It will be many years before Carl Borden’s full contribution to the archaeology of British Columbia can be completely evaluated. In the thirty-three years in which he was active in the archaeology of this province, he undertook significant excavations in three localities — the Fraser Delta, the Fraser Canyon, and central British Columbia — and conducted site surveys in other localities. In addition he helped formulate provincial antiquities legislation which was enacted, stimulated students to take up the profession, and published significant papers on the archaeology and prehistory of the province which earned him an international reputation. He passed away Christmas Day, 1978, and it seems appropriate at this time to provide a brief review of his published works and to examine the archaeological legacy he has left us. His publications very much reflect his main interests in archaeology. I have grouped these works into several categories indicative of these interests. Cultural-historical syntheses, preliminary field work reports and newsletter articles constitute the bulk of his published work.

In 1945, despairing of undertaking original research in German, although this was the field in which he had held an appointment at UBC since 1939, Carl Borden turned to archaeological research, in which he had been interested since his school days in Germany. Between 1945 and 1950 the Fraser Delta held his archaeological interest, and he excavated at five sites: Locarno Beach, Marpole, Point Grey, Musqueam and the Whalen site at Point Roberts. He published several preliminary field reports, and his first major archaeological synthesis (1951) was based on this work. The chronology he established has stood up under further investigation, but the cultural-historical model he generated from it has long since gone the way of many such constructions. In this first synthesis he went well beyond the description of the archaeological facts, and resurrected the Hill-Tout conception of an Eskimoid population on the lower mainland being later supplanted by the bearers of a culture migrating from the Interior. All prevailing models at that time stressed either
an initial southward or westward movement of people or culture, followed by a similar movement from directions other than that from which the first inhabitants came. Another archaeologist, Arden King, working in the same region at the same time as Borden, independently developed the opposing model: he related his earliest component, the “Island” phase at Cattle Point on San Juan Island, to the inland Archaic cultures of North America, and not to the arctic. (Both King’s and Borden’s earliest phases are very similar in culture content, and we know today that they are not the earliest culture of the region.) The attack on this first major synthesis came not from King, however, but from archaeologists (Osborne, Caldwell, Crabtree) working in the Interior who could find no convincing evidence for the pre-existence of those complexes which Borden saw spreading from there to the coast. Borden’s rebuttal (1954) was weak, and the entire episode left him fuming. In his later syntheses he dropped most of this entire scheme, but did so on the basis of evidences he uncovered, not on the basis of what other archaeologists didn’t find.

It was ten years before Borden engaged in another major synthesis. Most of the intervening time he spent digging both in the Interior and on the Coast. He attempted to move full-time into archaeological teaching and research, but this move was rejected by UBC authorities, and he ended up with all the archaeological responsibilities in addition to those in German. Emergency salvage archaeology in Tweedsmuir Park in central B.C. took up the summers of 1951 and 1952, and the report he produced on that work is the most complete site report he ever wrote. His 1954 paper on the indigenous population of B.C. is still very useful for the demographic data it contains. His 1962 paper on West Coast Crossties with Alaska was his next important work, and is possibly the most scholarly, carefully researched paper he ever wrote. Ten years of C-14 dating had now given archaeologists previously undreamed of control over comparative regional chronologies. In this paper he demonstrated the temporal precedence of typical Eskimoid traits on the lower Fraser, and suggested northward diffusions of ulus, ground slate, labrets and possibly other items of typical arctic culture. This was a considerable change from his earlier position. Since that time these types of artifacts have been found in earlier contexts in the Arctic than those discovered before 1962, but they have also been found earlier on the Strait of Georgia, and the question of temporal precedence is still open. The north to south diffusion of microblade technology was first thoroughly outlined in this paper, and that model still holds.
Between 1958 and 1963 Borden became totally involved in excavating and defining the archaeological sequence near Yale at the mouth of the Fraser Canyon. Further work was done there in 1970. This project was the most important of Borden's entire career. He discovered a 9,000 year long sequence for the Yale locality which has both regional and areal ramifications for culture history, and defined the Pasika complex, which may yet prove to be an even earlier cultural manifestation. No complete report was ever produced on this project, but considerable factual data and Borden's ideas on their significance are in many of his publications. His ideas are particularly well presented along with some field data in two 1968 papers: *A Late Pleistocene Pebble Tool Industry of Southwestern British Columbia,* and *Prehistory of the Lower Mainland.*

It was also in 1968 that his ideas on major population movements jelled in a paper read at the Eighth International Congress of Anthropological and Ethnological Science in Tokyo, later revised and published in *Syesis* (1969). These ideas form the basis for all of his later papers on this subject, culminating in the paper in *Science* (1979). The 1974 *Mercury* volume and the chapter for the *Handbook of North American Indians* are fuller treatments of this same theme which present a model of an early southern cultural tradition, the "Protowestern," and a northern one, the "Early Boreal," being responsible for the initial post-Pleistocene settlement of British Columbia.

Borden's papers other than the cultural-historical syntheses also provide some insights into his interests. The *Uniform Site Designation Scheme for Canada* has been adopted federally and by many provinces. The field work reports, with the exception of the 1952 report on central British Columbia and the 1956 report on the survey in the east Kootenays, are all of a preliminary nature. The reviews provide insights into his critical attitude, a faculty he also instilled in students. The newsletter articles are well written, and are important as they illustrate the breadth of archaeological knowledge which he was continuously assimilating.

Carl Borden emerges as both a field archaeologist and a synthesizer of cultural-historical information. His syntheses were always ahead of the presentation of the archaeological facts. Such a situation is not abnormal for field archaeologists; as they observe the material coming from the ground they constantly revise their ideas on chronology and meaning of the data. I remember Carl's constant re-evaluation of obsidian as a horizon marker at Chinlac, re-evaluations being made as the obsidian came from the ground. Carl worked under the system that if you do not know how many cultural components you have, how they mesh chronologically,
and what their content is by the time you finish the field work, you have not done your job properly. This system does have drawbacks as well as merit. The first drawback is that through your observations of the data during its actual extraction from the ground you have solved the problems which intrigue you, and the presentation of your material descriptively, quantitatively and associationally becomes, if not drudgery, at least of less importance to you. The second drawback is that the cultural units initially formulated tend to be considered as standard and representative, and departure from them as abnormal or non-representative. Without full publication of the data they cannot be evaluated fully. Borden became a victim of the system particularly in respect to writing full site reports. Grand syntheses rather than full site reports were his mode from 1951 onward.

Most of Borden’s chronological interpretations and taxonomic formulations have so far withstood the test of comparative investigations. Some have been questioned, however, and all require descriptive analysis, quantification and publication of the original field data on which they are based. Clarification of the number of components and their culture content at the Locarno Beach site is very much needed, for example. Description and quantification of the Marpole assemblages are needed to see if there are indeed several cultural components there, as Burley has recently demonstrated for other parts of the site. Spatial analysis of the Whalen Farm collections is required to throw light on definition of the components there, as is further dating of the Natalkuz Lake complex in Tweedsmuir Park, since the single C-14 date may be too young. Possibly with some of these questions in mind, Carl Borden bequeathed a scholarship fund to UBC to be used by students writing theses on the archaeology and culture history of the Northwest. He would, I am sure, stoutly defend his original interpretations of his material, but would also subscribe to the detailed descriptions and analysis of these materials and be prepared to change his mind if confronted with new evidence.

Carl Borden’s archaeological legacy then consists first and foremost of a large quantity of significant archaeological data which is and will continue to be fundamental to the reconstruction of the prehistory of B.C., and additionally a series of scholarly, well researched papers which outline B.C.’s prehistoric past and relate it to the rest of the world. Many archaeologists do not achieve such a legacy during a longer lifetime of archaeological work. The students Carl stimulated to become archaeologists and the antiquities legislation which he helped formulate will further ensure that this legacy is added to in the years to come.
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