Thank you for revealing the pleasures, challenges, and oddities that make life on this pale blue dot special. To my sister, Stella, thank you for your hilarity and constant presence in my life. To my brother Malcolm, thank you for your realism. You got guts like no other. And to Emily Fowler, I am putty in your hands.

Introduction

In an era marked by what sociologist Hartmut Rosa (2013) terms "social acceleration," contemporary life is increasingly characterized by the relentless demands of speed, efficiency, and technological connectivity. This acceleration has produced what Rosa (2013) describes as a paradoxical "loss of control" despite unprecedented technological capabilities to make the world more available, accessible, and attainable, individuals report growing experiences of alienation, disconnection, and what Zygmunt Bauman (2000) calls the "liquefaction" of social bonds. From rising rates of depression and anxiety to political polarization and environmental crisis, the symptoms of this accelerated disconnection permeate multiple dimensions of contemporary experience (Goodwin et al., 2020). Against this backdrop of widespread alienation, cultural institutions like museums occupy a potentially unique position in the social landscape. While museums vary considerably in their operational approaches, many possess institutional characteristics that can encourage contemplation, preserve historical continuity, and create opportunities for sustained encounter with material culture and shared heritage. Recent research in museum studies has increasingly recognized museums' potential contributions to individual and community well-being, with studies examining how museums support personal, intellectual, social, and physical well-being (Falk, 2021). However, this growing body of research has not specifically studied well-being through connectedness

framework, leaving unexplored how museums might specifically foster connectedness across multiple relational dimensions.

This study investigates the question: To what extent can museum experiences increase visitors' sense of connectedness to self, others, and world? This inquiry contributes to existing museum well-being research by introducing a connectedness framework that examines how museums influence visitors' relational experiences across these three distinct but interconnected dimensions. The importance of connection to human flourishing is well-established in psychological research, with studies demonstrating that social relationships and feelings of belonging are fundamental to mental health and well-being (Baumeister & Leary, 1995; Ryan & Deci, 2000). The significance of this research extends beyond museum studies to broader questions about institutional responses to contemporary alienation. As society increasingly confronts challenges of social isolation, political fragmentation, and environmental disconnection, understanding how existing cultural institutions foster human connection becomes crucial for both museum practice and broader social policy. Moreover, as technological solutions to disconnection proliferate—from mindfulness apps to digital wellness interventions—empirical investigation of how physical, cultural spaces influence connectedness offers important insights into alternative approaches to addressing contemporary alienation.

Using a mixed-methods approach, this study examines data from 36 museum visitors across three history museums in the Seattle metropolitan area. The research employs an adapted version of the Watts Connectedness Scale (Watts et al., 2022), originally developed for psychedelic therapy research but designed to measure connectedness across self, others, and world dimensions relevant to mental health and well-being. Both quantitative measures of connectedness and qualitative analysis of visitor experiences provide a comprehensive picture of how museums influence different aspects of human connection.

While the research focuses specifically on measuring connectedness rather than testing theoretical frameworks, the findings are analyzed through the lens of Rosa's (2019) theory of "resonance" as a means of understanding how and why museums might foster connection in ways that counter contemporary alienation. Rosa's framework provides valuable analytical tools for interpreting how museums might function differently from other contemporary institutions in their capacity to facilitate meaningful human relationships with self, others, and world. The findings reveal that museums are particularly effective at fostering

social connectedness, with visitors reporting significantly higher levels of connection to others compared to connection to self or world. These patterns vary meaningfully across age groups, suggesting that museums may serve different connectedness functions across the lifespan. Qualitative analysis illuminates the specific mechanisms through which museums foster connection, from facilitating intergenerational social bonds to enabling historical perspective-taking that expands visitors' temporal horizons.

Literature Review

Social Acceleration and the Loss of Control

Hartmut Rosa, a leading sociologist in the tradition of Critical Theory, provides a compelling diagnosis of contemporary life under what he terms "social acceleration" (Rosa, 2013). Critical Theory, which originated with Max Horkheimer, Theodor Adorno, and the Institute for Social Research (known as the Frankfurt School), has long been concerned with understanding how modern social conditions both promise and undermine human flourishing (Zuidervaart, 2014). Rosa builds on this tradition through his analysis of how acceleration has become the dominant organizing principle of modern society. Rosa developed the concept of "dynamic stabilization" to describe modernity's defining characteristic: "A society can be called *modern* when its *mode of stabilization is dynamic*, i.e., when it systematically requires (material) growth, (technological) acceleration, and (cultural) innovation to reproduce its structure and to maintain the institutional status quo" (Rosa, 2017, p. 440). This creates what Rosa calls a "mode of aggression" toward the world, where society adopts an approach focused on making everything more available, attainable, and accessible—what he terms the "triple A approach" (Rosa, 2017). Paradoxically, Rosa illustrates how the relentless drive for control and availability leads to its opposite: a profound sense of loss of control and disconnection (Rosa, 2017). By incessantly trying to control the world, we have created conditions where we are losing contact with it (Rosa, 2013). Rosa identifies three manifestations of this aggressive mode: aggression toward nature (exemplified through environmental destruction), aggression toward others (seen in political polarization and social fragmentation), and auto-aggression (manifested in rising rates of burnout and psychological distress) (Rosa, 2017). This analysis reveals how modern acceleration creates not just practical problems but fundamental challenges to human connection and meaning-making. As Rosa argues, the drive to make the world more available paradoxically results in widespread feelings of unavailability which

translate to a loss of the unexpected and a loss of ambiguity, ultimately causing the world to mysteriously withdraw (Rosa, 2020).

Acceleration, Deceleration, and Commodified Solutions

Given the alienating effects of social acceleration, deceleration might appear to offer an intuitive solution. Deceleration encompasses various approaches aimed at slowing down the pace of life, from "slow food" and "slow cities" movements to digital detox practices and mindfulness interventions (Osbaldiston, 2013). The underlying assumption is that if acceleration creates alienation and disconnection, then deliberately slowing down social, technological, and personal processes should restore meaningful connection and presence (Rosa, 2019). However, Rosa reasons that simple deceleration cannot serve as an adequate response to acceleration's alienating effects. As Rosa argues, "slowing things down would certainly not be enough" because deceleration fails to address the underlying structural logic that drives acceleration (Schiermer, 2019, p. 6). The institutional requirements of dynamic stabilization mean that societies organized around growth, competition, and efficiency cannot simply adopt a politics of time that gives people more leisure while maintaining existing economic and social structures. Moreover, Rosa contends that "even if it were possible, slowness cannot be an end in itself. Nothing is gained if the fire engine simply slows down" (Schiermer, 2019, p. 6). Speed becomes problematic only when it leads to alienation—when it undermines our capacity to form meaningful relationships with ourselves, others, and the world while simultaneously fueling modes of aggression.

The relentless logic of acceleration creates what might be understood as a fundamental scarcity of present-moment experience. As the triple A approach drives society to make ever more of the world available, attainable, and accessible, the present moment itself becomes increasingly compressed and fragmented (Rosa, 2017). This creates conditions where sustained attention, contemplative engagement, and meaningful presence become rare and valuable experiences. Rosa's concept of "contraction of the present" describes how acceleration paradoxically undermines our ability to meaningfully engage with the expanded world that acceleration has theoretically made available to us, as evidenced by attempts to re-capture the present (Rosa, 2013). Contemporary capitalism has responded to this acceleration-induced scarcity by developing commodified solutions to the alienation problem. The proliferation of mindfulness applications, meditation subscriptions, digital detox retreats, and wellness technologies represents market attempts to deliver controlled access to the very experiences that acceleration has systematically undermined: stillness,

reflection, presence, and meaningful connection. However, these technological solutions remain embedded within acceleration logic, promising efficient delivery of measurable outcomes through standardized methodologies. They represent attempts to manufacture experiences that mitigate modes of aggression. To offer an antidote to the acceleration problem, Rosa developed his theory of resonance to describe experiences that exist outside the logic of acceleration and work against growing modes of aggression (Rosa, 2019). However, the manufactured experiences that commodify stillness, tranquility, and meaningful reflection fail to meet the requirements of resonant experiences that, by definition, require spontaneity and unpredictability to be authentic (Rosa, 2019). This creates a fundamental tension: the same technological and economic systems that drive acceleration then offer to sell temporary respite from its effects, while remaining structurally unable to address the underlying conditions that create the need for such solutions.

Resonance as an Alternative to Alienation

Rosa's concept of resonance is presented as an antidote to the consequences of social acceleration. Resonance describes a specific quality of relationship characterized by four key elements: affection (being touched/moved by something), self-efficacy (the ability to respond and reach out), transformation (being changed by the encounter), and elusiveness (resonance cannot be controlled or manufactured at will) (Schiermer, 2019). Importantly, resonance is not harmony or pure consonance: "Resonance is not consonance, it requires the active presence of something that is beyond my grasp, elusive, and in this sense remains alien" (Celikates et al., 2019, p. 70). This framework identifies three "axes of resonance": horizontal (social relationships), diagonal (material relationships with objects), and vertical (existential relationships with larger entities like nature, history, or art) (Rosa, 2019). These axes provide a useful framework for understanding how different types of institutions, like museums, might facilitate or hinder meaningful human connection.

Social Dislocation and Free-Market Society

The challenges Rosa identifies through his acceleration theory are complemented by research on "dislocation" in free-market societies (Alexander, 2001). Bruce Alexander, a psychology and addiction researcher, defines dislocation as insufficient levels of psychosocial integration, "a state in which people flourish simultaneously as individuals and members of their culture" (Alexander, 2001, p. 3). Drawing on Karl Polanyi's (1944) *The Great Transformation*, Alexander

illustrates how free-market systems systematically dismantle traditional sources of connection: clan loyalties, village responsibilities, guild rights, family obligations, and stable social roles (Alexander, 2001). Zygmunt Bauman's (2000) concept of "liquid modernity" further illuminates these dynamics. In Bauman's analysis, social institutions and relationships have become increasingly fluid, provisional, and unstable, creating conditions where "individuals now face an array of conflicting life-choices on their own, meaning that they face them in increasing isolation and with little prospect of assistance from any collective body or system" (Gane, 2001). This liquidity severely compromises our ability to form enduring connections, as relationships become transactional rather than committed, and communities become temporary aggregations rather than stable sources of belonging (Bauman, 2000).

Connection and Well-Being in Museum Contexts

While critical social theory diagnoses the problems of contemporary alienation, psychological research provides evidence for the importance of connection to human well-being. Baumeister and Leary (1995) identify the need to belong as a fundamental human motivation, while Ryan and Deci's (2000) Self-Determination Theory identifies relatedness as a basic psychological need essential for motivation and well-being. This convergence of critical theory and psychological research suggests a clear framework for understanding contemporary social challenges: if acceleration creates alienation by systematically undermining our capacity for meaningful relationships (Rosa, 2013), and if this process is compounded by market-driven dislocation (Alexander, 2001) and the liquefaction of social bonds (Bauman, 2000), and if simple deceleration approaches fail because they don't address the underlying structural conditions that generate the need for speed (Rosa, 2019), then addressing contemporary alienation requires institutional spaces that can foster the kinds of authentic connections that are systematically undermined by accelerated social conditions. Rosa's resonance theory provides a framework for understanding what such connections might look like, while psychological research on belonging and relatedness demonstrates why such connections are essential for human flourishing. Museums emerge as potentially significant institutional spaces within this framework that can facilitate resonance across the horizontal (social), diagonal (material), and vertical (existential) axes that acceleration tends to fragment (Rosa, 2019). In museum contexts specifically, visitor studies research has found that museums support individual well-being across multiple domains: personal, intellectual, social, and physical well-being (Falk,

2021). Museums can foster "a greater sense of personal connectedness, appreciation, belonging, and harmony with the human and natural world" (Falk, 2022). However, despite growing research on museums and well-being, there remains limited understanding of how museums might specifically function as alternatives to both acceleration and its commodified solutions by fostering connectedness across different dimensions. This study addresses that gap by examining museums as potential "resonance spaces" that might temporarily suspend the logic of acceleration and create opportunities for meaningful connection.

Methodology

Study Purpose

This purpose of this study was to examine to what extent can museum experiences increase visitors' sense of connectedness to self, others, and the world?

This study utilized a survey design with an adapted version of the Watts Connectedness Scale (WCS) to examine the extent to which a museum experience influences visitors' sense of connectedness to self, others, and world. This scale was developed by Dr. Rosalind Watts and colleagues at Imperial College London's Centre for Psychedelic Research. It was specifically designed to measure connectedness across three domains (self, others, world) initially for psychedelic therapy research, but the authors note that "the operational definition of connectedness captured by the WCS may have broad relevance in mental health research." (Watts et al., 2022). The research employed a post-visit-only design to assess connectedness following the museum experience, using both quantitative ratings and qualitative data to capture the multidimensional nature of connectedness experiences.

Instrument

The Watts Connectedness Scale was adapted to focus on three dimensions of connectedness: Connection to Self (Q2-Q7), Connection to Others (Q8-Q12), and Connection to World (Q13-Q19). The adaptation involved selecting items most relevant to museum experiences and modifying language to reflect recent rather than ongoing experiences. Participants responded to each item on a sliding scale from 0 ("Not at all") to 100 ("Entirely"). Several items (Q8, Q12, Q13) were negatively worded and were reverse-scored during analysis. In addition to the quantitative scale items, three open-ended questions (Q23-Q25) asked participants to describe moments when they felt

connected to themselves, others, and the world during their museum visit (see Appendix B for complete instrument).

Sampling

Participants were recruited using convenience sampling as they exited three history museums in the Seattle metropolitan area. Data was collected at the Washington State History Museum in Tacoma, the Shoreline Historical Museum in Shoreline, and the Log House Museum in West Seattle. The Washington State History Museum is a medium-sized history museum that focuses on Washington State's cultural, social, and political development, featuring exhibits on Indigenous histories, immigration, environmental change, and civic engagement. The Shoreline Historical Museum, established as a Bicentennial Project, is dedicated to preserving and interpreting the heritage of Shoreline, Lake Forest Park, and North Seattle. This smaller museum produces exhibits on focusing on Indigenous peoples, local community development, and regional history. The Log House Museum, operated by Southwest Seattle Historical Society, promotes the heritage of West Seattle, White Center, and South Park. Housed in a historic 1904 carriage house that was part of the Fir Lodge Estate, this small museum focuses on the history of the Duwamish Peninsula and is particularly known for its exhibits on "The Birthplace of Seattle", including the 1851 Alki Beach landing and the founding of Seattle. The choice to survey visitors immediately after their visit was designed to capture connectedness experiences while they remained fresh and accessible to conscious reflection. A total of 36 museum visitors participated in this study, with demographic information collected on age, gender, and race/ethnicity.

Participants and Response Rates

A total of 36 museum visitors participated in the study. Response rates were high across all three dimensions of the adapted Watts Connectedness Scale: Self (97%), Others (97%), and World (92%). Individual questions had varying response rates, with the lowest being Q13 ("I feel separate from the world around me," 49%) and Q12 ("I feel unwelcome amongst others," 51%), which were both negatively worded questions.

Data Analysis

Quantitative data analysis involved calculating mean scores for each connectedness dimension by averaging the responses to items within each subscale. For negatively worded questions (Q8, Q12, Q13), scores were reversed (100 minus the original score) so that higher scores

consistently indicated greater connectedness. Descriptive statistics were calculated for each dimension of connectedness, individual question, and demographic subgroup. For the qualitative data, responses to open-ended questions were analyzed using emergent coding to identify patterns across participants' connectedness experiences. Emergent themes were categorized within each connectedness dimension, and the frequency of each theme was recorded (see Appendix A for complete codebook). This mixed-methods approach allowed for comparison between quantitative scores and qualitative descriptions of connectedness experiences.

Results

Overall Connectedness Dimension Scores

Table 1 presents descriptive statistics for each connectedness dimension as measured on a scale from 0 ("Not at all") to 100 ("Entirely"). Connection to Others received the highest mean score (M = 69.69), followed by Connection to World (M = 57.21) and Connection to Self (M = 56.25). This pattern suggests that museums may be particularly effective at facilitating social connections, potentially serving as what Bauman (2000) might call "solid spaces" within "liquid modernity."

Table 1. Descriptive Statistics for Connectedness Dimensions

Dimension	N	Mean	Median	Min	Max	Distribution (Low/Med/High)
Self	35	56.25	60	0	91.33	4/22/9
Others	35	69.69	73.20	36.67	100	0/15/20
World	33	57.21	60.43	14.20	92.67	6/13/14

Note: Distribution shows number of responses in Low (0-33.3), Medium (33.4-66.6), and High (66.7-100) ranges.

Analysis of score distributions revealed that 57.1% of connection to Others responses fell in the high range (66.7-100) compared to 25.7% for Self and 42.4% for World. Additionally, no connection to Others responses fell in the low range (0-33.3), while 11.4% of connection to Self responses and 18.2% of connection to World responses did. This distribution pattern reinforces the dimensional mean differences, indicating that participants consistently reported stronger feelings of connection to others compared to self or world.

Individual Question Analysis

Table 2 shows the five highest-rated aspects of connectedness based on mean scores. The strongest connectedness experiences reported by visitors related to feeling less alone (M = 82.77), feeling more welcome amongst others (M = 75.78), and feeling connected to a community (M = 71.03). These findings suggest that museums may serve a crucial social function in an era of increasing isolation and social fragmentation (Rosa, 2019).

Table 2. Highest-Rated Connectedness Items

Question	Dimension	Question Text	N	Mean
Q8*	Others	I feel less alone	22	82.77
Q12*	Others	I feel welcome amongst others	18	75.78
Q10	Others	I feel connected to a community	34	71.03
Q13*	World	I feel connected to the world around me	17	70.47
Q19	World	I feel that everything is interconnected	31	65.71

*Note: Questions marked with * were negatively worded in the survey and have been reverse-scored and reworded positively for clarity in this table.*

Table 3 presents the five lowest-rated aspects of connectedness. The aspects with the lowest ratings included the ability to "sit with" painful memories (M = 48.00), feeling connected to a source of universal love (M = 50.71), and feeling connected to one's senses (M = 52.82).

Table 3. Lowest-Rated Connectedness Items

Question	Dimension	Question Text	N	Mean
Q5	Self	I could 'sit with' painful memories	29	48.00
Q17	World	I feel connected to a source of universal love	28	50.71
Q3	Self	I feel connected to my senses	34	52.82
Q14	World	I feel connected to a purpose in life	31	54.97

Q6	Self	I feel connected to my body	33	54.97
----	------	-----------------------------	----	-------

The highest-rated items primarily relate to social connection and community belonging, while the lowest-rated items focus on bodily awareness, emotional processing, and abstract spiritual concepts. This pattern suggests that the museum experience may influence different aspects of connectedness to varying degrees, with interpersonal connection being most readily affected.

Age Group Differences

Analysis by age group revealed distinct patterns of connectedness, as shown in Table 4. All age groups reported higher connection to Others scores compared to the other dimensions, but the specific patterns varied across age groups.

Table 4. Connectedness Dimension Scores by Age Group

Age Group	N	Self (Mean)	Others (Mean)	World (Mean)
Middle-aged Adults (35-54)	8	63.24	63.84	45.68
Young Adults (18-34)	5	46.20	71.29	62.38
Older Adults (55+)	4	54.72	67.71	54.03

These findings reveal age-related differences in how museums affect visitor’s sense of connectedness. Middle-aged adults (35-54) showed the most balanced scores between connection to Self (M = 63.24) and Others (M = 63.84), with notably lower World connection (M = 45.68). In contrast, young adults (18-34) reported the strongest connection to Others (M = 71.29) and moderate World connection (M = 62.38), but substantially lower Self connection (M = 46.20). The gap between connection to Others and Self scores was particularly pronounced for young adults (25.09 points). Older adults (55+) demonstrated moderate and relatively balanced scores across all dimensions (Self: M = 54.72; Others: M = 67.71; World: M = 54.03). The unexpectedly high World connection scores among young adults (M = 62.38) compared to middle-aged adults (M = 45.68) suggests that younger visitors may be particularly drawn to situating themselves within broader historical narratives at a life stage when many are seeking to establish their place in the world.

Qualitative Themes

Analysis of open-ended responses to questions about connectedness experiences revealed several prominent themes. For Connection to Self, the most frequent themes were Self-Reflection & Learning (7 responses) and Personal History & Memory (6 responses). Participants described moments like "relating the overall Washington experience to my own" and "seeing pictures of the green belt brought back some memories". For Connection to Others, Social Interaction was predominant (11 responses), followed by Historical & Intergenerational Connection (4 responses) and Community Engagement (4 responses). Representative responses included "being here with family and taking a deep dive into history" and "seeing those who have come before and how their contributions and experiences contribute to the experiences I live now". For Connection to World, the most common themes were Historical & Cultural Perspective (9 responses) and Environmental & Nature Connection (6 responses). Participants described experiences such as "seeing how decisions made by those in power have ripple effects across the world" and encounters with environmental exhibits, as one visitor noted when "looking at map of green belt".

Table 5. Frequency of Qualitative Themes by Connectedness Dimension

Self Connection Themes	N	Others Connection Themes	N	World Connection Themes	N
Self-Reflection & Learning	7	Social Interaction	11	Historical & Cultural Perspective	9
Personal History & Memory	6	Historical & Intergenerational Connection	4	Environmental & Nature Connection	6
Cultural & Historical Connection	5	Community Engagement	4	Global Impact & Interconnectedness	2
Physical Experience in Museum	3	Cultural & Diverse Representation	1	Negative or No Connection	5
Negative or No Connection	2	Negative or No Connection	2		

The qualitative themes provide rich context for understanding the quantitative findings, particularly the high scores for Connection to Others. The prominence of social interaction in the qualitative responses aligns with the strong quantitative scores for interpersonal connection items. Similarly, the emphasis on historical themes across all three dimensions reflects the historical focus of the museum and suggests that historical content may serve as a unique vehicle for different forms of connectedness.

Discussion

Museums as Spaces for Social Connection

One of the most significant findings from this study is the consistently higher ratings for Connection to Others (M = 69.69) compared to Connection to Self (M = 56.25) and Connection to World (M = 57.21) across the participant sample. This pattern was reinforced by the distribution of high-range scores (66.7-100), with 57.1% of connection to Others responses falling in this range compared to 25.7% for connection to Self and 42.4% for connection to World. The qualitative data further supports this finding, with "Social Interaction" emerging as the most frequent theme (11 responses) in participants' descriptions of connection to others. This pronounced social connectedness effect aligns with Alexander's (2001) theory of psychosocial integration. Alexander conceptualizes dislocation as insufficient levels of psychosocial integration, which he argues results from the decline of traditional social structures like clan loyalties, village responsibilities, and community bonds in market-dominated societies. In his view, modern free-market society disrupts these traditional sources of belonging and connection, leaving individuals increasingly isolated from meaningful social fabric. The museum appears to function as a space that temporarily reverses this process by facilitating social connection through shared experience and community engagement.

What makes this finding particularly significant is how participants experienced connection not just through direct social interactions, "being here with family" and "chatting with my mom", but also through more temporally expansive social connections such as "seeing those who have come before and how their contributions and experiences contribute to the experiences I live now." This suggests that museums create unique conditions for intergenerational social connection that transcends the immediate present and connects visitors to broader communities across time. In this way, experiencing social connection in museums is not limited to the present moment, but can be facilitated across temporal periods. The highest-rated individual items—feeling

less alone (M = 82.77), feeling welcome amongst others (M = 75.78), and feeling connected to community (M = 71.03)—suggest museums may function as what Bauman (2000) would call "solid spaces" within "liquid modernity." In *Liquid Modernity*, Bauman describes how social institutions and relationships have become increasingly fluid, provisional, and unstable, leaving individuals to navigate a world where "bonds are dissembled into successive encounters" and "identities into successively worn masks" (Bauman, 2000, p.12). Museums appear to temporarily counteract this liquidation of social bonds by creating a rare solidifying experience in contemporary life that serves as a physical and cultural space where visitors can engage with enduring narratives, participate in shared meaning-making, and experience community belonging that extends beyond the transient connections that dominate liquid modern life. As one participant described their experience of connection to others: "Sharing the same physical space but seeing the shift over time allowed me to relate to a pioneer as well as a boomer era worker." This response illustrates how museums function as solid spaces by enabling connections that transcend the immediate present and create bonds across historical time periods, directly countering the successive, disconnected encounters that characterize liquid modernity.

Dimensions of Connectedness Across the Lifespan

The analysis by age group revealed distinct patterns of connectedness that suggest museums may facilitate connection differently across the lifespan. All age groups reported higher connection to Others scores compared to the other dimensions, reinforcing the primary finding about social connectedness. However, the specific patterns varied in intriguing ways that illuminate how museums might serve different developmental and social needs. Young adults (18-34) demonstrated the most pronounced pattern, with strong connection to Others (M = 71.29) and moderate connection to World (M = 62.38), but limited connection to Self (M = 46.20). This pattern aligns with developmental priorities often associated with early adulthood, such as establishing social networks and situating oneself within broader contexts while still working toward stable self-identity (Erikson, 1968). The museum exhibits at all three research sites emphasize locality, specifically how people have influenced Washington State and the state's effect on cultural identity. Responses such as "Seeing all the effort community members have put into the green belt for fellow community members" illustrate how this young adult was emotionally affected by the community's efforts. This response suggests that museums may be particularly effective at helping younger visitors place themselves

within local social networks and at a crucial developmental stage. The act of situating oneself amongst social networks was not constrained by locality. The strong World connection among young adults may reflect what Erik Erikson (1968) identified as the "identity vs. role confusion" challenge of early adulthood, where individuals seek to understand their place within larger social and historical contexts. Museums, with their capacity to present expansive temporal and cultural narratives, may offer young adults unique opportunities to explore questions like "Where do I fit in the larger story of human experience?" The qualitative data supports this interpretation with young adult responses such as "The ancient one exhibit, feeling a sense of connection to all who have come before us", thus demonstrating how global perspectives and history's significance can be induced by a museum experience. Middle-aged adults (35-54) showed the most balanced scores between Self (M = 63.24) and Others (M = 63.84), with notably lower World connection (M = 45.68). The reasons for this distinctive pattern, particularly the lower World connection among middle-aged visitors, remain unclear and warrant further investigation with larger samples and potentially age-specific qualitative interviews to better understand how different life stages influence museum engagement and connectedness experiences.

Museums as Counterforces to Social Acceleration

Rosa (2013) describes modernity as characterized by "dynamic stabilization," a condition where growth, acceleration, and innovation are required to maintain social structures. This results in a paradoxical "loss of control" where increased efforts to make the world available, attainable, and accessible lead to a sense of alienation and disconnection. Museums, with their deliberate pace, focus on reflection and meaning making, and resistance to the logic of efficiency and speed, may facilitate, in Rosa's (2019) terms, "resonant relationships" temporarily suspend the logic of acceleration. Resonance, as Rosa (2019) defines it, represents a specific type of relationship characterized by four essential elements: being genuinely affected by something external, responding to this affection, experiencing transformation through this exchange, and acknowledging the inherent unpredictability of such experiences. What makes museums particularly unique as places to experience resonance is their explicit mission to slow down time and create opportunities for contemplation. Unlike most contemporary institutions governed by acceleration, efficiency, and instrumental rationality, museums are specifically designed to encourage visitors to pause, reflect, and engage deeply with objects, ideas, and narratives. This institutional commitment to

deceleration creates structural conditions that are antithetical to the aggressive mode of relating that Rosa identifies as characteristic of accelerated society.

The findings suggest that museums may indeed serve this function, but in ways that vary across dimensions of connectedness and visitor demographics. The consistently higher scores for interpersonal connection indicate that museums may be particularly effective at countering the social fragmentation that accompanies acceleration. As Rosa (2013) notes, acceleration changes our mode of relating to others, often resulting in more superficial and transactional relationships. Museums appear to offer an alternative mode of social engagement that fosters deeper connection, as evidenced by responses such as “I felt connected to the staff at the museum that spent a long time explaining the history of the buildings and cultures”. This response illustrates how meaningful social engagement can occur in museums by simply having staff whose role it is to engage with visitors and make them feel welcome. The qualitative themes further illuminate how museums might counter acceleration. Historical themes were prominent across all three dimensions of connectedness, with "Personal History & Memory" (Self), "Historical & Intergenerational Connection" (Others), and "Historical & Cultural Perspective" (World) among the most frequent responses. This suggests that history-focused museums facilitate a temporal recontextualization that connects visitors to both personal and collective histories, potentially countering what Rosa (2013) describes as the "shrinking of the present" in accelerated societies. What makes history museums particularly powerful as resonance spaces is their capacity to expand visitors' temporal horizons. In an accelerated society where the present moment becomes increasingly compressed and the future feels uncertain, history museums offer visitors opportunities to situate themselves within longer temporal narratives that extend both backward and forward in time. This temporal expansion directly counters the acceleration-induced experience of being trapped in an eternal present where meaningful connections to past and future become increasingly difficult to maintain.

The Acceleration Paradox and the Commodification of Presence

The relentless logic of acceleration creates what might be understood as a fundamental scarcity of present-moment experience. Rosa's (2013) concept of "contraction of the present" describes how acceleration paradoxically undermines our ability to meaningfully engage with the expanded world that acceleration has theoretically made available to us. As the triple A approach drives society to make ever more of the

world available, attainable, and accessible, the present moment itself becomes increasingly compressed and fragmented (Rosa, 2013). This creates conditions where sustained attention, contemplative engagement, and meaningful presence become rare and valuable experiences. Rosa's fourth component of resonance—elusiveness—becomes particularly relevant here. Authentic resonance cannot be controlled, manufactured, or guaranteed; it requires spontaneity and unpredictability to occur. As Rosa (2019) emphasizes, resonance experiences must remain "elusive" precisely because the attempt to control or predict them destroys their essential character. Contemporary capitalism has responded to this acceleration-induced scarcity by developing market-based solutions to the alienation problem. The proliferation of mindfulness applications, meditation subscriptions, digital detox retreats, and wellness technologies represents attempts to deliver controlled access to the very experiences that acceleration has systematically undermined: stillness, reflection, presence, and meaningful connection. However, these technological solutions remain embedded within acceleration logic, promising efficient delivery of measurable outcomes through standardized methodologies. This creates a fundamental contradiction: markets attempt to sell predictable access to experiences that, by their very nature, cannot be controlled or guaranteed without losing their authentic character.

The Institutional Conditions for Elusiveness

Museums, paradoxically, both embody and transcend the triple A approach that characterizes accelerated society (Rosa, 2013). While museums do make artifacts from around the world available through collection, make knowledge attainable through interpretation, and make culture accessible through display, their institutional design operates according to a fundamentally different temporal and experiential logic. Rather than seeking efficient delivery of predictable outcomes, museums are architecturally organized to preserve what might be called "institutional conditions for elusiveness"—the structural prerequisites for Rosa's (2019) fourth component of resonance. This distinction becomes crucial when comparing museums to commodified solutions to acceleration. While wellness apps and mindfulness technologies promise controlled access to specific experiential outcomes, museums are structurally designed to preserve unpredictability and openness within their engagement with available materials. The same artifacts that embody the triple A approach in their collection and presentation become vehicles for encounters that resist the logic of control and predictability that characterizes acceleration.

This architectural difference manifests across multiple dimensions of museum organization.

Curatorial Design and Unpredictability

Museums deliberately juxtapose objects, narratives, and perspectives in ways that create opportunities for unexpected encounters. Unlike algorithm-driven content delivery systems that predict and reinforce user preferences, curatorial practice involves creating interpretive tensions and surprising connections that visitors cannot anticipate. The placement of a contemporary artwork next to a historical artifact, or the presentation of competing historical narratives within the same exhibition space, structures encounters with genuine otherness rather than confirmations of existing expectations.

Spatial Design

Museums exist outside the logic of acceleration. Visitors are encouraged to move at their own pace, to linger, to return to objects multiple times, and to allow encounters to unfold according to their own internal rhythms rather than external efficiency demands. This spatial design directly counters acceleration's compression of time by creating institutional spaces where time can expand rather than contract.

Material Authenticity and Otherness

The presence of authentic historical objects creates structural conditions for encountering genuine otherness that extends beyond individual subjectivity. Unlike digital representations or simulated experiences, material artifacts carry traces of different temporal and cultural contexts that cannot be fully controlled or predicted by either curators or visitors. This materiality preserves space for what Rosa calls the "active presence of something that is beyond my grasp, elusive, and in this sense remains alien" (Schiermer, 2017, p. 4).

Social Mixing and Unexpected Encounters

Museums bring together diverse publics in shared physical spaces, creating opportunities for the kind of horizontal resonance that acceleration tends to fragment. Unlike digital platforms that create echo chambers through algorithmic filtering, museum spaces facilitate encounters between people who might not otherwise interact, preserving possibilities for social surprise and connection.

Interpretive Openness

While delivering predetermined messages and measurable learning outcomes are central to many museum practices, museums also

typically offer multiple interpretive frameworks and encourage visitors to construct their own meanings. This openness preserves space for transformation—Rosa's (2019) third component of resonance—by refusing to constrain in advance what visitors might discover or how they might be changed by their encounters.

The Open Horizon of Museum Experience

The concept of an "open horizon" captures what distinguishes museums from commodified deceleration technologies in terms of Rosa's (2019) fourth component of resonance. When someone opens a meditation app, they enter a constrained experiential framework designed to deliver predictable outcomes—stress reduction, improved focus, emotional regulation—through standardized methodologies. The range of possible experiences, while potentially valuable, remains narrow and controlled. The institutional architecture of app-based wellness constrains the horizon of possibility to ensure consistent user experiences and measurable results. Museum visits, by contrast, open onto vastly expanded horizons of possible experience. A visitor entering a museum seeking reflection or connection cannot predict whether they will encounter a childhood memory triggered by a historical photograph, a political awakening through learning about social movements, a spiritual experience through encountering human creativity across cultures, an unexpected conversation with a stranger, or a profound material encounter with an authentic artifact. The institutional design of museums preserves space for all of these possibilities and more, without predetermining which will occur or how they will unfold. This "open horizon" principle explains why museums can facilitate Rosa's (2019) definition of resonance even when visitors come seeking specific types of experiences. The key difference lies not in whether experiences are sought or unsought, but in whether the institutional framework constrains or expands the range of possible transformative encounters. The qualitative data supports this "open horizon" principle through the extraordinary range of connectedness experiences that museums facilitate within a single institutional context: personal memory activation, historical perspective-taking, community belonging, environmental awareness, intergenerational connection, cultural identity exploration, and global consciousness development. Museums succeed in facilitating resonance precisely because they are architecturally organized to preserve unpredictability while providing structured contexts for meaningful engagement.

Institutional Analysis of Resonance Conditions

This analysis extends Rosa's (2019) resonance theory by linking institutional analysis of how structural design choices affect the possibility for authentic resonance rather than commodified forms of deceleration. Building on the concept of "institutional conditions for elusiveness" discussed above, this framework demonstrates how structural alternatives can be deliberately designed and implemented in museum settings. These structural alternatives represent institutional arrangements that systematically preserve rather than constrain the conditions necessary for Rosa's (2019) fourth component of resonance. While Rosa (2019) identifies the four components of resonance (affection, self-efficacy, transformation, elusiveness) and discusses how capitalist institutions can undermine resonant relationships, he provides limited analysis of how alternative institutional arrangements might positively structure conditions for resonance. This framework suggests that fostering resonance requires more than individual practices or temporary escapes from acceleration, rather it requires institutional architectures that are fundamentally organized around different principles than those governing accelerated society. Museums represent a particularly important case because they demonstrate how institutions can resist acceleration logic while remaining embedded within capitalist society. Rather than offering temporary oases from acceleration, museums provide structural alternatives to acceleration's organizing principles through their temporal architecture (allowing unhurried contemplation), spatial design (non-linear exploration), and organizational commitment to open-ended rather than standardized experiences. Museums are different because they're not just breaks from acceleration but institutionally organized around anti-acceleration principles. It is not just "take a break from speed," it is "here's a space designed around slowness." Museums exist within capitalism (they get funding, have budgets, and operate in market economies) but they can be organized around different principles than most capitalist institutions. While most businesses prioritize efficiency, speed, and measurable outcomes, museums prioritize contemplation, open-ended exploration, and experiences that can't be easily quantified, though this potential varies significantly across different institutional contexts and practices. Museums show how institutions can be designed to create conditions for Rosa's four resonance components: facilitating encounters that can genuinely affect visitors, enabling visitors to actively respond and engage (self-efficacy), supporting transformative experiences, and preserving the unpredictability essential to elusiveness

This institutional analysis also reveals why commodified solutions to acceleration remain inadequate despite their good intentions. Technological solutions remain embedded within acceleration logic through their market-driven need to deliver consistent, measurable outcomes that ensure user retention and revenue generation. Museums, by contrast, often operate with institutional missions that prioritize educational and community goals over user satisfaction metrics or market performance. Apps and wellness technologies, no matter how sophisticated, cannot escape the structural limitations imposed by their embeddedness within acceleration logic. Apps are designed for scalability and standardization across millions of users, while museums can tailor experiences to local communities and unique collections. Apps must deliver measurable results efficiently to succeed as market products, which constrains their capacity to preserve the very conditions (elusiveness, genuine otherness, unpredictability) that Rosa (2019) identifies as necessary for authentic resonance. The implications extend beyond museum studies to broader questions about institutional design in an accelerated society. If authentic resonance requires specific structural conditions, then fostering human flourishing in modernity requires not just individual practices or technological solutions, but the creation and preservation of institutional architectures that resist acceleration's organizing principles. Museums provide one model for how such resistance might be institutionally embodied, suggesting pathways for designing other spaces and organizations around resonance rather than acceleration.

Museums as Unique Sites of Material Resonance

The findings suggest that museums are uniquely positioned to facilitate what Rosa identifies as the three axes of resonance. Rosa conceptualizes resonance as occurring along three primary dimensions: the horizontal axis (relationships with other people through love, friendship, and democratic politics), the diagonal or material axis (relationships with objects, artifacts, and material things through work, education, sports, and consumption), and the vertical axis (relationships with larger totalities such as nature, art, history, or the divine that give us a sense of connection to the world as a whole). Perhaps most distinctively, museums excel at facilitating resonance along the diagonal (material) and vertical axes simultaneously. Unlike most contemporary institutions, museums are explicitly designed around material encounters that can mediate deeper forms of resonance. The physical artifacts in museums serve a dual resonant function—they exist as material objects visitors can engage with (diagonal axis) while simultaneously functioning as portals to broader

historical, cultural, or natural realities (vertical axis). This is evidenced in responses like "When I see the uneven surface of the log house and guess how much efforts they need to make it smooth," where the material encounter with an object creates a connection to something larger—in this case, the historical reality of craftsmanship and labor. This material dimension of museum resonance helps explain why the qualitative data showed relatively low scores for embodied connection (feeling connected to senses, body) despite the inherently physical nature of museum visits. Traditional Western Museum practices still tend to privilege visual and intellectual engagement over multisensory embodied experience, suggesting untapped potential for museums to expand their resonance capacity through more deliberately embodied approaches to exhibition and interpretation.

Implications

These findings have several important implications for museum practice aimed at fostering visitor well-being through connectedness.

Leverage museums' unique capacity for temporal social connection

The high Connection to Others scores suggest that museums excel at facilitating connections to people across time through thoughtful curation and interpretation. Museums should continue to develop exhibits that help visitors connect with historical figures, past communities, and intergenerational narratives, recognizing that social connection in museums may be fundamentally different from contemporary social interaction

Develop age-specific approaches

The distinct patterns across age groups suggest that museums might benefit from tailored connectedness-focused programs. Young adults might particularly benefit from programs that balance their strong social orientation with opportunities for self-reflection, while middle-aged adults might benefit from experiences that strengthen their connection to global perspectives.

Expand embodied engagement

The relatively lower scores for bodily and sensory connection suggest an opportunity to develop more multisensory and embodied museum experiences that engage visitors beyond the visual and cognitive dimensions. The National Nordic Museum in Seattle, WA and the Cooper Hewitt, Smithsonian Design Museum in New York, NY both have a history of successfully integrating multisensory elements in exhibit design.

Leverage historical narratives for connection

The prominence of historical themes across all dimensions of connectedness highlights the unique power of historical narratives to foster connection. Museums should continue to explore how historical content can be presented in ways that facilitate personal, social, and global connection.

Create intentional resonance spaces

Museums might benefit from explicitly designing spaces and experiences aimed at fostering resonance in Rosa's sense—moments where visitors are touched, moved, and transformed through their engagement with museum content and with each other.

Limitations

Several limitations should be considered when interpreting these findings. First, the post-visit only design limits the ability to attribute changes in connectedness directly to the museum experience. Without pre-visit measurements, it cannot be determined whether the reported connectedness reflects a change from baseline levels or pre-existing dispositions.

Second, the relatively small sample size ($N = 36$), particularly when broken down by age groups, limits the generalizability of the findings. The patterns observed across age groups, while intriguing, should be interpreted cautiously given the small subgroup sizes (Middle-aged: $n = 8$; Young: $n = 5$; Older: $n = 4$).

Third, as with all self-report measures, responses may be influenced by social desirability and retrospective biases. Participants may have reported higher connectedness than they actually experienced to meet perceived researcher expectations or justify their museum visit.

Finally, this study focused on a history-focused museum, and the patterns of connectedness observed may differ in other museum types such as art, science, or natural history museums. The historical focus likely influenced the specific content of connectedness experiences, as reflected in the prominence of historical themes in the qualitative data.

Conclusion

This study provides compelling evidence that museum experiences are associated with visitors' sense of connectedness, particularly to others and community. The findings suggest that museums may serve as important social spaces that counteract the alienation and dislocation described in critical social theory. The particularly strong effects observed for connection to others highlight the potential for museums

to foster psychosocial integration in an era characterized by acceleration and social fragmentation. The integration of quantitative and qualitative data reveals a nuanced picture of how connectedness manifests in museum settings. Historical connections, social interactions, and community engagement emerge as key themes underlying the connectedness experience. The variation across age groups further suggests that museums may serve different connectedness needs across the lifespan, functioning as "resonance spaces" (Rosa, 2019) that adapt to visitors' developmental and social contexts.

Perhaps most significantly, this research adds to existing research that demonstrate how museums are not merely repositories of objects or sites of education, but active agents in fostering human connection and well-being. Museums may temporarily suspend the logic of acceleration and create opportunities for meaningful encounters across multiple dimensions of human experience. The findings also reveal untapped potential for museums to expand their role as sites of connection and healing in contemporary society. While museums already demonstrate significant capacity to foster social connection, there remain opportunities to enhance embodied engagement, further develop age-specific programming, and more deliberately design experiences that facilitate resonance across all three of Rosa's axes. This research contributes to our understanding of how cultural institutions like museums can support psychological well-being and social cohesion in contemporary society. It suggests that museums function not only as preservers of cultural heritage but as creators of environments where visitors can reconnect with themselves, others, and the world. As society continues to grapple with challenges of alienation, social fragmentation, and disconnection, museums may prove to be unexpectedly important resources for fostering the kinds of meaningful connections that are essential for both individual well-being and social cohesion.

References

- Adorno, T. (2018). *Minima moralia: Reflections from damaged life*. Verso Books. (1951)
- Alexander, B. (2001, April). The Roots of Addiction in Free Market Society. In *The Roots of Addiction in Free Market Society* (Issue ISBN 0-88627-274-2). Canadian Centre for Policy Alternatives.
- Bauman, Z. (2007). *Consuming Life*. Polity Press.
- Bauman, Z. (2013). *Liquid Modernity*. John Wiley & Sons. (2000)

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation anxiety and anger*. Basic Books.
- Celikates, R., Lijster, T., & Rosa, H. (2019). Beyond the Echo-chamber: An Interview with Hartmut Rosa on Resonance and Alienation. *Krisis*, 39(1), 64-78.
- Classen, C., & Howes, D. (2006). The museum as sensescape: Western sensibilities and indigenous artifacts. In E. Edwards, C. Gosden, & R. Phillips (Eds.), *Sensible Objects: Colonialism, Museums and Material Culture* (pp. 199-222). Berg.
- Erikson, E. H. (1968). *Identity: Youth and Crisis*. Norton.
- Falk, J. H. (2021). *The value of museums: Enhancing societal well-being*. Rowman & Littlefield.
- Falk, J. H. (2022). *Making the case for museums: Why museums are valuable to individuals and communities*. Rowman & Littlefield.
- Gane, N. (2001). Zygmunt Bauman: Liquid modernity and beyond. *Acta Sociologica*, 44(3), 267–275. <https://doi.org/10.1080/000169901750528386>
- Goodwin, R. D., Dierker, L. C., Wu, M., Galea, S., Hoven, C. W., & Weinberger, A. H. (2022). Trends in U.S. Depression Prevalence From 2015 to 2020: The Widening Treatment Gap. *American journal of preventive medicine*, 63(5), 726–733. <https://doi.org/10.1016/j.amepre.2022.05.014>
- Hegel, G. W. F. (1998). *The Phenomenology of Spirit*. Motilal Banarsidass Publ. (1807)
- Maslow, A. H. (1968). *Toward a Psychology of Being*. Van Nostrand.
- Osbaldiston, N. (Ed.). (2013). *Culture of the slow : Social deceleration in an accelerated world*. Palgrave Macmillan UK.
- Petersen, A., & Willig, R. (2002). An Interview with Axel Honneth. *European Journal of Social Theory*, 5(2), 265–277. <https://doi.org/10.1177/13684310222225441>
- Polanyi, K. (2001). *The Great Transformation: The Political and Economic Origins of Our Time*. Beacon Press. (1944)

- Rosa, H. (2013). *Social Acceleration: A New Theory of Modernity*. Columbia University Press.
- Rosa, H. (2017). Dynamic Stabilization, The Triple A. Approach to the Good Life, and the Resonance Conception. *Questions de Communication*, 31, 437–456.
<https://doi.org/10.4000/questionsdecommunication.11228>
- Rosa, H. (2019). *Resonance: A sociology of our relationship to the world*. Cambridge: Polity Press.
- Rosa, H. (2020). *The Uncontrollability of the World*. John Wiley & Sons.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
<https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Schiermer, B. (2019). Acceleration and Resonance: An Interview with Hartmut Rosa. *Acceleration and Resonance: An Interview with Hartmut Rosa*, 1-7.
- Vella-Brodrick, D., Joshanloo, M., & Slemp, G. R. (2022). Longitudinal relationships between social connection, agency, and emotional well-being: A 13-year study. *The Journal of Positive Psychology*, 18(6), 883–893. <https://doi.org/10.1080/17439760.2022.2131609>
- Watts, R., Kettner, H., Geerts, D., Gandy, S., Kartner, L., Mertens, L., Timmerman, C., Nour, M. M., Kaelen, M., Nutt, D., Carhart-Harris, R., & Roseman, L. (2022). The Watts Connectedness Scale: a new scale for measuring a sense of connectedness to self, others, and world. *Psychopharmacology*, 239(11), 3461-3483.
<https://doi.org/10.1007/s00213-022-06187-5>
- Zuidervaart, L. (2013). *The Critical Theory of Axel Honneth* [Review of the book *The Critical Theory of Axel Honneth*, by D. Petherbridge].
<https://ndpr.nd.edu/reviews/he-critical-theory-of-axel-honneth/#:~:text=Honneth's%20critique%20of%20capitalism%20focuses,human%20need%20for%20mutual%20recognition.>

Appendix A

Museum Connectedness Codebook

Thematic Codes for Connection to Self (Q23)

Personal History & Memory

Definition: Responses that reference personal memories, autobiographical experiences, or connections to one's own past triggered by museum exhibits or experiences.

Inclusion Criteria:

- References to childhood memories
- Recognition of objects/events from one's own lifetime
- Connections to family history

Nostalgic recollections

Exclusion Criteria:

- General historical connections without personal reference
- References to memory that are not autobiographical

Example: "I loved looking at things that remind me of that time in my life because I was alive during those times and or I remember being told about the things that happened by my parents and grandparents."

Cultural & Historical Connection

Definition: Responses indicating a sense of connection to broader cultural or historical narratives, where visitors situate themselves within larger temporal or cultural contexts.

Inclusion Criteria:

- Recognition of one's place in historical continuum
- Cultural identity connections
- References to heritage or cultural background

Connections to historical events or periods

Exclusion Criteria:

- Personal memories without broader historical context
- General learning without cultural/historical framing

Example: "The ancient one exhibit, feeling a sense of connection to all who have come before us"

Self-Reflection & Learning

Definition: Responses describing introspective thought, personal insights, or learning experiences that prompted connection to one's thoughts, values, or internal processes.

Inclusion Criteria:

- Personal realizations or insights
- Reflective thinking
- Learning about oneself

Cognitive engagement leading to self-awareness

Exclusion Criteria:

Learning about external facts without personal reflection

Physical experiences without reflective component

Example: "Gave me thought about what I could do help out in the trails and parks for others to benefit"

Physical Experience in Museum

Definition: Responses focusing on embodied, sensory, or spatial experiences within the museum that created a sense of self-connection.

Inclusion Criteria:

- Sensory encounters (visual, auditory, tactile)
- Movement through exhibition spaces
- Physical reactions to exhibits

Immersive experiences

Exclusion Criteria:

- Purely cognitive or intellectual experiences
- Social interactions without reference to physical experience

Example: "Listening to the river movie"

Negative or No Connection

Definition: Responses explicitly stating no connection was experienced or expressing negative experiences regarding self-connection.

Inclusion Criteria:

- Direct statements of no connection

- Expressions of disconnection
 - Unclear or minimal responses indicating lack of engagement
- Example: "Not really. LOL"

Thematic Codes for Connection to Others (Q24)

Social Interaction

Definition: Responses describing direct interpersonal connections or interactions with other people physically present in the museum space.

Inclusion Criteria:

- Interactions with museum staff
- Experiences shared with family or friends
- Conversations or encounters with other visitors
- Collaborative activities with others present

Exclusion Criteria:

Historical connections to people not physically present

References to general community without specific interactions

Example: "Being here with family and taking a deep dive into history, makes me feel more connected."

Historical & Intergenerational Connection

Definition: Responses indicating connection to people across different time periods, previous generations, or historical figures.

Inclusion Criteria:

- References to ancestral connections
- Recognition of historical people's experiences
- Connections across generational boundaries
- Temporal bridging between past and present

Exclusion Criteria:

- General historical learning without personal connection
- References to artifacts without connection to people

Example: "Others as in from another era. Sharing the same physical space but seeing the shift over time allowed me to relate to a pioneer as well as a boomer era worker."

Community Engagement

Definition: Responses referencing connection to community efforts, civic engagement, or collective action.

Inclusion Criteria:

- References to community projects or initiatives
- Recognition of group accomplishments
- Awareness of collective impact
- Sense of belonging to community groups

Exclusion Criteria:

- Individual social interactions
- Historical connections without community aspect

Example: "I really enjoyed seeing what people in our community are doing to restore habitat and advocate for the Duwamish people."

Cultural & Diverse Representation

Definition: Responses indicating connection through recognition or representation of diverse cultural identities, backgrounds, or perspectives.

Inclusion Criteria:

- Recognition of cultural diversity
- Connection through cultural representation
- Cross-cultural understanding

Exclusion Criteria:

- General historical references without cultural emphasis
- Personal memories without cultural framing

Example: "Seeing more objects from my homeland made me relate to this state more"

Negative or No Connection

Definition: Responses explicitly stating no connection to others was experienced or expressing negative experiences regarding social connection.

Inclusion Criteria:

- Direct statements of no connection
- Expressions of social disconnection

-Unclear or minimal responses indicating lack of engagement

Example: "No"

Thematic Codes for Connection to World (Q25)

Historical & Cultural Perspective

Definition: Responses that situate local history and culture within global contexts or describe connection to the world through historical understanding.

Inclusion Criteria:

- Global historical events and their local impacts
- Cultural perspectives on world issues
- Historical continuity across borders
- References to world history

Exclusion Criteria:

- Local historical references without global context
- Personal history without broader world framing

Example: "Seeing the Japanese internment display is a reminder of the chaos that comes about from the people of the world fighting in WWII and people locally were deeply affected."

Environmental & Nature Connection

Definition: Responses describing connection to the natural world, ecological systems, or environmental concerns.

Inclusion Criteria:

- References to natural environments
- Ecological awareness
- Environmental stewardship
- Connection to natural elements

Exclusion Criteria:

- Built environment references without natural elements
- Social connections without environmental component

Example: "Seeing others do small things to help the environment and trails here and seeing the bigger impact it can make to others and the wildlife"

Global Impact & Interconnectedness

Definition: Responses emphasizing systemic interconnections, worldwide cause-effect relationships, or global interdependence.

Inclusion Criteria:

- Recognition of global systems
- Awareness of international interdependencies
- References to worldwide impacts of decisions
- Understanding of global interconnections

Exclusion Criteria:

- Local impacts without global context
- Historical references without explicit connection to present global systems

Example: "Seeing how decisions made by those in power have ripple effects across the world and how they continue to affect those living today"

Preservation & Future Generations

Definition: Responses focusing on preservation efforts, sustainability, or connection to future world inhabitants.

Inclusion Criteria:

- References to preservation of resources or heritage
- Concern for future generations
- Sustainability perspectives
- Long-term thinking about global impacts

Exclusion Criteria:

- Historical preservation without future orientation
- Personal future without global context

Example: "I felt connected to the understanding of the need to preserve history and nature. Also, the understanding that land needs to be protected for future generations."

Negative or No Connection

Definition: Responses explicitly stating no connection to the world was experienced or expressing negative experiences regarding world connection.

Inclusion Criteria:

- Direct statements of no connection
- Expressions of disconnect from the world
- Unclear or minimal responses indicating lack of engagement

Example: "That's not what the visit did for me."

Appendix B

Watts Connectedness Scale (WCS)

Reference

Watts' et al.

Instructions:

Reflecting on how you feel, please rate the following items on a scale from **'Not at all' to 'Entirely'**. Please answer every item, even if you are unsure or feel the item is unclear or poorly worded. Drag the indicator to a position on the scale that shows how much you agree or disagree with each of the following statements.

Response format

Each item is rated on a 0 – 100 visual analogue scale with the anchors 0 = Not at all, 100 = Entirely



Final items:

1. *My mind has felt connected to my heart/emotion.*
2. *I have felt connected to my senses (touch, taste, sight smell, hearing).*
3. *I have felt connected to a range of emotions.*
4. *If I had chosen to, I could have 'sat with' painful memories.*
5. *I have felt connected to my body.*
6. *I have been able to fully experience emotion, whether positive or negative.*
7. *I have felt alone.*
8. *I have felt connected to friends and/or family.*

9. *I have felt connected to a community.*
10. *I have felt connected to all humanity.*
11. *I have felt unwelcome amongst others.*
12. *I have felt separate from the world around me.*
13. *I have felt connected to a purpose in life.*
14. *I have felt connected to nature.*
15. *I have felt connected to a spiritual essence (in the secular or religious sense).*
16. *I have felt connected to a source of universal love.*
17. *I have seen things from a broad perspective, 'the bigger picture'.*
18. *I have felt that everything is interconnected.*

Scoring:

Connectedness to Self (CTS): $(WCS2 + WCS3 + WCS4 + WCS5 + WCS6 + WCS7) / 6$

Connectedness to Others (CTO): $((100 - WCS1) + (100 - WCS8) + WCS9 + WCS10 + (100 - WCS12) + (100 - WCS13)) / 6$

Connectedness to World (CTW): $(WCS11 + WCS14 + WCS15 + WCS16 + WCS17 + WCS18 + WCS19) / 7$

General Connectedness (WCS): $(CTS + CTO + CTW) / 3$