## MESOAMERICA AND THE GOALS OF ARCHAEOLOGY

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STICHTING NEDERLANDS MUSEUM

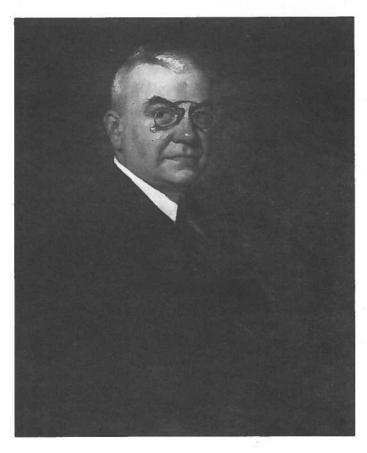
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GERRIT HEINRICH KROON (1868-1945)

parts of Mexico and Central America that comprise what archaeologists call Mesoamerica must rank among the most fascinating. The wonders of the ancient civilizations of Mesoamerica so fascinated Hernando Cortés, that bold and intrepid Spaniard who conquered the Mexica, that he wrote to his king, 'We saw things never heard or even dreamed of before ... so many things I do not know how to describe them.' Bernal Díaz del Castillo, who wrote an epic chronicle of that encounter between Hispanic and Aztec civilizations, reported that even those of his colleagues who had seen Constantinople, Italy, and Rome were astounded at the wonders of the new land they were beginning to change so drastically.

Today, we continue to be fascinated with Mesoamerica, its ancient culture and its modern survivals. Like the Spanish conquistadors, we are mesmerized by its wealth, delighted by its exotic food and drink, intrigued by its intellectual achievements, horrified by its religious excesses, mystified by the complexity of its origins, and impressed by its architectural grandeur. The mere mention of places like Tikal, Teotihuacán, Chichén Itzá, Monte Albán, Bonampak conjures up visions of lost cities, bygone splendor, and past glories. Our curiosity and our imaginations are stimulated and exercised by the romance and mystery of this enchanted land. As a small boy, I became fascinated with, or more correctly, infatuated with Mesoamerica and especially the Maya civilization. That infatuation has continued to this day, though tempered and sublimated by more objective views of those past glories.

The civilizations of Mesoamerica spanned a time of several thousand years and stretched over a vast territory from northern Mexico to Costa Rica. Their influence extended well beyond this core area northward into the southwestern and southern United States and southward at least into northern South America. Their artistic achievements in stone, pottery, metal, painting, feathers, and wood are among the most highly prized

possessions of many a world-famous museum. Their architectural skill produced planned cities and ceremonial centers with great pyramids, plazas, temples, and roadways that today constitute a significant part of Mesoamerica's attraction for the world-wide tourist industry. The whole world benefits today from the agricultural gifts of Mesoamerican civilization: maize, chocolate, chile, and avocado, to mention but a few. The complex and somewhat fearful religion with its plethora of gods and its grim human sacrifice has a special claim on the curiosity of modern man. But it is the intellectual achievements of Mesoamerica that fascinate us the most: the as yet incompletely understood systems of writing preserved on hieroglyphic stelae, in painted codices, and in some other media; the astronomical observations of the sun and the planet Venus; the precise recording of the lunar cycles; the vigesimal or base-20 system of numeration involving the concept of zero; the combination of this wide range of knowledge into a highly accurate 365-day calendar and a 260-day almanac; the tantalizing but limited evidence of a rich literature and poetry.

For at least 100 years, Mesoamerica has been the scene of vigorous archaeological research by a large international community of scholars who, fortunately for us, were less intimidated than was Cortés when it came to trying to describe the wonders of the region. It is one of the best known and best understood archaeological regions in the world. It is a region from which many of the present-day inhabitants derive legitimate ethnic and national pride. It is a region that has attracted all manner of producers, users, misusers, and admirers of archaeological information.

There are those who fancy themselves as explorers seeking and discovering the hitherto unknown. The tropical rain forest that covers much of lowland Mesoamerica seems still to hold out some hope for would-be explorers. There are the treasure hunters who want to find something of great beauty or great value. There are the looters who rape the record of the past to

add to their own collections and their museums or to gain financial reward by preying on the acquisitive instincts of others. There are the epigraphers whose great desire is to find and decipher new hieroglyphic texts. There are the self-deluded, the charlatans, and those inspired by various forms of revelation who look to the other ancient civilizations of the world, to outer space, and to the wildest of fantasies in order to understand the vast store of archaeological information on Mesoamerica. There are the educators who try to interpret Mesoamerica to the curious public through the written word, the painted image, the film, and the museum. There are honest leaders who try to improve the self-esteem of downtrodden peoples by introducing them to their cultural and biological heritage. There are also the unscrupulous who select and distort archaeological data in order to convince others of their political or ideological views. And, of course, there are numbers of professional archaeologists working away at the seemingly endless task of describing and interpreting those fascinating ancient civilizations of Mesoamerica.

Thus, Mesoamerica, with its long history of intensive research by leading scholars from many countries and its full array of present-day activity related to, contributing to, and deriving from archaeology is an excellent region for examining the goals of archaeology. However, it would be difficult to claim that some of the cast of characters I have mentioned are actively striving to reach the goals of archaeology. Indeed, some of them may not even have goals in the sense that I want to use the word. All have a purpose: the explorer wants to discover something new; the treasure-hunter, to find something beautiful; the looter, to steal ancient art; the charlatan, to achieve fame and fortune; and so on. Each one has a purpose, a motivation, a reason for the particular activity, but I find it difficult to equate these purposes, motivations, or reasons with the goals of archaeology.

I have something loftier in mind when I think of goals, some-

thing that involves high aspirations and honorable intentions, noble thoughts and moral sense, responsible judgement and ultimate accountability. I have purposely chosen the word 'goals' even though most recent writers seem to prefer the term 'aims', in order to symbolize the somewhat different conception I have in mind. I have no quarrel with the use of aims and I am not trying to talk about goals versus aims. In fact, perhaps the best way for me to give emphasis to my point of view would be to take advantage of the English style of the Book of Common Prayer, in which linkage and repetition give power and meaning to the language. Thus, I am concerned with aims and goals, but I am using the less common term 'goals' as a short-hand label for the full concept that I wish to develop.

In order to explore this enlarged conception of goals, it will be useful to isolate the features that distinguish the more elevated concept. These are three in number: (1) explicit purpose, (2) plural and multiple character, and (3) developed sense of responsibility. The first of these, explicit purpose, has already been mentioned. After all, every activity is the result of some kind of motivation, every effort is rationalized and justified by a reason, and every action is underlain by some sense of purpose. I do not intend to put purposes and goals in apposition to one another. Rather, I want to build upon the universal of purpose to achieve a better understanding of goals. Thus, the looter and the archaeologist both have purposes, but only the archaeologist has goals in the sense that I am using the term here. There are many options for purposes. They may be multitudinous or few, far-reaching or limited, significant or petty, unconvincing or compelling. But there is only one characteristic that must be present for every purpose that helps to define a goal. It must be explicitly set down so that the initial stimulus for striving towards a particular goal can be identified and assessed at any stage in the progress toward the goal.

The second feature of goals, plural and multiple character, stems from the fact that no goal can survive as a proper goal in an

isolated state. It exists and has meaning only in the competitive and comparative company of other goals. The frequently asked question, 'What is *the* goal of archaeology?' is, therefore, both inappropriate and meaningless. In fact, whenever such a question presents itself, I get an uneasy feeling that causes me to hark back to an event that took place very early in my intellectual growth.

When I was studying geology as an undergraduate at Tufts University, Charles Stearns introduced me to a paper by a great 19th-century scholar, T. C. Chamberlain, that made a lasting impression on my way of thinking. Shortly before the turn of the century, Chamberlain wrote a paper on scientific method in which he argued against the then common method of what he called the 'ruling theory' and urged the adoption of his 'method of multiple working hypotheses.' His paper soon became a classic and has been reprinted several times for the benefit of succeeding generations of students, most recently in 1965. I shall review Chamberlain's ideas in some detail, because a principle that springs from his paper is central to my argument. Moreover, his elegant Victorian prose makes his points stand out with relevance to today's problems in a way that I could not hope to accomplish in the more sterile word market of the present-day scholarly world.

Thomas Crowder Chamberlain (1843–1928) was a distinguished American geologist and educator who contributed much to the study of North American continental glaciation. He served as president of the University of Wisconsin and was professor of geology and director of the Walker Museum at the University of Chicago where he founded and edited the *Journal of Geology*. He was prominent in national affairs and in 1908 was president of the American Association for the Advancement of Science. He was an outstanding teacher much concerned about the proper training of young scientists. It is in his role as a teacher of scientific method that Chamberlain speaks to us across the years today.

In his classic paper on 'The Method of Multiple Working Hypotheses' he summarizes the recent, that is, late 19th-century, history of scientific thought in terms of three stages, each one distinguished by a different method for research: the ruling theory, the working hypothesis, and multiple working hypotheses. Chamberlain used the word 'theory' to describe the first method partly because that was the term actually used by the practitioners of the method and partly because the 'theory' involved was explicitly not a hypothesis, that is, not something to be tested.

This first method has its origin in the very natural and proper desire of every researcher to explain phenomena. As Chamberlain (1965: 755) observes: 'There is no nobler aspiration of the human intellect than desire to encompass the cause of things.' But the weakness of this first stage of the method of the ruling theory is that such a powerful desire can stimulate the development of premature theories to provide explanations that are accepted without proper appraisal of their worth. Chamberlain (1965: 754–5) details the sequence of events that can so quickly convert an honest search for explanation into the adoption of a ruling theory:

'The habit of precipitate explanation leads rapidly on to the development of tentative theories... and there is soon developed a general theory explanatory of a large class of phenomena... [that] may not be supported by further considerations than those which were involved in the first hasty inspection. For a time it is likely to be held in a tentative way with a measure of candor. With this tentative spirit and measurable candor, the mind satisfies its moral sense, and deceives itself with the thought that it is proceeding cautiously and impartially toward the goal of ultimate truth. It fails to recognize that no amount of provisional holding of a theory... justifies an ultimate conviction. It is not the slowness with which conclusions are arrived at that should give satisfaction to the moral sense, but the thoroughness, the completeness, the all-sideness, the impartiality of the investigation.

It is in this tentative stage that the affections enter with their blinding influence... Important as the intellectual affections are as stimuli and as rewards, they are nevertheless dangerous factors which menace the integrity of the intellectual processes. The moment one has offered an original explanation for a phenomenon which seems satisfactory, that moment affection for his intellectual child springs into existence; and as the explanation grows into a definite theory, his parental affections cluster about his intellectual offspring, and it grows more and more dear to him, so that, while he still holds it seemingly tentative, it is still lovingly tentative, not impartially tentative. So soon as this parental affection takes possession of the mind, there is rapid passage to the adoption of the theory... [and] the mind rapidly degenerates into the partiality of paternalism... The theory then rapidly rises to the ruling position... From an unduly favored child, it readily becomes master, and leads its author whithersoever it will.'

There was a reaction against such abuses that involved an almost total rejection of theory in any form and an emphasis on facts and description. Chamberlain (1965: 755) comments on this development: 'The advocates of reform insisted that theorizing should be restrained, and efforts directed to the simple determination of facts... Because theorizing in narrow lines had led to manifest evils, theorizing was to be condemned. The reformation urged was not the proper control and utilization of theoretical effort, but its suppression.' Chamberlain then identifies the fatal flaw in this type of reform: 'The vitality of study quickly disappears when the object sought is a mere collection of unmeaning facts.' How often we have heard echoes and restatements of that critical truism in discussion of archaeological method during the past few decades!

These efforts at reform led to the second stage which is char-

acterized by the method of the working hypothesis. Chamberlain (1965: 755) explains that 'The working hypothesis differs from the ruling theory in that it is used as a means of determining facts, and has as its chief function the suggestion of lines of inquiry; the inquiry being made, not for the sake of the hypothesis, but for the sake of the facts.' However valuable though this change in motivation was, there remained the danger of intellectual paternalism that had perverted the method of the ruling theory. As Chamberlain (1965: 756) so aptly points out: 'a working hypothesis may with the utmost ease degenerate into a ruling theory. Affection may as easily cling about an hypothesis as about a theory, and the demonstration of the one may become a ruling passion as much as of the other.' The result is a kind of methodological uniformitarianism.

Chamberlain proposes a new method for the third stage that will help overcome this problem, his method of multiple working hypotheses. He points out that the way to avoid the inherent difficulties of using one working hypothesis is to generate a whole family of working hypotheses, so that no one hypothesis can easily become an unduly favored child. The use of a family of working hypotheses guarantees a healthy form of sibling rivalry. The hypothesis that emerges as the best explanation of the facts is the one that survives the competition.

Chamberlain (1965: 757) insisted that the habits of the mind that are developed by the use of the method of multiple working hypotheses can be applied in all aspects of life. He suggested that in education, for example, the question to be asked is not, 'What is the best method?' but 'What are the special values of different methods and what are their several advantageous applicabilities?' From his discussion of the wider utility of the method of multiple working hypotheses, there emerges an important principle. The spirit of competition among several ideas that is the hallmark of the method of multiple working hypotheses is valuable at all phases of the scientific enterprise and at every level of abstraction.

This fundamental principle of competition makes it essential that every phase, category, or level of research be plural and multiple in character. We have long recognized this need in certain phases of archaeological research, for example, in technique and method. There is little talk these days of the way to dig. Rather, there is a growing literature about the many ways of digging, the many tools for excavation ranging from the artist's brush to the bulldozer, the many means for exploring archaeological sites. The successful archaeologist does not select from this range a favorite way of excavating and then apply it uniformly to every situation. This would be the method of the ruling technique. Instead, the successful excavator uses the method of multiple techniques which involves knowing both the full range of options and the criteria for selecting from that range the technique or combination of techniques best suited to solve the excavation problem at hand.

Similarly, we have learned to deal with competition among the many methods of analysis available to us. We assess their relative value with respect to a particular problem and then use them singly or in combination as the need dictates. We have no difficulty using different methods of analysis on the same body of data to solve separate problems. We have done a reasonable job of adhering to Chamberlain's principle of competition by using many different approaches to the classification of our data. We have long since agreed with J. O. Brew (1946) that what we need is 'more rather than better' classifications. When we attempt the initial interpretation of archaeological data we are pretty well accustomed to the use of the method of multiple working hypotheses. But when it comes to dealing with higher levels of interpretation and explanation, such as conceptual schemes, models, theoretical approaches, cover theories, philosophical justifications and epistemological bases, we find a great deal of backsliding.

In the category of theoretical approaches, for example, we are barely out of Chamberlain's first stage. We are dangerously

close to a 20th-century version of the ruling theory. The archaeological profession is currently carrying on a debate on the question of whether there is only one legitimate theoretical approach to archaeology or a number of competing theoretical approaches to be used as a basis for conducting archaeological research. Archaeology has been enriched in recent years by the stimulating ideas and well reasoned theoretical discussion of Lewis Binford (1972), his students and followers. This package of ideas, which has been dubbed the 'new archaeology' in the United States, has added another powerful theoretical approach to the corpus available to archaeologists. It has stimulated many because of its insights, successes, and promises. It has angered others because of its polemics, exaggerated claims, and ex-cathedra pronouncements.

I must emphasize that I have no desire to battle with the 'new archaeologists'. I admire their energy, respect their purpose, appreciate their arguments, and accept much of what they have to say. However, I am impatient with those practitioners and advocates of 'new archaeology' who claim that it is the only theoretical basis for scientific archaeology. I am not impressed by the assertion that unless this particular theoretical approach is used, the results of the research are doomed not only to be inadequate, but also misguided, and perhaps wrong. This is just the opposite of Chamberlain's (1965: 758) warning that 'if our vision is narrowed by a preconceived theory as to what will happen, we are almost certain to misinterpret the facts and to misjudge the issue.' What started out as a healthy reaction against too much emphasis on fact, description and culture history is not seen by some of the advocates of the 'new archaeology' as another valuable addition to the plural and multiple corpus of theoretical approaches to archaeology, but as the only legitimate road to archaeological explanation. To paraphrase Chamberlain, from an unduly favored child, it has become a master and leads its authors and advocates whithersoever it will.

Current book reviews in archaeological journals provide good examples of this new dependence on the method of the ruling theory. It used to be that there were two main types of book reviews. The first consists of a clear statement of the contents of the book and an honest critical commentary on the substance, method, and theory of that content. Such a review is a most welcome service to the profession. The second type has no statement at all of the content of the book, nor any honest commentary on it. Instead, it offers a polemic on how much better the book would have been if it had been written by the reviewer using a completely different approach which is outlined in detail. This type of review is not a review at all but an exercise in ego gratification. A third type of review is beginning to show up with alarming frequency. In it the reviewer usually ignores the need to summarize or criticize the contents, and then asserts that the book or monograph is of little or no real value because the author does not subscribe to the theoretical, philosophical or epistemological approach favored by the reviewer. This type of review also fails as a proper review. It represents another attempt to achieve archaeological progress by simply stating and restating that the ruling theory is better for no other reason than that it is the ruling theory. It is nothing more than an expression of theoretical intolerance and intellectual tyranny.

What we have, then is a polarized confrontation of theoretical approaches rather than a healthy competition among them. The various approaches, the 'new' and the 'old', the deductive and the inductive, the nomothetic and the normative, the scientific and the intuitive, are locked in a futile debate over which approach is better. The debate is futile because the real question is not which theoretical approach is better, but which is better for what (Thompson 1972). It is clear that the time has come to take Chamberlain's advice seriously, if we expect to avoid being dominated by a ruling theoretical approach. When the 'new archaeologists' first presented their views, they success-

fully identified some of the weaknesses in the existing culture-historical and normative approaches. For example, they correctly observed that the older approaches had become a kind of de facto ruling theory. We must now resist any effort to replace it through the establishment of a new ruling theory by proclamation. The way to do it is to subscribe to a method of multiple theoretical approaches.

I hope that this review of the value of Chamberlain's principle of competition among several ideas at every level of the scientific enterprise leaves no doubt about the importance of the plural and multiple character of goals. The health of the discipline requires multiple goals. In fact, archaeologists do recognize more than one goal. There seems to be widespread agreement on at least three aims or goals: the delineation of culture history, the reconstruction of past cultures and lifeways, the formulation of cultural processes. Unfortunately, there is a tendency not only to be in agreement on these three goals, but to be completely satisfied with such a limited and finite list of goals. It almost seems as though the incompleteness and uncertainty of the archaeological record causes us to seek some rocks of security and certainty somewhere within our conceptual system. These three goals have been repeated in the literature so many times without any discussion of other possible goals, that we seem to be grasping for security through recitation of a litany of fixed and limited goals that are so simple and so basic, no one would ever disagree with them. Moreover, because of the close identification of the 'new archaeology' with the goal of cultural process, there is serious danger of overemphasis on cultural process as the principal goal, or even the only valid goal, as a carryover of the ruling theory problem in the realm of theoretical approaches just discussed.

We must, therefore, make a serious effort to identify the entire range of possible goals for archaeology. In order to undertake even the most preliminary of efforts in this direction, we need to examine the third essential feature of goals, a developed

sense of responsibility. Goals are a way of operationalizing responsibilities, so a review of the kinds of responsibilities that archaeologists must face should help identify other goals for consideration. I find it useful to think in terms of five areas of responsibility, although I make no claims for either exhaustiveness or inclusiveness by listing five. An archaeologist has responsibilities to the archaeological resources, to self, to colleagues, to the citizen, and to society.

The past two decades have seen the development of a special concern for the non-renewable resources of archaeology. The insistent progress of the modern world and the increasing capacity of men to modify the landscape seem to be conspiring to increase alarmingly the rate of destruction of the archaeological record everywhere. In West Germany, the surface mining of brown coal will result in a complete modification of the surface, and thereby the destruction of all archaeological remains, in the central Rhineland over the next 50 years. In England, the construction industry is consuming sand and gravel at a rate that will exhaust that nation's deposits of aggregate, and thereby eliminate a major source of archaeological sites, before the end of this century. It is estimated that, in less than 10 years, mechanized agriculture may destroy all archaeological evidence in the large part of the state of Arkansas that is in the Mississippi alluvial valley. We have no figures for the destruction of sites in Mesoamerica, but the combination of road building, oil exploration, dam construction, agricultural, industrial, and urban expansion is taking a heavy toll. More immediate and possibly more serious is the threat from looters and vandals who cut up ancient monuments with chain saws and carry them off to sell on the international art market.

These concerns have led to a more careful definition of our responsibilities for the archaeological resource in many parts of the world. These resources are recognised as having irreplaceable value to groups of people, to nations, to the entire world. Serious attempts are being made in many places to improve the

legal machinery to protect the resource and to punish despoilers. Massive efforts are directed toward identifying, recording, documenting, salvaging, rescuing, preserving, interpreting the most threatened parts of the resource. At least half of the funds spent on archaeological research all over the world is generated by these concerns. A whole new approach to the archaeology of threatened resources, called cultural resource management in the United States, has emerged to provide a way of assessing the claims of archaeological projects in the perspective of other national needs. However, the archaeological record is inanimate and passive and only takes on meaning by interaction with people.

The archaeologist, who has the professional task of bringing life to the record of the past, must therefore then face the second area of responsibility, that of responsibility to self. This is not to say that archaeology exists primarily for the pleasure of archaeologists. Nevertheless, each individual archaeologist has a unique and personal role to play in making the record of the past relevant and meaningful for fellow men. This essential subjective contribution of the individual scholar requires an intellectual and practical environment that fosters the emotional and physical well-being of the professional (Thompson 1956, 1958). Mesoamerica, with its diversity of cultures and its high level of cultural development has long been a source of stimulation for creative and imaginative scholars.

Of course, there is always a danger that too much concern with self will cause a return to the era of the gentleman archaeologist who often carried out excavations solely for self gratification. Fortunately, our profession is now recruited from all walks of life on the basis of motivation and talent rather than on class or wealth. Even so, we must guard against the danger of isolation through self-satisfaction by making archaeologists responsible to their colleagues.

The archaeologist must accept this third area of responsibility that is owed to colleagues because a relationship to others

provides the best protection against isolation and self-appreciation. On the one hand a professional group provides standards of quality and excellence. On the other, it makes possible the pooling of limited personal resources for group action. The individual benefits from an objective review of plans and results that can only come from peers. Each archaeologist becomes responsible to the corporate group by conforming to the standards, contributing to the improvement of the standards, and by challenging the validity. These mutual responsibilities have been highly developed in Mesoamerica where individual scholars are of many different nationalities and persuasions. The interaction of so many differing view points, attitudes, and subjective approaches has been most productive. In general, archaeologists everywhere have been fairly successful in meeting their responsibilities to each other.

These successful responses to the first three areas of responsibility are not enough, because these areas are inward-looking, archaeologically oriented, and possibly only self-serving without the corrective influence that comes from trying to meet the outward-looking, less archaeologically oriented responsibilities to the citizen and to society.

Archaeologists have not done very well when it comes to meeting their responsibilities to the citizen. In the first place, the citizen has natural curiosities about the past and turns to the professional archaeologist to satisfy them. The archaeologist has tended to leave the job to the popularizer, the charlatan, and even the propagandist. Ironically, it is often this same individual who complains the loudest when the citizen is misinformed or mislead.

Second, the citizen often has a sense of heritage and a concern for some personal legacy from the past whether it be on an ethnic, racial, regional, national, or even global scale. Again the professionals have often shirked their responsibilities.

Third, the citizen needs information for making those informed decisions that are so essential in our complex world and

especially in countries with democratic systems of government. The citizen ultimately has a great deal to say about whether the archaeological resource has any worth, how much of it is to be saved, whether any part of it is to be salvaged, how much money will be available, who will be asked or allowed to do the work. The citizen also needs accurate and up-to-date knowledge about the past in order to discriminate between claims of political or ideological motivation that are justified by argument based on archaeology. The more ethnic and national groups seek to bolster their existence by involving the past, the more information the citizen needs to make critical decisions.

In Mesoamerica, Mexico has been highly successful in distilling from the archaeological record a wide range of information that is transmitted to fledgling citizens in the schools and museums and through the public media. A sense of pride in an indigenous past seems to be very much a part of the Mexican national character.

However, citizens do not act alone, or at least are not very effective when they act alone. Rather, citizens tend to function in groups of many kinds. It is essential, therefore, that the archaeologist recognize the fifth area of responsibility, that to society. The archaeologist serves society best by providing accurate information, honest interpretations, and reasonable recommendations about the past in a format that is intelligible to the non-archaeological functionaries of society who make policy and apply that policy in decision making. The archaeologist serves society poorly by waiting for signals from self-serving elements in society and then delivering what they seem to want. It is true, of course, that most archaeologists are either public employees or are indirectly supported by society. This does not mean that archaeologists should provide anything to society except an honest best product of archaeological research.

As Graham Clark (1939) pointed out in his famous essay on archaeology and society: 'the social value of archaeology is by no means synonymous with its political value.' Certainly, the

specious and biased use of archaeological data to justify political and idealogical positions during the period between the World Wars has alerted us to the dangers of this kind. Today, when so many new nations, and some old ones, are invoking past glories as revealed by archaeology to instill a sense of national identity in their populations, archaeologists need to be particularly careful in serving society. For example, in Mexico not many years ago, some scholars were politically motivated to attempt to locate the bones of Cuahtémoc, the last emperor of the Aztecs, and actually convinced themselves that they were successful. Responsible archaeologists carefully examined all facets of the situation and determined that although the tomb that had been found was of the right time period, it did not contain the remains of Cuahtémoc.

Earlier I pointed out that the individual citizen has a major role in decision making with respect to archaeology. Action, however, is not taken until a significant number of citizens agree on the policy or the action. Archaeologists must also band together when dealing with society at large. If there is no agreement within the body of archaeologists concerning a public issue, there will be little or no influence flowing from archaeology to the decision-makers. It is essential that archaeologists have influence on public agencies, legislative bodies, presidents and prime ministers, because it is society in the final analysis that decides on the worth and disposition of those non-renewable archaeological resources. Thus, this discussion of the areas of responsibility has brought us full circle, highlighting the interrelated nature of the responsibilities and the goals that they generate.

Now that we have reviewed the five areas of responsibility for the archaeologist, it is possible to suggest an expanded list of goals for archaeology, most of which are already in active use in Mesoamerica:

 To identify, record, and protect the non-renewable resources of archaeology.

- 2. To develop and maintain the highest professional standards for archaeological research.
- 3. To delineate culture history.
- 4. To reconstruct past cultures and lifeways.
- 5. To formulate cultural processes.
- 6. To provide the citizen with the best archaeological interpretations possible.
- 7. To assist in the making of policy for the archaeological resources and in making decisions about them.
- 8. To interact in general with the non-archaeological world in a way that will promote the best use of both our limited and dwindling resources and the results of our research on them.

These multiple goals (and others not yet identified or formulated) are available to guide archaeologists who must explain their intentions to friends, colleagues, supporters, enemies, detractors, and challengers. As in the case of the other categories of research activity, goals may be used singly or in combination. Since the goals often reinforce or complement one another, competition is less the selection of a single goal best suited to the problem and more the setting of priorities among several appropriate goals. Priority setting is nothing more than a different kind of competitive activity.

The criteria for goal selection and priority setting are not as well understood as are the criteria for decision making at lower levels of the research effort. Greater reliance must be placed on such intangibles as the role of the subjective element. Also, goal selection is in large measure a matter of judgement and there are many unseen and unknown routes for the introduction of bias. It is possible to discuss the quality of the subjective element involved and to isolate some of the possible bias. Ultimately, however, there is only one way of assessing the value and appropriateness of an archaeologist's goals. I can only repeat my earlier, often criticized statement (Thompson 1956), that much depends on the intellectual honesty and scholarly integrity of the investigator.

In summary, the goals of archaeology must be purposeful, multiple, and responsible. A review of the full circle of the responsibilities of archaeologists makes possible a considerable expansion of the list of goals. This new list gives special emphasis to goals that involve interaction between archaeologists and the non-archaeological world. We have been able to put behind us the image of the gentleman archaeologist, but we seem to be unwilling to give up his private club. A review of any large and complex archaeological region in the world, such as Mesoamerica, makes it clear that the current need is for archaeology to go public. We archaeologists must recognize that archaeology has values for many in society other than ourselves. We must try to understand the important role that archaeology plays in modern society. We must participate fully in the setting of policy and the making of decisions relating to archaeology and the use of archaeological resources. If we do not, others will do it for us. And I submit that to abdicate our responsibilities would not be a proper goal for archaeology.

## REFERENCES

BINFORD, L. R.

1972 An Archaeological Perspective. Seminar Press, New York and London.

BREW, J. O.

1946 The Archaeology of Alkali Ridge, Southeastern Utah. Papers of the Peabody Museum, Harvard University, Vol. 21.

CHAMBERLAIN, T. C.

The Method of Multiple Working Hypotheses. *Science*, Vol. 147, No. 3671 (7 May), pp. 754–9.

CLARK, GRAHAME

1939 Archaeology and Society. Methuen, London.

THOMPSON, R. H.

- The Subjective Element in Archaeological Inference. Southwestern Journal of Anthropology, Vol. 12, No. 3, pp. 327–32.
- 1958 Modern Yucatecan Maya Pottery Making. Memoirs of the Society for American Archaeology, No. 15.
- 1972 Interpretive Trends and Linear Models in American Archaeology. In Contemporary Archaeology, edited by M. P. Leone, pp. 34–8. Southern Illinois University Press, Carbondale.