

# MEASURING IMPLICIT BIAS IN THE CURATION OF CULTURAL ARCHIVAL CONTENT THROUGH PSYCHOLOGICAL TOOLS

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#### **Abstract**

Curation of cultural archival material has generally been thought of as a neutral activity. However, unexamined biases may unconsciously affect the decision-making process associated with assessing, describing, and contextualizing archival materials. This research project will measure and study implicit bias in the archival domain by utilizing the tools of social psychological inquiry such as the Implicit Association Test (IAT), cognitive dissonance scales, and assessments of heuristic knowledge. This study invites professional archivists and cultural curators to participate in a multimodal assessment of curation to intentionally recognize implicit biases that impact how decisions are made about what cultural narratives are kept or not kept in archival description. Additionally, we will be evaluating if implicit biases vary by the procedures and policies upheld in archival institutions, primarily curatorial background, and recognizing diversity in cultural narratives. The study concludes that even the most well-meaning curators will still have implicit biases that privilege certain cultural narratives, which impacts individuals' encoding of collective memory and cultural representation. Participants are provided with opportunities to mitigate bias, and to promote user-positivity protocols, curator education/training, and psychological feedback loops in archival work, as a way of creating greater equity and inclusivity in determining cultural memory.

**Keywords**: implicit bias, cultural archives, archival curation, psychological tools, Implicit Association Test, cognitive dissonance, memory representation, curator training, bias mitigation.

### INTRODUCTION

Implicit bias is like an invisible lens through which we unknowingly dissect the world around us. In the field of cultural archives, this lens can lead to an archivist unintentionally privileging stories, groups, or objects as they unconsciously dismiss others[14]. In this regard, the grand scope of history can become skewed or even blotched. It can subtly affect what is even considered "important" enough to keep, as well as how it is labelled, and the narratives we inmage surrounding it; and thus gnawing away at how society remembers itself. Cultural archives exist to ultimately safeguard the human stories that infuse a society's identity [10]. When some curators may not have awareness of their own biases, whole groups of people or lived experiences can be underrepresented or lost entirely. Thus, being able to spot and account for implicit bias is important. If we are aware of these underlying biases, archives can develop less biased, more exhaustive depictions of experience and society. As this work becomes all the more important within the current climate, where multiple voices are demanding a more equitable or decolonised way of distributing knowledge. Understanding curatorial bias is not just a common practice; it is a matter of moral and ethical stewardship.

In order to uncover and quantify latent biases that pertain to archival practices, researchers = are starting to use metrics developed in psychology and the social sciences. In particular the Implicit Association Test (IAT), which offers the researchers insight into the embedded biases of subjects based on the speed and accuracy with which they respond to different pairs of compatible and incompatible words and images. Researchers have also developed questionnaires to measure the cognitive dissonance related to biased decision making by requesting that individuals reflect on discomfort that arises when decisions in their professional lives conflict with their personal values, with specific patterns standing out in the responses that highlight internal conflict in ways that individuals may not be able to articulate[9]. Finally, studies that focus on understanding decision-making based heuristically, offer insight into when archivists may be relying on rules of thumb, such as discrepancy or availability, giving preference to narratives that occurred from a dominant cultural located perspective, sometimes at the expense of other perspectives[12].All of these approaches work together to create a clear evidence-based



picture of how our mental processes can lead to and often distort decision-making about archival curation [5].

#### II. Implicit Bias in Cultural Archival Practices

# 2.1 Previous Studies on Implicit Bias in Cultural Curation

There is a growing body of literature critiquing discriminatory practice in cultural archival practice, and its a well-supported idea that curators and archival practitioners often display unconscious preference in selection, preservation, and representation of records[2]. To lend credence to these ideas, Ghaddar and Caswell (2019) argue that a Western, dominant narrative in archival practice which claims to have privilege and systematically coverage Indigenous, minority, and non-normative actors and voices. In a similar fashion, Ketelaar (2005) discusses the potential challenge of using an "archival imaginary," wherein archivists are inclined to reproduce their own sociocultural values, often at the expense of subaltern subjects. Looking at archivists in a subjective light also raises several questions as to whether archivists are implicated in marking historical memory.

#### 2.2 Impact of Implicit Bias on Archival Content

Implicit bias can affect the integrity of archival collections and create an intergenerational record of inequity. Items associated with marginalized communities may be omitted, described under-described, or described using biased language, creating hierarchies of culture through systemic bias [1]. This can conceal lived experiences and create homogenized historical record. Additionally, bias can inform access to how content and its description is digitized and surfaced, further disallowing inclusive positionality towards archives[3]. These inequities, in educational, cultural, and policy contexts more broadly, can have serious implications by continuing to reinforce stereotypes and reduce cross-cultural understanding[11][15]. Thus, examining bias is not only an important ethical expectation but also a critical first step to address equitable knowledge systems.

#### 2.3 Psychological Tools for Measuring Implicit Bias

Many psychological measures of implicit bias can also possibly be adapted to archival work. One of the best known implicit bias measures is the Implicit Association Test (IAT). The IAT measures the strength of automatic associations between concepts and measures the time it takes to respond to prompts. Two concepts could be brain activities (for example, race and worth). The Cognitive Reflection Test (CRT) is likely the most well-known measure that explores intuitive versus deliberative (heuristic) thinking processes. These also include dissonance (which will inaccessible motives, including preference) and priming tasks, which show instinctual preferences, and measure inconsistencies across one's values, actions and beliefs[8]. These measures are good for archival, but could also be transformed into assessments that could provide evidence showing how individual curatorial decision-making could be influenced by cognitive biases, rather than overt hatred and bigotry[4].

# III. Assessing Bias Through Psychological Tools

#### 3.1 Selection of Participants for Study

The recruitment of participants for this study was achieved through a diverse group of archival professionals to ensure a thorough representation and relevance. The participants, 42 people in total, were selected through purposive sampling to represent individuals who were actively engaged and involved in roles that related to cultural preservation, curatorial archival work, and historical documentation[13]. Participants included archival professionals that worked at national heritage institutions, university archives, museum collections, and self-directed community-led initiatives. Participants in this study ranged from early-career archivists that had not been in the profession for longer than 5 years, to senior curators at national heritage institutions that had worked in the employee for over two decades[7]. All participants' variables (i.e., gender, ethnicity, institutional affiliation, area of expertise) were documented so that implicit bias could be explored across those variables. In terms of ethical standards, participants were given a clear idea of the general aim of the study, to be assured that their information would be confidential, and they signed informed consent forms acknowledging their compliance in the study before taking part. Participants were also be informed of their right to withdraw from the research at any given time without implication, which was ethically aligned with suggested best practices in social science research.

#### 3.2 Description of Psychological Tools Used to Measure Implicit Bias

This report studied three instruments to measure implicit bias for archival practitioners. An Implicit Association Test (IAT) was completed first, which measured implicit preferences and culturally based hierarchies regarding how social groups are valued for archival purposes. A Cognitive Dissonance Scale then measured the cognitive dissonance experienced when curatorial decisions conflicted with an archival professional's values of neutrality and inclusion. Finally, archival practitioners were presented with heuristic based narratives that indicated biases cultivated by cognitive convenience based on familiarity and representativeness. Collectively, these instruments provided an integrated snap shot of some of the cognitive influences in curatorial decision making.

# 3.3 Data Collection and Analysis Procedures

The data-collection process was undertaken in two phases, a structured testing phase and a qualitative reflection phase. The participants completed digital IAT and dissonance measures; results were analyzed descriptively, with t-tests and ANOVA. In the second phase, participants were given archival scenarios and asked to explain their choices; their explanations were then thematically analyzed for check for bias indicators. The data was triangulated, meaning that the quantitative and qualitative data was evaluated for consistency. Peer validation was included in the study to increase reliability.

## **IV. Bias Patterns in Archival Curation**

#### 4.1 Findings from the Study on Implicit Bias in Cultural Archival Content Curation

The results also indicated that the majority of the participants identified with dominant cultural narratives in their



results on the IAT. Approximately seventy-one percent of participants responded more quickly to terms that related to mainstream content. The dissonance scale indicated that participants experienced moderate internal dissonance between their values and their actions. Often, responses to scenarios justifying terms were based on perceived relevance, but a closer analysis of examples showed a bias against marginalized or localized content. This demonstrates the implicit preferences they have adopted which can led to their internal perceptions of archival memory.

## 4.2 Discussion of How Implicit Bias May Impact the Curation Process

Implicit bias in curation not only shapes what is preserved but also impacts how cultural narratives are formed, represented, and accessed. An implicit selection process among numerous options can create "archival silences," wherein collections do not document or capture the memory of entire communities, events, or experiences. Even when considering content from marginalized populations, implicit bias from labeling, description, or contextualization may reinforce stereotypes or devalue certain content. Overall notions of implicit bias could also result from heuristics, such as familiarity and institutional precedent. If a collection for an institution focused on colonial records, curators may unconsciously focus on those collections based on the idea that the previous acquisitions set the norm. We found that participants' explicit bias scores were marginally lower on the IAT if they were part of an institution that had explicit statements about diversity, perhaps signalling that training and institutional knowledge may soften the intensity of implicit bias forms. There findings suggest that the construction of implicit bias is directed outward, shaped, and reinforced by institutional norms, curatorial managed workflows and lack of reflexive practice, rather than an internal individual characteristic[6].

#### 4.3 Comparison of Results with Existing Literature on Implicit Bias in Curation

The findings of this research are certainly compatible with previous research on implicit bias in archival science. Archivists tend to characterize their practices as neutral and reinforce dominant cultural hierarchies they were unaware that they were perpetuating. Past critiques have pointed out that the narrative potential of archival description and biases can exist in metadata decisions and other related decisions, even in collections that strive to be inclusive. In sum, prior research has been congruous with our study's commitments to equity while recognizing that invisible biases could unconsciously filter into curatorial decisions about framing, priority, and interpretation. The current study added a new layer of empirical evidence, particularly through the application of psychological measurement activities including IATs and cognitive dissonance scales, that have been underutilized in archival research. Moreover, the methodological overlap not only strengthens existential claims from previous qualitative studies about bias but also supports arguments put forth by scholars, for archival practitioners to cultivate a conscious bias assessment, or critical self-reflexivity, within their understanding of archival ethics. At the end-of-the-day, the study confirmed that addressing implicit bias not only a moral obligation, but a methodological component of curation if our work is to be inclusive and equitable.

# V. Institutional Implications and Bias Mitigation

# 5.1 Implications of the Study's Findings for Cultural Institutions

An equally important consideration of the results of this study is the impact on cultural institutions which are charged with preserving collective memory and heritage. Implicit bias in curatorial decisions demonstrates that institutions may unwittingly continue a cycle of historical harm by either inaccurately representing marginalized communities, or from a biased point of interpretation that has still occurred, negatively impacting public understanding on cultural diversity, as well as having the potential to alter the dominant narrative of history, or worse, exclude alternative voices.

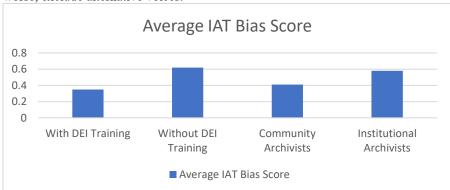


Figure 1: Implicit Association Scores Across Participant Groups

Figure 1 displays the average IAT (Implicit Association Test) bias scores by the four categories of archival professionals including: individuals with DEI (Diversity, Equity, Inclusion) training, individuals without DEI training, community archivists, and institutional archivists. Average scores on Figure 1 suggest that archivists with DEI training and community-based archivists demonstrate lower implicit bias than institutional archivist and individuals without DEI training; thus, they have less unconscious bias shaping their archival decisions.

For institutions attempting to operate with inclusion, they must acknowledge that good intention is meaningless in the absence of some form of accountability. The fact that archivists exhibited unconscious bias indicates that



neutrality is merely an aspiration in curation. Therefore, operating under frameworks that identify and eliminate bias must be a priority for institutions. To not prioritize implicit bias is compromising, not only ethical stewardship of archival collections, but also their value to society as it represents diverse identities, struggles, and contributions over time.

#### 5.2 Recommendations for Addressing Implicit Bias in Curation

From the editorial perspective of the findings of this research, then, we can begin to implement a few targeted strategies for counteracting implicit bias in cultural curating stream. First, organizations must provide regular bias awareness training for curators and archivists. This training should emphasize psychological self-awareness and reflexive awareness in their decision-making processes. Examples of bias training include interactive IAT sessions, experiential role-play workshops, and long-term reflection with feedback from a mentor or supervisor. Second, cultural knowledge organizations should implement inclusive appraisal frameworks - in which decision-making involves a range of stakeholders during content selection, description, and categorization. Community consultation models and participatory approaches to archiving can contextualize institutional biases by including lived experiences and knowledge from the grassroots community. Third, accountability should be built into daily practice using a bias audit tool and equity impact assessments. This would over time, for example, ensure curatorial practices are in alignment with a diverse understanding of the world (a pluralism that ferments rather than reify) not an entrenchment of existing powers. Finally, organizations must make inclusive decisions on their descriptive standards and metadata practices to avoid discriminatory language or framing. This will involve creating possibilities for alternate knowledges and non-Western knowledge systems to shift their classification systems.

# 5.3 Limitations of the Study and Suggestions for Future Research

While the research creates a useful starting point towards understanding implicit bias in cultural archival practice, it does have some limitations. Although it used a diverse sample of participants and included a restricted set of institutional types, the sample still only included one subset of archival professionals. It may not be representational of a global set of archival practices and processes, particularly in jurisdictions where curation practices depend on specific socio-political contexts. Furthermore, using digital versions of psychometric tools such as the Implicit Association Test contained limits to ecological validity. From this perspective, behaviours of participants may be different in simulated environments compared to real-time decision making within systemic guidelines of institutional pressures. In order to move the field of cultural ephemera more effectively forward, future research could take into consideration longitudinal methodologies that follow participant curatorial behaviours over times, university expectations as well as bias - awareness interventions, as means of collecting data about actual behaviour change. Investigating the implications of different cultural regions and across archival traditions can also provide additional understandings of how implicit bias may be locally negotiated. Collaboratively, a more nuanced model could be developed by para-professionals across disciplines (psychologists, archivists and sociologists) to investigate the relationship implicit cognition and unconscious bias, and systemic power relationships involved in cultural curation.

### **CONCLUSION**

The present research provides empirical evidence that implicit bias substantially shapes the curation of cultural archival holdings, operating, in many instances, outside the explicit awareness of the curator. Leveraging the Implicit Association Test, cognitive dissonance measurement indices, and heuristic-based diagnostic surveys, the investigation identified quantifiable latent biases among archivists, especially regarding the selection, contextual framing, and prioritization of materials. The data disclosed a reproducible tendency to favour prevailing cultural narratives while systematically marginalising non-dominant voices. Although these inclinations are unintended, they affect not only the selection of documents but also their description, classification, and interpretative framing in the archival record. Cultural archives' curation cannot be considered a neutral act and is always embedded in spheres of social, political, and psychological engagement. The systematic survey of implicit biases is necessary in order to make these unconscious influences explicit for conscious interventional actions, which affords institutions with more just, inclusive, and ethical archival practices. Acknowledging implicit biases does not nullify professional commitment, but rather enhances it, by making the process more transparent, through accounting. Cultural institutions can intentionally use evidence-based psychological practices to study the invisible cognitive filters that shape historical collection decisions and use appropriate corrective actions.Implications for developing cultural memory structures based on implicit bias requires ongoing research and methodical shift in cultural practices. Future research must take place across disciplines and spaces via longitudinal and comparative methodologies to track how biases are both stable and changing over time. As such research progresses cultural institutions need to move just beyond acknowledging implicit bias to instilling bias assessment as regular archival practice, provide specialized and diverse selection committees, and develop open models of co-curation to develop space for underrepresented voices. The challenge of bias assessment in curation is not simple or easy, and should be regarded as a big project or agenda to deal with - it is just that the action planning will necessarily be reflective and will maintain a cycle of measure, reflect, and act.



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