EXPERT WITNESSES' AND LAWYERS' PERSPECTIVES ON THE USE OF ARCHAEOLOGICAL DATA AS EVIDENCE IN ABORIGINAL RIGHTS AND TITLE LITIGATION

ERIN A. HOGG AND JOHN R. WELCH*

No longer a subject of narrowly antiquarian interests, archaeology[1] is now deeply implicated in the resolution of Aboriginal[2] rights and title conflicts in ways that will define political, economic, and legal futures across Canada and beyond. The role of an expert witness in the courts is to provide an objective, informed opinion on a specialized body of knowledge (Lederman, Bryant, and Fuerst 2014, 784; Paciocco and Stuesser 2008, 184). In order to perform this role, experts are ethically obliged to adopt and maintain an objective, informed outsider's position and to make all reasonable efforts to identify and set aside their biases (Thom 2001, 15; Valverde 1996, 208). The roles of experts are especially important in Aboriginal rights and title cases, where power inequities and other legacies of Canadian colonialism converge directly and consequentially with Indigenous legal and cultural systems (Borrows 2016, 2; Napoleon 2013, 139–44; Pasternak 2014, 148–50). Anthropologists have discussed the challenges of presenting their

* We would like to thank George Nicholas and Rudy Reimer for their thorough review of Erin Hogg's dissertation, which is the basis of this article. Thanks also to our two reviewers for their detailed feedback and suggestions as well as thanks to Paige Raibmon for her excellent comments on terminology. This research was funded by a Social Science and Humanities Research Council of Canada Doctoral Fellowship and with internal funding from Simon Fraser University and the SFU Department of Archaeology.

1 Archaeology is the study of humans through material remains (Hogg, Welch, and Ferris 2017, 189).

2 In Canada, the First Nations, Inuit, and Métis peoples are recognized as Aboriginal peoples in the Canadian Constitution (1982). The term used to describe these groups in international law is *Indigenous Peoples* (United Nations General Assembly 2007). Unlike the term *Aboriginal*, which corresponds to distinct peoples in a Canadian context, *Indigenous* corresponds to all descendants of people, across the world, who inhabited a country or geographical region at a time when people of different cultures or ethnic origins arrived.

opinions to the court (e.g., Cruikshank 1992; Culhane 1992, 1998; Fisher 1992; Thom 2001), and comparable contributions from archaeologists are slowly emerging (e.g., Hogg and Welch 2020a, 2020b; Martindale 2014; Martindale and Armstrong 2020). Because only a few rights and title cases have *not* considered archaeological evidence (Hogg and Welch 2020a), critical assessments of our discipline's roles in courtrooms are in order.

At the same time, as of 2021, archaeologists and other professionals are refining ethical principles for engaging with Indigenous Peoples (e.g., Canadian Archaeological Association 1997; Society for American Archaeology 1996; World Archaeological Congress Council 1990). Substantial guidance is available to facilitate collaborative, equitable, and respectful research and professional relationships (e.g., Atalay 2012; Castellano 2008; Colwell-Chanthaphonh and Ferguson 2008; Ferris and Welch 2015; Harding et al. 2012; Meloche, Spake, and Nichols 2021; Nicholas 2006; Nicholas and Andrews 1997). Nowhere is the importance of principled research conduct brought into clearer focus than when results are submitted for consideration by courts, and few civil proceedings have greater potential consequences than Aboriginal rights and title cases. Aboriginal rights and title, as affirmed by section 35 of the Canadian Constitution, 1982,[3] acknowledge Indigenous Peoples as the original occupants of Canada (*Delgamuukw* 1997, para. 114). The definitions of these rights, and the tests required to prove them, have changed in response to both jurisprudence and scholarship, with many momentous developments unfolding since *Delgamuukw* (1997). As of 2021, Aboriginal title requires proof of continuous, exclusive, and sufficient land occupation (*Tsilhqot'in* 2014), and an Aboriginal right must stem from an integral pre-contact practice that continues to the present (*Van der Peet* 1996).

This article examines the roles of archaeologists and archaeological evidence in Aboriginal rights and title litigation through the lens of interviews conducted with archaeologists who have acted as expert witnesses and the lawyers who hired them. All of the participants currently work or previously practised in British Columbia, a jurisdiction on the forefront, globally, of efforts to address Indigenous sovereignty (Foster, Raven, and Webber 2007; McHugh 2011). Our first goal is to shed light on archaeology's ongoing contributions to legal thinking and

[3] Canada's federal government patriated and amended the Constitution, resulting in the *Constitution Act*, 1982. Lobbying by Indigenous Peoples from across Canada ensured inclusion of Aboriginal rights in section 35, which states, "the existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed" (1982, s. 35(1)).

decision-making as regards Indigenous land rights.[4] Our second goal is to highlight standards, opportunities, and challenges archaeologists encounter in this little-known facet of archaeological practice. We begin by reviewing the roles expert witnesses play in Canadian courts, giving particular attention to Aboriginal rights and title litigation. The remainder of the article discusses results from the senior author's interviews with archaeologists and lawyers. We divide this discussion into two sections. The first outlines the hiring and preparing of expert witnesses from the perspective of both lawyers and experts. The second reviews archaeological and legal perspectives on what archaeological evidence can and cannot do to enable the three tests for Aboriginal rights and title.

1. EXPERT WITNESSES IN CANADIAN COURTS

This section lays foundations for understanding the experiences of archaeological experts by reviewing previous studies and describing the duties of expert witnesses. We introduce the roles of expert witnesses and discuss factors affecting their testimony in Aboriginal rights and title litigation.

Canadian courts use an adversarial model for resolving "factual controversies" pivotal in civil and criminal cases (Paciocco and Stuesser 2008, 1). At trial, parties produce evidence that the *trier of fact* (either a judge or jury) will use to make its decision. *Evidence*, in legal terms, is "data that triers of fact use in performing the fact-finding function" (1) and is subject to specific rules.[5] In law, the same evidence can be interpreted in different ways (either supporting or negating facts). It is argued by opposing counsel and weighed by the trier of fact (Upshur 2001, 7). In science or social science, on the other hand, *evidence* "is an observation, fact, or organized body of information offered to support or justify inferences or beliefs in the demonstration of some proposition or matter at issue" (8). Although there is sound logic behind both definitions, the important distinction, for this article, is the restrictive application of evidence in law, including what constitutes evidence and how much to weigh it.

[4] We intentionally use the phrase *land rights* instead of *land claims* in this article, to correctly situate the burden of proof with the state.

[5] In Aboriginal rights and title trials, evidence includes documents and testimony of lay and expert witnesses (Brown and McIvor 2012, 11; Department of Justice 2018). Since *Delgamuukw* (1997), Canadian courts recognize that the rules for evidence must accommodate oral history as proof of historical facts and allow the trier to give such facts weight comparable to documentary evidence (Lederman, Bryant, and Fuerst 2014, 321).

1.1. The Role and Duty of Expert Witnesses

Expert witnesses are the only witnesses allowed to provide opinion – "an inference from observed fact" – to the court (Paciocco and Stuesser 2008, 184). As the trier of fact cannot be expected to have specialized knowledge on every subject discussed during a trial involving myriad relevant facts, subject matter expert witnesses provide "assistance in knowing what to make of the facts" (184).[6]

Most courts first assess the basic qualifications of expert witnesses and then hear from each party to establish the scope and focus of witness expertise and to assess any objections from the opposing party. Archaeological experts generally have at least one graduate degree and substantial experience in fieldwork, specialized analyses, teaching, and publishing. Once experts have been "qualified" by a court, they are more likely to be asked to serve as experts in the future as they are deemed qualified by precedent.

At trial, an expert witness is first examined in chief. Done properly, this involves a carefully sequenced suite of factual questions to introduce the most relevant content of their report to the trier of fact (Paciocco and Stuesser 2008, 16).[7] With the expert report and testimony in evidence, it is the opposing counsel's duty to cross-examine. Cross-examination often includes questions regarding the expert's credibility (i.e., career); reliability (i.e., their hypotheses); and methodology (i.e., tests and standards employed) (Lederman, Bryant, and Fuerst 2014, 859). Adept cross-examination often includes tactical attempts to cast shadows of doubt regarding the expert's opinions or strategic efforts to discount crucial facts.

[6] An expert's duty is to assist the court (*Criminal Code*, section 657.3). Rules enable their opinions to be admissible when: (1) the trier is unable to make an inference or conclusion without expert opinion; and (2) the expert satisfies the common law and statutory requirements governing admissibility (Lederman, Bryant, and Fuerst 2014, 784). These rules exist in part because of increased use of expert witnesses during the last half of the twentieth century. As it became clear that, instead of operating strictly as impartial "friends of the court," experts were assisting one party against the other, courts moved to require professionalism and to limit bias (783).

[7] In most jurisdictions, the expert prepares and presents to the court a report on her/his proposed testimony (Lederman, Bryant, and Fuerst 2014, 862). This report must be filed with the court, usually before the trial, to assure all parties have access. While testifying, experts can only diverge from their written reports if it is not prejudicial to the other party (863). Experts are allowed to refer to books or other sources to support their opinions, and these are typically also entered into evidence in the form of exhibits.

1.2. Issues with the Use and Testimony of Expert Witnesses

Although precedence and statutory requirements set high standards for expert witnesses, issues often arise with regard to how experts are chosen and how the trier of fact perceives expert testimony. Courts understandably hesitate to give weight to scientific data that derive from specialized methods, especially data that are presented using arcane jargon or that require acceptance of contingent causation and statistical probability and significance (Gold 2003, 231). Many courts are not impressed by factual claims created mainly through peer reviews on the part of experts' intra-disciplinary colleagues (Dwyer 2008, 179; Jasanoff 1995, 205).

There are also issues with how experts are selected and their biases neutralized. Valverde (1996, 208) notes that evidence "cannot appear before the courts on its own steam." Most experts are carefully chosen by a party, then briefed on what is required, and given every opportunity to emphasize facts deemed relevant to their employer (208). An assessment of experts in the United Kingdom, United States, France, Germany, and Italy found that the perceived bias of expert witnesses was less likely to come from the behaviour of the witnesses than from "the conduct of the litigants, in the way that experts are chosen" and in how their testimonies are framed and focused (Dwyer 2008, 369).

1.2.1. Expert Witnesses in Aboriginal Rights and Title Litigation

Concerns with the use and testimony of expert witnesses are well known in Aboriginal rights and title litigation. Expert witnesses have been involved in Indigenous land rights processes since the Indian Claims Commission in the United States (Price 1981). There, expert anthropologists filtered Indigenous perspectives through modern theoretical models, which had great sway in the courts (Ray 2003, 256). However, even as these models became outdated academy contexts, they have continued to be used in litigation (257).

In Canada, expert witnesses have participated in all modern Aboriginal rights and title litigation, starting with *Calder* (1973).[8] Issues with the use and testimony of experts have accompanied these decisions. We review several such issues, including perceived expert bias, the cultural background of the court, and opposing experts.

[8] The Nisga'a Nation sued British Columbia for Aboriginal title to their territory. The Supreme Court of Canada split on the question of Nisga'a title to specific land but, for the first time, recognized Aboriginal title in principle (*Calder* 1973).

The first of such issues is perceived expert bias. Courts have sometimes perceived experts, particularly anthropologists acting on behalf of the Indigenous plaintiffs, as advocates instead of unbiased scientists. The most prominent example is the contentious *Delgamuukw* (1991) trial,[9] in which Justice McEachern simply dismissed the opinions of the plaintiff's anthropologists as advocacy. In a comment about one of the expert witnesses, McEachern (*Delgamuukw* 1991, 130) noted: "it is always unfortunate when experts become too close to their clients, especially during litigation." This critique sparked rebuttals from anthropologists, many of whom emphasized their discipline's essential reliance on knowledge of other people's cultural norms and practices (e.g., Cruikshank 1992; Culhane 1998, 1992; Fisher 1992; Miller 1992; Ridington 1992; Wilson-Kenni 1992). Thom (2001, 13–15) suggests that concerns regarding perceived bias and advocacy typically occur because triers lack the social science training that anthropologists take for granted; experts are thus obligated to teach the triers of fact what they need to know about fundamental concepts, including culturally specific ways of transmitting knowledge, establishing social boundaries, and maintaining control over territory.

The second issue is the cultural background of the court. Social science and historical experts in Aboriginal rights and title cases almost invariably confront biases inherent in courts as intrinsically colonial institutions. This issue may be usefully cleaved into legal basis against Aboriginal rights and title and the divergence between social science and legal thought. Aboriginal rights and title scarcely existed as an area in Canadian law before *Calder* (1973). Since the finding in favour of the Indigenous plaintiffs in that case the courts have had to catch up, creating guidelines and legal tests.[10] Even as these shifting guidelines have "served to focus litigation-oriented research" (Ray 2003, 263), they have too often been grounded in outdated theories or models of social reality.[11] The

[9] The Gitksan and Wet'suwet'en Nations claimed Aboriginal title to traditional territory in British Columbia (*Delgamuukw* 1991).

[10] Formal land claims were presented in the nineteenth and early twentieth centuries, but a 1927 amendment to the *Indian Act* made it illegal for Indigenous Peoples to raise funds or hire lawyers for land claims (Giokas 1995, 50; Thom 2001, 14), and a parliamentary committee determined that Aboriginal title in British Columbia was extinguished (Foster 2007, 70). Not until the 1951 amendments to the *Indian Act* were Indigenous Peoples able to take their land claims to court (Giokas 1995, 62–68; Foster 2007, 70).

[11] An example is the test for Aboriginal rights, based on the idea that culture can be broken down into distinctive elements, each of which can then be ranked according to its significance. In partial response, some legal scholars have observed that Aboriginal rights should be envisioned as emerging more from Indigenous law than from Western concepts of property and group identity (McNeil 1989, 241; McNeil 1997).

second issue, closely related to the first, is the challenge for the Canadian legal system to interpret evidence originating from unfamiliar temporal and cultural contexts (Asch and Bell 1994, 505). Few judges are familiar with the details of Indigenous societies, lifeways, or histories, and they may struggle to escape the confines of normative perspectives and to grasp the implications of evidence relating to Indigenous land use (Bell and Asch 1997, 73; Thom 2001, 14).[12] To add to this challenge, Canadian courts are designed to deal with time-certain historical facts and may be ill-equipped to interpret social facts rooted in Indigenous contexts and time beyond memory (Banks 2008, 72–73).

Finally, social science experts, including archaeologists, often find themselves in opposition to one another. This is not unique to Aboriginal rights and title litigation, but it can add complexity to these cases because of the nature of the evidence at issue. Anthropological and archaeological evidence is generally grounded in close and sustained studies of geographical and cultural contexts. Banks (2008, 70) suggests that experts for land rights plaintiffs, who must convey the burden of proof, often offer opinions based on detailed reports on field studies, documentary analyses, and oral histories; Crown experts' opinions, in contrast, are often based on critiques of opposing experts' research assumptions, methods, models, or conclusions. The Crown's expert anthropologist in *Delgamuukw* (1991), Sheila Robinson, has been criticized for focusing her testimony on questions about a small number of facts selected to support the Crown's position and undermine the claimants' (Culhane 1992). In contrast to the academic process, expert testimony is not subject, strictly speaking, to peer review. Qualified experts are, in effect, licensed to "push to the limit of the interpretations" (Ray 2003, 271).

The next section of this article builds on previous scholarship and new interview data to examine the experiences of archaeological experts and the lawyers for whom they worked. Banks (2008) examines how oral knowledge is treated by Crown anthropological witnesses. Kristmanson (2008) assesses the use of archaeological evidence with a focus on Mi'kmaq claims in Newfoundland. McLellan (1995) reports on interviews with archaeological expert witnesses and their experiences in court. Miller (2011) discusses courts' understandings of oral histories. Our review, in contrast, compares perspectives from archaeologists

[12] For example, Justice McEachern, in the Delgamuukw (1991) trial, was unable or unwilling to apply cultural relativism in order to appreciate the sophistication of Gitksan and Wet'suwet'en land use institutions, leading to his determination that the expert anthropologists were biased in favour of the Indigenous plaintiffs (Asch and Bell 1994, 545; *Delgamuukw* 1991, para. 251; Ridington 1992, 16).

and lawyers to reveal how archaeologists and archaeological data have contributed to the adjudication of Aboriginal rights and title litigation and how these contributions might be strengthened.

2. EXPERIENTIAL EVIDENCE: RESULTS FROM INTERVIEWS WITH ARCHAEOLOGISTS AND LAWYERS

In order to gain clarity on archaeology's contribution to Aboriginal rights and title jurisprudence, the senior author interviewed twenty-one archaeologists and nine lawyers between March and July 2018.[13] The archaeologists provided background and experiential data that were not available from reading court decisions and expert reports; the lawyers offered insights into the purpose of archaeological evidence and the roles of experts. Interviews were semi-structured, with open-ended questions evaluating the process of acting as an expert witness (for archaeologists) and the process of working with an archaeologist (for lawyers).[14]

2.1. Participant Details

We contacted twenty-eight archaeologists and received responses from twenty-one, a response rate of 75 percent. All but two archaeologists lived in British Columbia, and at least two participants had testified in trials outside of the province.[15] Six archaeologists held academic positions; fifteen worked in the cultural resource management (CRM) industry.[16] Eighteen archaeologists had acted as expert witnesses in land rights-related litigation. Three had participated only in data collection and analyses for particular cases. This experience included interactions with lawyers, enabling them to comment on research processes, methodologies, and evidentiary standards. Five archaeologists had acted as experts for a single case, nine had acted as experts between two and five times, and four had acted as experts in at least six cases. Although our sample size is too small to make inferences about the careers of archaeologists who act as expert witnesses, we can conclude that once an individual is a court-certified expert, especially if they end up on

[13] Participants' identities are confidential.

[14] The authors received ethics approval for the interviews through Simon Fraser University's Office of Research Ethics. For more information on SFU's ethics process, see sfu.ca/research/resources/research-ethics.

[15] In the interests of maintaining confidentiality and avoiding discussion of privileged information, we avoided discussions of specific cases except with the informed consent of the participant.

[16] CRM is research to evaluate the significance of archaeological sites and other cultural resources threatened by proposed land alterations.

the winning side, that person generally attracts additional offers to participate in cases.[17]

We contacted nineteen lawyers and received responses from nine (47 percent response rate). Participants were selected if they had worked with an archaeological expert witness for an Aboriginal rights or title case. Some archaeologists provided us with the names of lawyers with whom they had worked, but we also contacted known Aboriginal rights and title litigators. All the lawyers worked in British Columbia, but some had worked on cases in different provinces or at the Supreme Court. Six lawyers worked in private practices, acting as legal counsel for First Nations. Three lawyers worked for the provincial or federal Crown. The next sections review lawyers' and archaeologists' experiences of the processes of selecting, hiring, and preparing experts.

2.2. Choosing an Expert

Before a litigation team hires any expert, it must first decide if experts are actually required and, if so, from what fields. One lawyer (Participant 10) described this process as: "you're trying to figure out how their skills complement each other." The list of required experts may change over time as a case evolves. In addition, experts may be chosen for different roles within the litigation process. One strategy is to have two teams of experts: the first to advise the team preparing the case for trial; the second to testify. Such separation allows the trial expert(s) to avoid being "compromised as an advocate" (Participant 10).

Experts, in general, are chosen for two reasons: (1) what is represented in their CVs, and (2) their ability to communicate. As all experts must be qualified in order to testify, their CVs must reflect their supposed expertise. One lawyer (Participant 12) stated that it was "almost like a job interview type analysis. What's the person's educational background, how long have they been practising?" Lawyers will typically look for a PhD and "a track record of peer-reviewed publications" (Participant 19). For archaeology, "a long history of being a consulting archaeologist repeatedly hired by a variety of parties" is also relevant (Participant 19).

Lawyers commonly seek experts who have worked in the Claim Area (Participant 23). Lawyers working for a First Nation might seek archaeologists who have prior relationships with that nation. Another strategy is to "roam around the literature about Group X and find out who has written about [them], and whether they're able to help" (Participant 19).

[17] Due to the innumerable issues affecting case outcomes, we exclude references to *success* and *winning*.

Once a lawyer has an established rapport with an expert, they might select that individual even if the expert does not have experience in the Claim Area. One lawyer (Participant 23) stated that they often ask the same archaeologist to work for them, as "his methodologies are good and he's very credible."

The second aspect of hiring an expert is their ability to communicate and provide their opinion to the court (Participants 18, 21). All of the lawyers emphasized that they wanted "somebody who [would] actually be able to communicate the ideas from their field too, in a way that will be helpful to the court" (Participant 21). A big, polished CV is irrelevant if the expert is unable to communicate effectively. One way to ensure this "is to find people who already have experience testifying, as then they have a record of how credible they've been and how the court has dealt with their previous testimony" (Participant 10).

Lawyers' strategies for choosing expert witnesses have clear parallels with the archaeologists' experiences. The majority of archaeologists were directly recruited by lawyers. They were typically chosen because they were recommended by other archaeologists who were already working in the Claim Area or were known by the legal firm. Six of the archaeologists had been asked to be experts as part of their direct work for a First Nation, a CRM firm, or the government (either as an expert witness or to collect data for an expert). Most who had acted as an expert more than once were asked to participate again because they were known to be credible or had rapport with a lawyer.

2.3. Crown Experts

One issue for Aboriginal rights and title litigation is experts' sympathies towards First Nations and their perceived unwillingness to work for the Crown. Although many of the interviewed archaeologists had been experts for both First Nations and the Crown, the three Crown lawyers we interviewed all emphasized that it can be challenging to find experts to work for them. One lawyer provided two reasons: (1) expert disagreement with Crown policy, and (2) expert perception of risk to future employment by First Nations (Participant 22). Another lawyer stated:

> Understandably, experts in fields like ethnohistory and ethnography and archaeology and anthropology, who have built their careers by working with First Nations, are not keen to work for the Crown in litigation when that is an adversarial situation … [T]hey would often see it as, I don't know, perhaps a betrayal or perhaps they would just feel uncomfortable about it ... I think they reasonably fear it might

> make their working life difficult if they were seen as taking a position that was not fully supportive of First Nations. (Participant 21)

This sentiment was echoed by an archaeologist who had acted as an expert for both First Nations and the Crown:

> I think there was always a question of trust. I think the First Nations, especially if you've known them and you've worked with them or you've worked in their area, there was an expectation that you would, if not side with them … at least you wouldn't be actively involved in an action which they perceived as being contrary to their interests. (Participant 29)

These sentiments can make it challenging for the Crown to find credible expert witnesses, forcing Crown lawyers to sometimes hire less-qualified experts (Participant 21) or to rely on in-house research expertise (Participant 22). However, one lawyer also emphasized that the court typically appreciates experts who have worked for a variety of parties because, if they have only ever worked for First Nations (or only for the Crown), then "their objectivity is open for questioning because the risk is that they have confused their objective role as researchers or scholars with their personal advocacy for the cause that they've been retained to support" (Participant 19).

Although some archaeologists and experts in other fields feel uncomfortable working for the Crown, all lawyers emphasized that expert neutrality is essential. Although experts are hired by one party, their role is to provide their *own* opinion to the court and to ensure that that opinion is both supported by the corpus of relevant facts and as free as possible of bias. These standards were echoed by archaeologists who had worked for both the Crown and First Nations (Participants 11, 29, 30). One archaeologist (Participant 11) stated: "I mean, our sympathies may be with the First Nations but we're there to provide facts and honest information and, if the case is good, the First Nations are going to win it."

2.4. Preparing an Expert

Once legal counsel has hired an expert, they typically have a conversation "to get a sense of the issues" (Participant 10). Personal discussions help lawyers find out what the expert knows and what their opinions are (Participant 23). It can also help the lawyer refine questions for the expert to answer in their report (Participant 10). As lawyers seldom have

technical knowledge of archaeology, they rely on experts to "tell us how they're going to assist us" (Participant 22).

When the legal team has a sense of what the expert's opinions are, it prepares a letter that lays out specific questions for the expert to answer and the rules of procedure (Participants 10, 18, 22, 23).[18] One lawyer (Participant 10) emphasized that these questions "are designed to structure the report and to focus the expert's work." The letter also helps to reduce costs to the client and to keep the expert on task. Several of the lawyers said they try to deal with experts in a neutral way (Participant 23). Communication between legal counsel and an expert is privileged and confidential before a trial commences; however, once the expert report is entered in court, the "whole process of your communication becomes public" (Participant 20). The discovery process requires parties to afford their opponents access to all notes, correspondence (including email), and other communications. One lawyer (Participant 20) stated:

> If I write a letter to the witness saying please dig down ten feet, but don't go any further because we don't want to find anything down there that scares us, that letter will become part of the record … [and] that kind of letter would be shown in front of the court as a way to undermine the witness' evidence.

Archaeologists' experiences again complement those of lawyers. After sitting down with lawyers, one archaeologist said they received "basic questions they wanted me to address" (Participant 9). It was then up to the archaeologist to "marshal the archaeological evidence, in the best way that made sense with my professional knowledge, to answer the questions" (Participant 9). Depending on the case and the legal counsel, archaeologists might be provided with either broad questions or very specific ones. The archaeologist might have to explain what types of questions archaeology *can* answer or might have to create their own questions to structure their inquiry in a way useful to the proceedings (Participant 28). The archaeologists interviewed were typically hired to work on a case that was already under way, but at least one archaeologist was hired to do long-term research on Aboriginal rights and title, with the expectation that the data collected would be used in one or more future cases (Participant 29). Archaeologists worked on their own or hired other archaeologists to help them, but in one case the archaeologist

[18] Expert witness work in British Columbia is systematically transparent: all files, notes, emails, and final reports are presented to the other party.

worked within an interdisciplinary team of experts with overlapping research agendas (Participant 26).

2.4.1. Turning Data into Evidence

Lawyers and archaeologists spoke about the process of turning archaeological data into legal evidence, both in the expert report and while testifying. Lawyers emphasized the need to "ensure that the expert's opinion is based in fact and walked through how he [the expert] came to that opinion" (Participant 18). This process is not unique to archaeologists but something counsel does for all experts. Experts need to ensure that the facts they state are backed up in accord with legal standards – clear, cogent evidence that supports probability or proof. Lawyers assisting experts to get to this level of fact do so by asking experts questions about their data, assumptions, and frames of reference. One lawyer said that they ask experts about what the important pieces of data are, where the information gaps are, and how the expert is attempting to fill those gaps in their research and report (Participant 10).

These processes, identifying and explaining assumptions and adding links to inferential chains, are familiar to good archaeologists. Experts, particularly those who are involved in more than one case, emphasized two essential and challenging duties they discharged: (1) translation of archaeological research into evidence capable of withstanding court scrutiny, and (2) stepwise description of research processes and data analyses in a way that eliminated all reasonable doubts regarding the integrity of the facts.

Both legal and academic opinions are based on the same structure: observation to data, data to patterns, and patterns to interpretations. However, experts' opinions need to be grounded in defendable evidence, and experts need to be prepared to defend the integrity of their qualifications, data, and analytic methods. For example, if an expert has radiocarbon dates for a site, they will most likely be asked why they only have that number of dates and why they did not take more samples (Participant 29). Experts need to remember that everything they write in their reports will be scrutinized by the opposing counsel and, they need to keep that in mind during their research process (Participant 6). Good experts are able to think rigorously, objectively, and reflexively about their research and its presentation. Arguably, all research results, no matter who the intended audience, should be put through these processes, but research prepared for legal contexts will certainly be examined closely.

2.5. Testifying

Once the report is complete and entered in evidence, lawyers must prepare the expert for testifying. All lawyers emphasized that they worked with experts to prepare them for cross-examination. Typically, this took place over at least one, if not several, meetings in which they went over areas where the expert was likely to be challenged and discussed how to approach those areas: "You want your experts to not be surprised" (Participant 10).

Lawyers also emphasized different strategies for helping experts understand their roles during cross-examination. One lawyer (Participant 10) said that they try to "make sure that they understand the purpose of their evidence," if their evidence is essential for the trial, more as a rebuttal for an opposition claim, or more of as background. This helps the expert "understand the role that they're playing as well because that leaves them better equipped to understand their evidence." Another lawyer (Participant 21) stressed mandates to remind the experts of their role: "their job isn't to help me and/or try to anticipate where the person [opposing counsel] is going. It's just to answer the question." The expert is there to provide their opinion to the court, not to have conversations or debates with the opposition or judge.

Lawyers spoke about how they prepared to cross-examine experts, often by attempting to acquire background knowledge. One lawyer stated that they try to remind experts that, even though lawyers will have read up on their discipline, the expert is the authority on their subject (Participant 18). One lawyer (Participant 21) shared a story of cross-examining an expert, who stated how impressed she was with their knowledge of their field, to which the judge replied, "yes, [expert], they all know a lot about whatever the topic is very briefly, and then, after the trial is over, they forget all about it."

Perhaps needless to say, archaeologists' experiences were distinct from that of the lawyers. "Going to court can be a very vicious kind of experience" (Participant 26) and can be challenging for anyone, particularly first-time experts. Having to defend one's credentials and professional capacities can be gruelling. Archaeologists were also quick to note that "testifying is very personal, and everyone will have different experiences" (Participant 29).

Although all of the lawyers emphasized that they prepared their experts to testify, archaeologists spoke to a spectrum of preparation strategies on the part of lawyers. Some experts felt that they were not prepared and were expected to figure it out when they got to court

(Participants 1, 28). At the other end of the spectrum, some experts spent hours rehearsing their testimony with attorneys who were "training you to be the most successful that you can be" (Participant 29). Different lawyers and cases required different strategies for preparing experts, but from the perspectives of archaeologists preparing to testify for the first-time, the process was uncomfortable (Participant 1).

Archaeologists had varied experiences testifying, largely depending on how they were treated under cross-examination. One archaeologist (Participant 2) stated that, as their sister is a lawyer, they basically knew what they were getting into. Another archaeologist (Participant 29) felt that the experience of testifying was largely based on personality: "I think a big factor there is how personally you take what happens." Experiences testifying also varied on the basis of how expert witnesses were treated by the judge and the opposing counsel. Several archaeologists found the experience worthwhile and felt they had been treated with respect as persons and as authorities (Participants 4, 6, 11, 29, 30). One shared a story of realizing their capacity to handle cross-examination:

> The whole key turning point, when I went, "oh phew I can do this," was when the Crown lawyer was really going away and said, "you wrote this all yourself?" and I said, "yes, I did," and she said, "well we've got a legal team, a whole team of researchers checking up," and she stopped, and sort of slumped, and said, "and most of them are your ex-students." So, I knew at that time she wasn't going to bait me too badly. (Participant 4)

Other archaeologists found the experience overly adversarial or intimidating (Participants 1, 26, 28). Several shared experiences of feeling personally attacked. As experts must first be certified as such before they can testify, their initial experience of cross-examination usually occurs when the opposing counsel tests their qualifications. One archaeologist (Participant 1) stated that they were attacked for being unscientific as they had a degree in anthropology, not archaeology. To counter this, the expert pointed out an article they had published in *Science*, saying, "*Science* is the most reputable scientific peer-reviewed journal in the world." Another archaeologist (Participant 28) stated that "some judges were very, very polite and so forth but some of the other judges were fairly harsh," making testifying even more intimidating. Finally, one archaeologist shared that the only way they were able to get through cross-examination was by remembering who had testified:

> I had a lot of compassion for the chiefs who had been on the stand before me. That's what gave me the courage. I thought, I'm here, I did the research, I'm presenting the evidence on behalf of the chiefs and if they can sit up here and be cross-examined, then I can find the courage. (Participant 26)

Because experiences differ depending on the person testifying, the evidence being addressed, the opposing lawyers, and the case itself, no overall assessment about archaeologists' experience is possible. Canadian law is intrinsically adversarial, with generally more at stake than is the case with regard to the peer discourse in which academics participate during publication, career, and grant proposal review processes. Although lawyers may feel that they have prepared an expert, testifying is inherently fraught with uncertainty both in terms of what happens on the stand and in terms of the weight the court allocates to the expert's facts and opinion.

This section outlines the hiring and preparing of archaeological expert witnesses from the perspective of both lawyers and experts. This includes choosing an expert, the issues of Crown experts for Aboriginal rights and title litigation, preparing an expert, and testifying. The archaeologists and lawyers that we interviewed emphasized the importance of clear communication and experience in one's research area. This includes the ability to translate archaeological research into evidence capable of withstanding court scrutiny. Lawyers described the strategies they used for preparing their expert witnesses to testify, and archaeologists described their experiences at court. Expert witnesses' experiences testifying ranged from adversarial to enjoyable, depending on their prior preparation, the subject matter at hand, and their treatment under cross-examination.

3. ARCHAEOLOGICAL EVIDENCE IN LITIGATION

Archaeological research can identify past use and occupation, sometimes with great temporal and behavioural accuracy. However, it often falls short in providing the precise and unambiguous evidence courts most cherish. This section examines the advantages and limitations of archaeological evidence from archaeologists' and lawyers' perspectives.

3.1. Advantages of Archaeological Evidence

Both lawyers and archaeologists emphasized that archaeological data have roles to play in adjudicating Aboriginal rights and title. Archaeological data can be key evidence of occupation and use of a territory, such as in *Meares Island* (*MacMillan Bloedel v. Mullin; Martin v. R. in right*

of BC [*Meares Island*] 1985)[19] and *Tsilhqot'in* (2014).[20] One archaeologist emphasized:

> We're demonstrating where people were and [that] over … the historic [and] … pre-contact times that yeah, people are here, people are all over, they're using these resources. I think it's invaluable for that because it's easy for us to also lose sight of, well, we might not be able to answer which language … people are speaking that left these tools, but … that, yeah, there was people here, it wasn't a blank empty wilderness. (Participant 11)

Other archaeologists (Participants 1, 3, 5, 24, 29) agreed that archaeological data are essential evidence of continuous and sufficient occupation. Courts have also concurred. In the single most important case, *Tsilhqot'in* (2007), archaeological data demonstrated five hundred years of Tsilhqot'in occupation in the Claim Area and helped match mapped archaeological sites to villages recorded in historical documents (Hogg and Welch 2020b; Participants 1, 11, 24). In the *Meares Island* trial, culturally modified trees (CMTs) indicated continuous use of the island, defeating the Crown argument that a maritime culture would not occupy or use inland areas (Participants 11, 29, 30).

Archaeological data can also be used to document specific practices, such as fishing:

> There are certain locations of sites and if they have … radiocarbon dates or styles of artefacts that show that there is a long continuous history at a … known fishing location even into today. Like it's looking at a sort of continuity from the present back into the past that provides, I think, the most valuable information, not only site locations but … certain archaeological types of technology, like fishing weirs or fish hooks … recovered in those fishing locations. And then also faunal remains of the different types of species that were utilized. That's really good data that shows … those resources were important, and they were used, and they've been used for a very long time. And that there is very much a well-developed, established technology through thousands of years of utilizing those resources. (Participant 28)

---

[19] *Meares Island* (near Tofino, British Columbia) started with a successful request for an injunction by the Clayoquot and Ahousaht Bands. The subsequent title case was adjourned by agreement from all parties (Nuu-chah-nulth Nation, MacMillan Bloedel, British Columbia, and Canada) in part because of the strength of the archaeological evidence presented at trial (Stryd and Eldridge 1993, 190).

[20] The Tsilhqot'in Nation claimed Aboriginal title to land in central British Columbia. The Supreme Court granted Aboriginal title, the first such declaration in Canada.

Archaeological data identifying ancient fishing sites, technology, and remains of specific species offer the sort of detailed evidence that cannot be legitimately contested by the Crown (Participant 4).

Lawyers also noted archaeology as a source of evidence of occupation and use. One lawyer (Participant 20) suggested that this is "the first and most significant contribution of archaeology to the legal framework": Archaeology is able to transform the Canadian imagination. From thinking of the wilderness as being an uninhabited place to being a place where, in fact, there has been continuous and intense Aboriginal occupation from before the time of Europeans, from long before. The insight that archaeology provides is fundamental to the legal and even the political support for the idea of Aboriginal rights and title (Participant 20).

The same lawyer spoke of experience with specific cases in which archaeological evidence illustrated the extent of territorial occupation and use. In *Tsilhqot'in* (2007), archaeological evidence of pithouses indicated that, although there was a very small population for the large territory, people "were everywhere." Likewise, archaeological evidence of CMTs on Meares Island indicated "that every square inch of the inland area was used thoroughly in a sustainable way over the centuries" (Participant 20).

Comparable views were expressed by other lawyers. One observed that archaeology is a potent tool "to show that there was human existence at this place, and dating it" (Participant 23). Archaeology is also uniquely qualified to establish time depth, to "paint a picture of the way of life of the people" (Participant 10). Archaeology is "objective in that it is grounded in things that have an actual physical existence" that extends into antiquity (Participant 21). According to one lawyer (Participant 12), "you just can't prove your argument" without archaeological evidence.

Lawyers have been known to take advantage of archaeology's tangible evidence by presenting ancient belongings in court. Two lawyers (Participants 18, 20) explained how they had presented artefacts so that the judge could see and touch the evidence: "when you've got the abrader in your hand, it makes people real" (Participant 18).

Several lawyers said that they saw "no particular piece of evidence as being able to answer a question by itself" (Participant 10). In this sense, lawyers treat archaeology as one of many puzzle pieces needed to meet the tests for Aboriginal rights and title. Archaeology's contributions of "physical evidence of antiquity on the land is a fundamental pillar" in claimants' cases (Participant 18). Although archaeology on its own is probably not sufficient to prove Aboriginal title or rights, when combined

with other evidence it "can be a valuable tool in helping us put together the whole picture" (Participant 10).

3.2. Limitations of Archaeological Evidence

All participants interviewed spoke of archaeology's limitations. For many, a critical problem is the inability of archaeological evidence to identify and track ethnicity (Participants 4, 6, 7, 8, 11, 25, 29).[21] Even when there is evidence to pinpoint a claimant group or a population replacement based on changes to house type or toolkits, it can be challenging to convince a court that such evidence signals either the persistence of a specific ethnic group or the arrival of another (Participants 8, 28). Even in instances in which archaeologists may agree that a change in house shape is a clear indication of group replacement, their assumptions and logic may not be deemed sufficient by the court (Participant 8):

> We have to be able to stand up in court and say, this is why houses are important here and pottery is important there but pottery is not important here. And houses are irrelevant over there … What is important? What are the patterns? How do we know the pattern is real? Those are the things that I think archaeologists are less comfortable doing. (Participant 8)

Despite these challenges, there are examples of successful communication of archaeological evidence of group continuity. In *Tsilhqot'in* (2007), the judge agreed with much of the archaeologists' evidence for Tsilhqot'in, not Plateau Pithouse, occupation (Hogg and Welch 2020b).

Lawyers involved in land rights cases are well aware of the limits of archaeological evidence. One lawyer emphasized that, while archaeological data may be able to show very deep Coast Salish roots in Greater Victoria, if the goal is to prove exclusive occupation by a specific group, like Songhees, "the information is not helpful at that level" (Participant 10). Archaeological evidence *can* show occupation and use but often *cannot* show that the material culture left behind was made by the ancestors of the group currently claiming the territory (Participants 10, 18, 19, 20, 21, 22, 23). This limitation has been at issue repeatedly in court (Participant 19). However, when archaeological evidence is paired with other forms of evidence that *can* indicate ethnicity (such as ethnographic or historical

[21] Jones (1997, xiii) defines *ethnic group* as "any group of people who set themselves apart and/or are set apart by others with whom they interact or co-exist on the basis of their perceptions of cultural differentiation and/or common descent." *Ethnicity* is defined as "social and psychological phenomena associated with" group identify (xiii).

evidence), archaeological evidence remains vital "because it does show the extent of human existence" on and in the ground (Participant 23).

One participant posed questions regarding whether it is reasonable to expect to "find material culture evidence for the practice of a right," and whether it was possible to "demonstrate that material culture is associated with that right and not with something else" (Participant 29). Some archaeologists noted a limited role for archaeological data as evidence for the tests for Aboriginal rights, referencing that the strengths of archaeological data as evidence of fishing are not replicable for other activities indicating sufficient land use.

Trade and exchange are well-documented mechanisms for using diverse terrestrial and coastal resources to maintain group boundaries and to sustain local and regional social and economic systems. Archaeological data often show that objects, such as dentalia shells or obsidian, were transported, but seldom specify the mechanism (i.e., direct procurement, informal exchange, formal trade, plunder, etc.). Trade in foodstuffs or other organic items is less likely to register in the archaeological record (Participant 4). Participant 29 noted that many pre-contact activities may not leave material indicators, limiting archaeology's capacity to offer full and detailed inferences about land uses. Several archaeologists pointed out that considering archaeological data in tandem with other evidence, such as oral histories and explorers' accounts of trading, enables broad and reasonably detailed accounts of Indigenous land use (Participants 4, 15, 16).

The archaeologists emphasized that fieldwork, especially excavations and follow-up analyses, is expensive and time consuming (Participant 11). Archaeologists have not always been clear in communicating to counsel the investments of time and money required to collect primary data. One archaeologist (Participant 29) stated that understanding costs is part of designing good research. Another (Participant 11) described fieldwork as a "two-edged sword," meaning that if one party in a case decides to do fieldwork but doesn't find what they were searching for, the other party is likely to exploit that failure in court. Similarly, the choice not to gather additional data entails reliance on available evidence. In the *Delgamuukw* (1991) trial, for example, archaeological fieldwork sponsored by the First Nations plaintiffs failed to find a village site referenced in oral history.[22] The Crown presented this in court to discredit the oral

[22] Oral histories include "cultural narratives such as origin stories, myths, and legends that are passed down from generation to generation orally as cultural knowledge" (Weisman 2014, 5585–86).

history, obliging the plaintiff to argue that additional fieldwork would likely have discovered the village (Participants 18, 26):

> If I had another $200,000 more, I would have had the archaeologists go around to many different places … [I]f we'd been able to triple or quadruple the number of days, I'm confident we would have found something. But, I mean, these things are all vastly conditioned by the available resources … [A]rchaeology is very expensive. (Participant 18)

All lawyers recognized the cost of doing archaeological research, but some took issue with the occasional *lack* of return on investment. Changing sea levels and other environmental conditions, the lack of preservation over time, and the uneven scope, focus, and quality of archaeological work all contribute to incomplete and equivocal archaeological evidence (Participants 10, 13, 21, 23). One strategy to mitigate this concern is to limit the use of archaeology. Several of the lawyers interviewed affirmed that evidence can only be useful when it exists and that not all rights and title issues require archaeological experts (Participants 10, 18). Where "a lot of the occupation was very light on the ground" or the archaeological research was "nothing impressive," counsel would be unlikely to feature archaeological research (Participant 10). Cases in British Columbia suggest archaeological evidence is most beneficial in coastal areas with large village sites, evidence of fishing, clam beds, and funerary evidence; it is less useful in areas lacking robust and well-documented material evidence (Participant 10). History to date has proved the general rules that, (1) cases that include archaeological evidence use it for good reasons, and that (2) litigation teams seldom include evidence, especially archaeological evidence, not clearly relevant to pivotal legal tests.

This section describes archaeological and legal perspectives on what archaeological data can and cannot do as evidence in Aboriginal rights and title litigation. Archaeological data can be excellent evidence of the extent and time depth of occupation. In this sense, it can be key evidence for Aboriginal title, helping to answer the legal tests for continuous and sufficient occupation. However, archaeology is not always useful, particularly in situations where pre-contact activities may not have left material indicators or in areas where limited archaeological research has occurred or preservation is limited.

4. CONCLUSIONS: ISSUES FOR PROSPECTIVE EXPERT WITNESSES

Expert witnesses provide objective facts and informed opinions to aid courts in understanding a specialized body of knowledge. This article assists archaeologists, lawyers, and society at large in appreciating the challenges and opportunities expert archaeologists face in structuring and presenting data, analyses, and inferences to meet evidentiary specifications. The results of interviews with archaeologists and lawyers reveal that archaeologists who have acted as expert witnesses generally understand their role as objective outsiders and stick to it, regardless of whether they are employed by an Indigenous plaintiff or the Crown defendant. The archaeologists interviewed appreciated their duty to provide informed opinions based on sound research; the lawyers spoke to the importance of avoiding any appearance of biases in their experts' reports and testimonies.

Although archaeological data can act as excellent evidence for Indigenous land rights, there are two underlying issues that need to be further discussed: (1) the discipline of archaeology is not always adept at defining patterns in space and time or testing its assumptions and hypotheses and (2) there are differences between the way that evidence and fact are understood in social sciences versus in law.

The archaeological record speaks directly and consistently to the fact that an absence of evidence does not equal evidence of absence. In addition to sampling biases that may restrict where archaeological investigations take place, not all cultural materials preserve through time. Archaeologists have recognized potential biases in their methods and analyses, both in presentation and interpretation, for decades (e.g., Beck and Jones 1989, 244; Binford 1977; Burke, Lovell-Jones, and Smith 1994, 20; Hegmon 2003, 224; Knapp 1996, 152). Where archaeologists choose to conduct research, the sampling and analytical strategies they employ, and the types of data they collect, all lead to various prejudices. Theoretical strategies, such as processual archaeology (Binford 1962, 1977; Clarke 1973), attempted to reduce bias through scientific and objective procedures. More recently, concepts from post-processual archaeology have encouraged archaeologists to be "critically aware" of their potential biases and the implications of archaeological research (Hegmon 2003, 224).

Although logic is common across both archaeology and law, what is different is how logic is framed. Legal causality is not scientific certainty, and a fact in law is a finding made within a moral and normative context

(Paciocco and Stuesser 2008, 1). Scientists, including archaeologists, tend to assume that facts are raw data and that the same data, analyzed using similar methods, should yield similar results (Kandel 1992, 3–4). This is irrelevant in law, where the judge serves as the fact-finder and truth is determined following the airing of competing viewpoints (Kandel 1992, 4; Miller 2011, 38).

When combined with the foundational importance of sampling and representation in archaeological data, there can be major challenges to presenting archaeological evidence in the court. For example, once facts are in evidence they can be used very differently: archaeological experts have pushed the trier of fact to favourably consider faulty evidence (e.g., *Ahousaht* 2013);[23] defendants have used plaintiffs' research against them (e.g., *Lax Kw'alaams* 2011; Martindale 2014).[24] Fundamental differences between how truth is conceived in legal and academic spheres can be challenging for the trier of fact in assessing expert evidence (Dwyer 2008, 12; Gold 2003, 231; Jasanoff 1995, 44, 205; Kandel 1992, 4).

What can archaeologists do to prevent their research from being used in unforeseen ways? Our interviews and analyses suggest that archaeologists should: (1) be cognizant of the fact that any data relevant to land use and occupancy is, especially in British Columbia, subject to legal use and evaluation and (2) ensure that our research methods, analyses, and final products are based in rigorous and objective standards. As Kandel (1992, 4) emphasizes, "anthropologists [including archaeologists] understand that their expert insights must be comprehensible to, and will inevitably evaluated within, the rational framework of the law."

Lawyers need archaeologists to translate our data into legal evidence. Archaeologists need lawyers to ensure that their expert reports and opinions are grounded in clear, relevant evidence. Experts have to be prepared to defend their research and explain their methods and results to judges, who seldom know much about the discipline. To hold up in court, research "needs to have integrity and credibility" (Participant 19). Archaeologists need to know the limitations of their data and to either work around those or acknowledge them as hindrances rather than fatal flaws (Participant 18). It is no exaggeration to note that archaeology is deeply implicated in highly consequential processes involving resolutions

[23] The Nuu-chah-nulth Nation of Vancouver Island claim to their traditional territory resulted in an affirmation of their Aboriginal right to fish and to sell fish, except for geoduck (*Ahousaht* 2013).

[24] The Lax Kw'alaams Nation Aboriginal rights claim to a commercial fishery in their traditional territory on the north coast of British Columbia was unsuccessful (*Lax Kw'alaams* 2011).

of land rights and that future jurisdictional maps, particularly in British Columbia, will reflect the results of expert archaeologist opinions.

Just as archaeology and law are responding to shifting societal interests and values regarding Aboriginal land and resource rights and title, so, too, is the disciplinary makeup. Of the twenty-one archaeologists interviewed, nineteen identified as men and two as women. Although this obvious gender imbalance in part reflects historical inequity in senior ranks in the discipline (Goldstein et al. 2018; Speakman et al. 2018), it raises questions about who is more likely to be selected as an expert witness and respectfully treated during courtroom proceedings, especially cross-examination.[25] Gender balance among expert witnesses in general and archaeological experts in particular is likely at least a decade away, but it is worth noting that 71 percent of interviewed archaeologists worked in the cultural resource management industry, where disparities in participation have dissipated.[26] As women become at least proportionally represented in archaeology's senior ranks, more women will be selected as experts. At least as important, courts will increasingly be called upon to qualify academically and culturally trained Indigenous people as experts.

The privileges that archaeologists enjoy via legal rights to access, and social licences to interpret, the material remains of past land uses translate into solemn responsibilities to use our data, expertise, and opinions whenever law or society call upon us. Expert witnesses from all disciplines are advised to recognize and uphold such obligations by doing their best to explain their research to the court, to remain implacable despite the adversarial nature of testifying, and to defend their expertise and opinions. For the increasing numbers of archaeologists with working relationships with claimant Indigenous nations, special care must be taken to minimize all indications of bias and uses of their data in unjust ways. Here, at last, legal and academic aims converge in mandates for all archaeologists to assure that our data collection and analysis methods, as well as our inferences and interpretations, meet rigorous standards

[25] Differential treatment of male and female expert witnesses include perceptions of female experts as less confident and credible than their male counterparts (Brodsky and Gutheil 2016, 71; Larson and Brodsky 2010). However, case-specific gender issues influence expert credibility: a male expert witness is seen as more credible testifying about construction; a female expert is seen as more credible testifying about battered women (McKimmie et al. 2004; Neal 2014). Women are more likely to be demeaned or patronized by opposing counsel than men (Larson and Brodsky 2010, 2014). Our interviews did not delve into gender issues, but our data demonstrate a historical preference in Canada for male archaeologists as experts.

[26] The membership roster of the British Columbia Association of Professional Archaeologists (2019) lists 124 women and 121 men.

for knowledge creation. Archaeologists are no strangers to long-term thinking, and the quality of research under way in CRM and academic contexts in British Columbia and other unceded lands across Canada must be approached and conducted with litigation in mind.

REFERENCES

Asch, Michael, and Catherine Bell. 1994. "Definition and Interpretation of Fact in Canadian Aboriginal Title Litigation: An Analysis of Delgamuukw." *Queen's Law Journal* 503: 503–50.

Atalay, Sonya. 2012. *Community-Based Archaeology: Research with, by, and for Indigenous and Local Communities*. Berkeley, CA: University of California Press.

Banks, Judy. 2008. "Taking Culture to Court: Anthropology, Expert Witnesses and Aboriginal Sense of Place in the Interior Plateau of British Columbia." MA thesis, Simon Fraser University.

Beck, Charlotte, and George T. Jones. 1989. "Bias and Archaeological Classification." *American Antiquity* 54, no. 2: 244–62.

Bell, Catherine, and Michael Asch. 1997. "Challenging Assumptions: The Impact of Precedent in Aboriginal Rights Litigation." In *Aboriginal and Treaty Rights in Canada*, ed. Michael Asch, 38–74. Vancouver: UBC Press.

Binford, Lewis R. 1962. "Archaeology as Anthropology." *American Antiquity* 28: 217–25.

———. 1977. "General Introduction." In *For Theory Building in Archaeology: Essays in Faunal Remains, Aquatic Resources, Spatial Analysis and Systemic Modelling*, ed. Lewis R. Binford, 1–10. New York: Academic Press.

Borrows, John. 2016. "Outsider Education: Indigenous Law and Land-Based Learning." *Windsor Yearbook of Access to Justice* 33, no. 1: 1–27.

British Columbia Association of Professional Archaeologists. 2019. "Current Members," https://www.bcapa.ca/members/current-members/.

Brodsky, Stanley L., and Thomas G. Gutheil. 2016. *The Expert Witness: More Maxims and Guidelines for Testifying in Court*. Washington, DC: American Psychological Association.

Brown, Anja P., and Bruce S. McIvor. 2012. "Preparing an Aboriginal Rights Case: An Overview for Defence Counsel," https://lss.bc.ca/sites/default/files/inline-files/preparingAnAboriginalRightsCase.pdf.

Burke, Heather, Christine Lovell-Jones, and Claire Smith. 1994. "Beyond the Looking-Glass: Some Thoughts on Sociopolitics and Reflexivity in Australian Archaeology." *Australian Archaeology* 38, no. 1: 13–22.

Canadian Archaeological Association. 1997. "Statement of Principles for Ethical Conduct Pertaining to Aboriginal Peoples." *Canadian Journal of Archaeology* 21, no. 1: 5–6.

Castellano, Marlene Brant. 2008. "Aboriginal Ethics Guide Ethical Research." *Visions: BC's Mental Health and Substance Use Journal* 5, no. 1: 22–23.

Clarke, David L. 1973. "Archaeology: The Loss of Innocence." *Antiquity* 47, no. 185: 6–18.

Colwell-Chanthaphonh, Chip, and T.J. Ferguson, eds. 2008. *Collaboration in Archaeological Practice: Engaging Descendant Communities*. Lanham, MA: AltaMira Press.

Cruikshank, Julie. 1992. "Invention of Anthropology in British Columbia's Supreme Court: Oral Tradition as Evidence in *Delgamuukw v. BC*." *BC Studies* 95: 25–42.

Culhane, Dara. 1992. "Adding Insult to Injury: Her Majesty's Loyal Anthropologist." *BC Studies* 95: 66–92.

———. 1998. *The Pleasure of the Crown: Anthropology, Law and First Nations*. Burnaby, BC: Talon Books.

Department of Justice. 2018. "Civil and Criminal Cases." Canada's System of Justice. http://www.justice.gc.ca/eng/csj-sjc/just/08.html.

Dwyer, Deirdre. 2008. *The Judicial Assessment of Expert Evidence*. Cambridge, UK: Cambridge University Press.

Ferris, Neal, and John R. Welch. 2015. "New Worlds: Ethics in Contemporary North American Archaeological Practice." In *Ethics and Archaeological Praxis*, ed. Cristobal Gnecco and Dorothy Lippert, 69–92. New York: Springer.

Fisher, Robin. 1992. "Judging History: Reflections on the Reasons for Judgment in *Delgamuukw v. BC*." *BC Studies* 95: 48–49.

Foster, Hamar. 2007. "We Are Not O'Meara's Children: Law, Lawyers, and the First Campaign for Aboriginal Title in British Columbia." In *Let Right Be Done: Aboriginal Title, the* Calder *Case, and the Future of Indigenous Rights*, ed. Hamar Foster, Heather Raven, and Jeremy Webber, 61–84. Vancouver: UBC Press.

Foster, Hamar, Heather Raven, and Jeremy Webber. 2007. *Let Right Be Done: Aboriginal Title, the Calder Case, and the Future of Indigenous Rights*. Vancouver: UBC Press.

Giokas, John. 1995. "The Indian Act: Evolution, Overview and Options for Amendment and Transition," http://www.bac-lac.gc.ca/eng/discover/aboriginal-heritage/royal-commission-aboriginal-peoples/Pages/item.aspx?IdNumber=232.

Gold, Alan D. 2003. *Expert Evidence in Criminal Law: The Scientific Approach*. Toronto: Irwin Law.

Goldstein, Lynne, Barbara J. Mills, Sarah Herr, Jo Ellen Burkholder, Leslie Aiello, and Christopher Thornton. 2018. "Why Do Fewer Women Than Men Apply for Grants after Their PhDs?" *American Antiquity* 83, no. 3: 367–86.

Harding, Anna K., Barbara L. Harper, Dave Stone, Catherine S. O'Neill, Patricia Berger, Stuart Harris, and Jamie Donatuto. 2012. "Conducting Research with Tribal Communities: Sovereignty, Ethics, and Data-Sharing Issues." *Environmental Health Perspectives* 120, no. 1: 6–10.

Hegmon, Michelle. 2003. "Setting Theoretical Egos Aside: Issues and Theory in North American Archaeology." *American Antiquity* 68, no. 2: 213–43.

Hogg, Erin A., and John R. Welch. 2020a. "Aboriginal Rights and Title for Archaeologists: A History of Archaeological Evidence in Canadian Litigation." *Journal of Social Archaeology* 20, no. 2: 214–41.

———. 2020b. "Archaeological Evidence in the *Tsilhqot'in* Decision." *Canadian Journal of Archaeology* 44, no. 2: 155–84.

Hogg, Erin A., John R. Welch, and Neal Ferris. 2017. "Full Spectrum Archaeology." *Archaeologies* 13, no. 1: 175–200.

Jasanoff, Sheila. 1995. *Science at the Bar: Law, Science, and Technology in America*. Cambridge, MA: Harvard University Press.

Jones, Siân. 1997. *The Archaeology of Ethnicity: Constructing Identities in the Past and Present*. London and New York: Routledge.

Kandel, Randy F. 1992. "How Lawyers and Anthropologists Think Differently." *NAPA Bulletin* 11, no. 1: 1–4.

Knapp, A. Bernard. 1996. "Archaeology without Gravity: Postmodernism and the Past." *Journal of Archaeological Method and Theory* 3, no. 2: 127–58.

Kristmanson, Helen. 2008. "Taking Archaeology to Court: The Use of Archaeological Knowledge in Aboriginal Rights and Title Litigation." PhD diss., University of Manchester.

Larson, Bridget A., and Stanley L. Brodsky. 2010. "When Cross-Examination Offends: How Men and Women Assess Intrusive Questioning of Male and Female Expert Witnesses." *Journal of Applied Social Psychology* 40, no. 4: 811–30.

———. 2014. "Assertive Women as Expert Witnesses: A Study of Assertive and Defensive Responses in Male and Female Experts." *Behavioral Sciences and the Law* 32: 142–63.

Lederman, Sidney N., Alan W. Bryant, and Michelle K. Fuerst. 2014. *Sopinka, Lederman and Bryant: The Law of Evidence in Canada*. 4th ed. Markham, ON: Lexis Nest.

Martindale, Andrew. 2014. "Archaeology Taken to Court: Unravelling the Epistemology of Cultural Tradition in the Context of Aboriginal Title Cases." In *Rethinking Colonial Pasts Through Archaeology*, ed. Neal Ferris, Rodney Harrison, and Michael V. Wilcox, 397–422. Oxford: Oxford University Press.

Martindale, Andrew, and Chelsey Geralda Armstrong. 2020. "The Vulnerability of Archaeological Logic in Aboriginal Rights and Title Cases in Canada: Theoretical and Empirical Implications." *Collaborative Anthropologies* 11, no. 2: 55–91.

McHugh, P.G. 2011. *Aboriginal Title: The Modern Jurisprudence of Tribal Land Rights*. Oxford: Oxford University Press.

McKimmie, Blake M., Cameron J. Newton, Deborah J. Terry, and Regina A. Schuller. 2004. "Juror's Responses to Expert Witness Testimony: The Effects of Gender Stereotypes." *Group Processes and Intergroup Relations* 7, no. 2: 131–43.

McLellan, Judy N.N. 1995. "Archaeology and the Courts: Archaeologists as Expert Witnesses." BA honours thesis, Simon Fraser University.

McNeil, Kent. 1989. *Common Law Aboriginal Title*. Oxford: Clarendon Press.

———. 1997. "The Meaning of Aboriginal Title." In *Aboriginal and Treaty Rights in Canada*, ed. Michael Asch, 135–54. Vancouver: UBC Press.

Meloche, Chelsea H., Laure Spake, and Katherine L. Nichols, eds. 2021. *Working with and for Ancestors: Collaboration in the Care and Study of Ancestral Remains*. London: Routledge.

Miller, Bruce G. 1992. "Common Sense and Plain Language." *BC Studies* 95: 55–65.

———. 2011. *Oral History on Trial: Recognizing Aboriginal Narratives in the Courts*. Vancouver: UBC Press.

Napoleon, Val. 2013. "Thinking about Indigenous Legal Orders." *Derecho and Sociedad* 42: 229–45.

Neal, Tess M.S. 2014. "Women as Expert Witnesses: A Review of the Literature." *Behavioral Sciences and the Law* 32, no. 2: 164–79.

Nicholas, George P. 2006. "Decolonizing the Archaeological Landscape: The Practice and Politics of Archaeology in British Columbia." *American Indian Quarterly* 30, nos. 3 and 4: 350–80.

Nicholas, George P., and Thomas D. Andrews. 1997. *At a Crossroads: Archaeology and First Peoples in Canada*. Burnaby, BC: Archaeology Press, Dept. of Archaeology, Simon Fraser University.

Paciocco, David M., and Lee Stuesser. 2008. *The Law of Evidence*. 5th ed. Toronto: Irwin Law.

Pasternak, Shiri. 2014. "Jurisdiction and Settler Colonialism: Where Do Laws Meet?" *Canadian Journal of Law and Society* 29, no. 2: 145–61.

Price, Lynn. 1981. "Proving Aboriginal Title Via Expert Testimony: Lessons from the Indian Claims Commission." *American Indian Journal* 7: 16–24.

Ray, Arthur J. 2003. "Native History on Trial: Confessions of an Expert Witness." *Canadian Historical Review* 84, no. 2: 253–75.

Ridington, Robin. 1992. "Fieldwork in Courtroom 53: A Witness to *Delgamuukw v. BC*." *BC Studies* 95: 12–24.

Society for American Archaeology. 1996. *Principles of Archaeological Ethics*. http://saa.org/AbouttheSociety/PrinciplesofArchaeologicalEthics/tabid/203/Default.aspx .

Speakman, Robert J., Carla S. Hadden, Matthew H. Colvin, Justin Cramb, Travis W. Jones, Isabelle Lulewicz, Katharine G. Napora, Katherine L. Reinberger, Brandon T. Ritchison, Alexandra R. Edwards, and Victor D. Thompson. 2018. "Market Share and Recent Hiring Trends in Anthropology Faculty Positions." *PLOS One* 13, no. 9: e0202528.

Stryd, Arnoud H., and Morley Eldridge. 1993. "CMT Archaeology in British Columbia: The Meares Island Studies." *BC Studies* 98: 184–234.

Thom, Brian. 2001. "Aboriginal Rights and Title in Canada after *Delgamuukw*: Part One, Oral Traditions and Anthropological Evidence in the Courtroom." *Native Studies Review* 14, no. 1: 1–26.

United Nations General Assembly. 2007. *United Nations Declaration on the Rights of Indigenous Peoples*. http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf.

Upshur, Ross. 2001. "The Status of Qualitative Research as Evidence." In *The Nature of Qualitative Evidence*, ed. Janice Morse, Janice Swanson, and Anton Kuzel, 5–27. Thousand Oaks, CA: SAGE.

Valverde, Mariana. 1996. "Social Facticity and the Law: A Social Expert's Eyewitness Account of Law." *Social and Legal Studies* 5, no. 2: 201–17.

Weisman, Brent R. 2014. "Oral Sources and Oral History." In *Encyclopedia of Global Archaeology*, ed. Claire Smith, 5584–91. New York: Springer.

Wilson-Kenni, Dora. 1992. "Time of Trial: The Gitksan and Wet'suwet'en in Court." *BC Studies* 95: 7–11.

World Archaeological Congress Council. 1990. "First Code of Ethics." http://worldarch.org/code-of-ethics/.

CASES CITED

Ahousaht Indian Band and Nation v. Canada (Attorney General), 2013 BCCA 300.
Calder et al. v. Attorney-General of British Columbia, [1973] SCR 313.
Delgamuukw v. British Columbia, [1997] 3 SCR 1010.
Delgamuukw v. British Columbia, [1991] 5 CNLR 5, 1991 CanLII 2373 (BCSC).
Lax Kw'alaams Indian Band v. Canada (Attorney General), 2011 SCC 56.
MacMillan Bloedel v. Mullin; Martin v. R. in right of BC, 1985 CanLII 154 (BCCA).
R. v. Van der Peet, [1996] 2 SCR 507.
Tsilhqot'in Nation v. British Columbia, 2014 SCC 44.
Tsilhqot'in Nation v. British Columbia, 2007 BCSC 1700.

STATUTES CITED

Constitution Act, 1982, being Schedule B to the *Canada Act* 1982 (UK), 1982, c. 11.
Criminal Code, RSC 1985, c. C-46.