



**ADVANCED GCE**  
**CRITICAL THINKING**  
Unit 4: Critical Reasoning  
**RESOURCE BOOKLET**

**F504/RB**

**To be opened on the day of the examination**

**Thursday 17 June 2010**  
**Morning**

**Duration: 1 hour 30 minutes**



**INSTRUCTIONS TO CANDIDATES**

- Read and use Documents 1 and 2 to answer the questions.

**INFORMATION FOR CANDIDATES**

- This document consists of 4 pages. Any blank pages are indicated.

## Background Information

Archaeology is the study of the past, often by examining artefacts, which are man-made objects. These artefacts may be found by digging on historical sites.

Indiana Jones is the archaeologist hero of several popular adventure films.

### **Document 1**

#### **Welcome back Indy**

Adapted from Cornelius Holtorf writing in New Scientist 17 May 2008

Few scientific disciplines have a hero as charismatic as Indiana Jones. The whip-wielding character is the most widely recognised image of an archaeologist and largely due to this, the field enjoys huge popularity. Yet many archaeologists still seem desperate to distance themselves from Indiana Jones. Since the height of the last Indy fever in the 1980s I have given up counting the number of exhibitions, educational events and publications that shout: 'the real archaeologist practically never works like Indiana Jones.'

Now, Indy is back. *Indiana Jones and the Kingdom of the Crystal Skull* is released on 22 May, and there is every sign that it will be just as popular as its predecessors. So should archaeologists again rush to point out the gaping chasm between fiction and fact? 1

It is of course true that the films do not accurately represent professional archaeology. Modern archaeologists are not treasure-hunting looters, they do not use force to gain access to artefacts, and they do not normally wear fedoras\* or carry bullwhips. But movies appealing to mass audiences can be afforded a little licence. After all, science-fiction films and medical dramas aren't expected to be entirely accurate portrayals of space travel and hospitals either. 2

A far more serious criticism is that elements of the film scripts communicate highly objectionable values. The adventures of Indiana Jones are based on an imperial world in which western archaeologists routinely travel to the far corners of the globe in order to retrieve precious artefacts and save the world from Evil. This therefore gives the impression that the world is dependent on intervention from the west. 3

Moreover, the films draw on a long cinematic tradition of portraying archaeology as the domain of white, heterosexual, able-bodied and talented men who live through action-packed adventures in foreign countries. This stereotype becomes part of the cultural baggage of very large audiences, so it colours their perceptions of archaeology outside the cinema. As a result it may even discourage individuals who do not think they conform to this apparent ideal from making archaeology their career choice. 4

In *Crystal Skull* a more realistic portrayal of archaeology has been promised: co-writer George Lucas has stated that he and director Steven Spielberg 'really wanted to capture what archaeology is like.' Even so, the film clearly still aims at global mass entertainment rather than subtle, nuanced representations of archaeologists in real life. 5

But the popularity of Indiana Jones owes more to his spirit of adventure and fortunate discoveries than to the fact that he happens to represent a stereotype that is terribly politically incorrect. The typical archaeologist might well roam in Yorkshire or Massachusetts, he might be gay or of Asian or African descent. In the latest film Indy is in his sixties and self-consciously refers to his age. And the success of Lara Croft\*\* shows that the hero can equally well be a heroine.

Ultimately, archaeology has far more to gain from being associated with characters like Indiana Jones than it has to fear. Public enthusiasm for the films attracts many bright young students to the field, as well as creating goodwill and occasionally providing fund-raising opportunities. Shortly after the third Indiana Jones film was released, for example, the Institute of Archaeology at University College London was raising funds to build new laboratories. Harrison Ford, who played Indiana Jones, donated one of his character's bullwhips, which was auctioned for a substantial sum.

Dismissing any connection, on the other hand, is like telling people: 'If you are interested in archaeology because of Indiana Jones then it is not for you!' It is the equivalent of Greenpeace warning every potential donor that real Greenpeace activists virtually never work in small rubber dinghies fighting illegal whalers. Although true, this achieves nothing except alienating an interested audience before it has had the opportunity to hear what it is that you actually want to convey.

The irony is that archaeologists do find their subject exciting and are often driven by the same spirit of adventure as Indiana Jones. Many students choose their subject out of a desire to travel and a fascination for discovering ancient artefacts. Indeed, just like their professors, they tend to consider fieldwork under tough conditions pleasurable, taking any opportunity to tell each other of hardships encountered and hazards lived through. Even for seasoned scholars, the best rewards for hard work are spectacular discoveries, and it helps when they are made of precious metal.

There is a little 'Indy' in many archaeologists, even if in public contexts it is hidden behind the face of a serious scientist. We may hate to admit it, but Hollywood's depiction of archaeology may capture something of the spirit of the discipline after all.

Cornelius Holtorf teaches archaeology and heritage studies at the University of Kalmar in Sweden. His latest book is *Archaeology is a brand! The meaning of archaeology in contemporary popular culture* (2007).

\* Fedoras are felt hats of the type worn by Indiana Jones.

\*\* Lara Croft is the archaeologist heroine of the Tomb Raider video game series.

## Document 2

### 'Legend of the Crystal Skulls: the truth behind Indiana Jones's latest quest'

Crystal Skulls are Fake?

Sixteen years ago, a heavy package was delivered to the National Museum of American History. Richard Ahlborn, who was in charge of the Spanish-American collections, knew of my expertise in Mexican archaeology and called me to ask whether I knew anything about the object – an eerie, milky-white crystal skull considerably larger than a human head.

In the years since the package arrived, my investigation of this single skull has led me to research the history of pre-Columbian collections\* in museums around the world, and I have worked with a broad range of international scientists and museum curators. Studying these artefacts has prompted new research into pre-Columbian lapidary (or stone-working) technology, particularly the carving of hard stones like jadeite and quartz.

Although nearly all of the known crystal skulls have at times been identified as Aztec, Toltec, Mixtec, or occasionally Maya, they do not reflect the artistic or stylistic characteristics of any of these cultures. A British Museum scientist and I examined some crystal skulls under light and under a scanning electron microscope and conclusively determined that they were carved with relatively modern equipment, which was unavailable to pre-Columbian carvers. They are too good to be true pre-Columbian artefacts and are therefore almost certainly fakes. Pre-Columbian lapidaries used stone, bone, wooden, and possibly copper tools with abrasive sand to carve stone, so these crystal skulls are much too perfectly carved and highly polished to be convincing.

Jane MacLaren Walsh is an anthropologist at the Smithsonian's National Museum of Natural History.

\* Pre-Columbian collections: artefacts from societies (such as the Aztecs) which existed in the Americas before the arrival of the explorer Christopher Columbus from Europe in 1492.

Adapted from: <http://www.archaeology.org/0805/etc/indy.html>



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