University of Colorado, Colorado Springs
Center for Cognitive Archaeology
ANTH 4125/5125: Rock Art and Modern Cognition

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The course requires students to study four complementary modules that are supported by readings and 30 ten-minute audiovisual presentations (AVPs).

There is one most important exercise. All students should do whatever they can to visit some rock or cave art. I realise that this is going to be easier for some than for others, but you should try. I will provide some URLs that will give you a good start in identifying where there are sites that can be visited. I will endeavour to find suitable places for people for whom these web sites do not provide much useful information.

Modules: Overview

Study Modules	Supporting audiovisual presentations
Module 1: What is prehistoric art or rock art?	Diversity of rock or cave art
	Archaeology of art
Module 2: Art and ethnography	Art and ethnography
Module 3: Art and ritual	Art and ritual
Module 4: Art and other behaviour	Art and other behaviour
Module 5: Art and cognitive evolution	Art and cognition

Module 1: What is prehistoric art?

The work for this module is about getting familiarity with the diversity of rock or cave art over the last 40 thousand years and in all parts of the world.

In the first exercise of the course, you are asked to produce a map showing the location of images from different sites, 10 images from each continent (Africa, Asia, Europe, Australia and North and South America). If you are able to visit a site yourself, this should be included here. Most of the images should be obtained from the huge store of images available online. I recommend that you look at the photographic site Flickr and search for rock art, petroglyphs or pictographs in each continent. Please do not only select images from the first page of images or you will all end up with the same map. It is essential to give the source for all your photographs, by stating the URL of the online site, the book from which you scanned it, or the name of the photographer (which ideally should be you). (10 points)

In order to be able to study prehistoric art, you need to understand some of the principles by which archaeologists make inferences, so there are AVPs that introduce some of the key ideas.

Diversity of art
1. Rock art of the world
2. European cave art
3. Earliest Australian art
4. Early art in other parts of the world
5. The diversity of early art—the media of the message

Archaeology of art
1. Archaeological dating—radiocarbon, OSL etc
2. Dating art
3. Superimposition
4. Style
5. Comparison with excavated art

Module 2: Art and ethnography

In this module you will consider how archaeologists know anything about the way people have used art in non-Western societies.

Art and ethnography
1. Australia—Morphy and Yolngu bark painting
2. Australia—Myers and Central Australia
3. South Africa--Shamanism
4. Descola
5. Layton

Module 3: Art and ritual

Much rock art around the world is quite unlike "Art" on the walls of art galleries around the world because there are relatively few image classes and there is a lot of repetition. One approach to this repetition is to examine the extent to which the production of rock art involved ritual. The readings and the AVPs will guide you towards an understanding of this.	**Art and ritual**	
	1.	Rappaport and ethnography of ritual
	2.	Whitehouse and Atkinson on religion
	3.	Ross (and Davidson) on ritual art
	4.	The art of Vernal, Utah
	5.	Nine Mile Canyon, Utah

Module 4: Art and other prehistoric behaviour

One of the key questions about understanding prehistoric art is how the behaviour related to it fits in with other behaviour in that region and that time, and how that relationship between art and other behaviour compares from region to region.	**Art and other prehistoric behaviour**	
	1.	Parpalló and eastern Spain
	2.	Power of pictures
	3.	East and West Mediterranean
	4.	Art and Evolutionary Psychology
	5.	Art and Human Behavioural Ecology

Module 5: Art and cognitive evolution

Now that we have some understanding of some of the factors that produced rock art and how archaeologists can go about interpreting it, we are ready to consider some of the issues about how art relates to cognition.	**Art and cognition**	
	1.	Origins of pictures—the nature of signs
	2.	Ritual and memory (Minc)
	3.	Models of cognition—WM and ICS
	4.	The history of art
	5.	Human cognition and art cause or consequence?

Readings

Diversity of art

1. Rock art of the world
   Clottes, J. (2002). *World rock art*. Los Angeles: The Getty Conservation Institute.

2. European cave art
   Davidson, I. (1997). The power of pictures. In M. Conkey, O. Soffer, D. Stratmann, & N. G. Jablonski (Eds), *Beyond art: Pleistocene image and symbol*, vol. 23 (pp. 128–158). San Francisco: The California Academy of Sciences.

3. Earliest Australian art
   Mulvaney, K. (2012). Iconic imagery: Pleistocene rock art development across Northern Australia. *Quaternary International*, *285*, 1–12.

4. Early art in other parts of the world
   Henshilwood, C. S., d'Errico, F., & Watts, I. (2009). Engraved ochres from the Middle Stone Age levels at Blombos Cave, South Africa. *Journal of Human Evolution*, *57*, 27–47.

5. The diversity of early art—the media of the message

Archaeology of art

1. Archaeological dating—radiocarbon, OSL, etc. Concentrated on Radiocarbon dating and OSL dating in your reading.
   http://archaeology.about.com/od/dating/Dating_Archaeological_Sites_and_Artifacts.htm

2. Dating art
   Steelman, K. L., & Rowe, M. (2012). Radiocarbon dating of rock paintings: Pictographs into the archaeological record. In J. McDonald & P. Veth (Eds), *A companion to rock art* (pp. 565–582). Oxford: Blackwell.

David, B., Geneste, J.-M., Petchey, F., Delannoy, J.-J., Barker, B., & Eccleston, M. (2013). How old are Australia's pictographs? A review of rock art dating. *Journal of Archaeological Science*, *40*, 3–10.

3. Superimposition
Mulvaney, K. (2012). Iconic imagery: Pleistocene rock art development across Northern Australia. *Quaternary International*, *285*, 1–12.

4. Style
Pigeaud, R. (2007). Determining style in Palaeolithic cave art: A new method from horse images. *Antiquity*, *81*, 409–422.

5. Comparison with excavated art
De las Heras, C., Lasheras, J.A., Rasines, P., Montes, R., Fatas, P., Prada A., &Muñoz, E. (2012). Datation et contexte archéologique de la nouvelle omoplate gravée découverte à Altamira. In J. Clottes (Ed.), *L'art pléistocène dans le monde* (pp. 270–272). Actes du Congrès IFRAO, Tarascon-sur-Ariège, Tome LXV-LXVI. Art et Sociétés, Bulletin de la Société Préhistorique Ariège-Pyrénées. (I will have this translated.)

Art and ethnography

1. Australia—Morphy and Yolngu bark painting
Extract from Morphy, H. (1991). *Ancestral Connections: Art and an Aboriginal system of knowledge*. Chicago: The University of Chicago Press.

2. Australia—Myers and Central Australia
Extract from Myers, F. R. (2002). *Painting culture: The making of an aboriginal high art*. Durham: Duke University Press.

3. South Africa—Shamanism
Lewis-Williams, J. D. (2012). Rock art and shamanism. In J. McDonald & P. Veth (Eds), *A companion to rock art* (pp. 17–33). Oxford: Blackwell.

   McCall, G. S. (2007). Add shamans and stir? A critical review of the shamanism model of forager rock art production. *Journal of Anthropological Archaeology*, *26*, 224–233.

4. Descola
Descola, P. (Ed.). (2010). *La Fabrique des images: Visions du monde et formes de la représentation*. Paris: Somogy et Musée du Quai Branly. (I will have this translated).

5. Layton
Sauvet, G., Layton, R., Lenssen-Erz, T., Taçon, P., & Wlodarczyk, A. (2009). Thinking with animals in Upper Palaeolithic rock art. *Cambridge Archaeological Journal*, *19*, 319–336.

Art and ritual

1. Rappaport and ethnography of ritual
Extract from Rappaport, R. A. (1999). *Ritual and religion in the making of humanity*. Cambridge: Cambridge University Press.

2. Whitehouse and Atkinson on religion
Atkinson, Q. D., & Whitehouse, H. (2011). The cultural morphospace of ritual form: Examining modes of religiosity cross-culturally. *Evolution and Human Behavior*, *32*, 50–62.

3. Ross (and Davidson) on ritual art
Ross, J., & Davidson, I. (2006). Rock art and ritual: An archaeological analysis of rock art in arid Central Australia. *Journal of Archaeological Method and Theory*, *13*, 305–341.

4. The art of White Shaman rockshelter
Boyd, C. (2012). Pictographs, patterns, and peyote in the Lower Pecos Canyonlands of Texas. In J. McDonald & P. Veth (Eds), *A companion to rock art* (pp. 34–50). Oxford: Blackwell.
http://discovermagazine.com/2012/may/11-decoding-ancient-secrets-of-white-shaman

5. Nine Mile Canyon
Matheny, R. T., Smith, T. S., & Matheny, D. G. (1997). Animal ethology reflected in the rock art of Nine Mile Canyon, Utah. *Journal of California and Great Basin Anthropology*, *19*, 70–103.

Art and other prehistoric behaviour

1. Parpalló and eastern Spain
Davidson, I. (2012). What is carry on? Portable art and changes of symbolic meaning. In J. Clottes (Ed.), L'art pléistocène dans le monde (pp. 268–269). Actes du Congrès IFRAO, Tarascon-sur-Ariège, Tome LXV-LXVI. Art et Sociétés, Bulletin de la Société Préhistorique Ariège-Pyrénées. (I will have this translated.)

2. Power of pictures
Davidson, I. (2005). The painting and the tree: Symbolism in the Upper Palaeolithic. A tribute to a great Basque scholar. *Munibe (Antropologia-Arkeologia)*, *57*, 197–205.

3. East and West Mediterranean
Davidson, I. (2012). Variation in early paintings and engravings. In J. McDonald & P. Veth (Eds), *A companion to rock art* (pp. 51–68). Oxford: Blackwell.

4. Art and Evolutionary Psychology
Miller, G. F. (2001). Aesthetic fitness: How sexual selection shaped artistic virtuosity as a fitness indicator and aesthetic preferences as mate choice criteria. Bulletin of Psychology and the Arts, 1, 20–25.

5. Art and Human Behavioural Ecology
Davidson, I. (2012). Four questions about foraging models and the process of colonisation. *Australian Archaeology*, *74*, 19–20.

Art and cognition

1. Origins of pictures—the nature of signs
Davidson, I. (2012). Origins of pictures: an argument for transformation of signs. In K. Sachs-Hombach & J. R. J. Schirra (Eds.), *Origins of pictures: Anthropological discourses in image science*. Cologne: Halem.

Malafouris, L. (2008). Beads for a plastic mind: The 'Blind Man's Stick' (BMS) hypothesis and the active nature of material culture. *Cambridge Archaeological Journal*, *18*, 401–414.

2. Ritual and memory (Minc)
Minc, L. D. (1986). Scarcity and survival: The role of oral tradition in mediating subsistence crises. *Journal of Anthropological Archaeology*, *5*, 39–113.

3. Models of cognition—WM and ICS
Barnard, P. J. (2010). Current developments in inferring cognitive capabilities from the archaeological traces left by stone tools: Caught between a rock and a hard inference. In A. Nowell & I. Davidson (Eds.), *Stone tools and the evolution of human cognition* (pp. 207–226). Boulder: University Press of Colorado.

4. The history of art
Malafouris, L. (2007). Before and beyond representation: Towards an enactive conception of the palaeolithic image. In R. C. Renfrew & I. Morley (Eds.), *Image and*

imagination: A global history of figurative representation (pp. 287–300). Cambridge: The McDonald Institute.

Moro Abadía, O., & Gonzáles Morales, M. (2012). Understanding Pleistocene rock art: An hermeneutics of meaning. In J. McDonald & P. Veth (Eds.), *A companion to rock art* (pp. 263–275). Oxford: Blackwell.

5. Human cognition and art: Cause or consequence?
No reading

Assessment: Undergraduate

1. Using resources from the Internet or your visits to sites, produce a map showing the location of images from different sites, 10 images from each continent (Africa, Asia, Europe, Australia and North and South America). It is essential to give the source for all your photographs, by stating the URL of the online site, the book from which you scanned it, or the name of the photographer (which ideally should be you). (10 points)
2. To what extent does knowledge of the role of art in modern societies help us to understand prehistoric art and cognition? Can we look at images and work out the ontological beliefs of prehistoric societies? (25 points)
3. Online multiple-choice test on art and other archaeology. (15 points)
4. Did the fact that humans can produce art on rocks which endures to be seen beyond the moment of production have an impact on the evolution of human cognition, or is it just the case that art could only be produced once humans had come to have modern human cognition. (50 points)
5. As an undergraduate student, your final grade will be determined by the number of points that you receive out of a possible 100:

A	90 - 100 Points
B	80 - 89 Points
C	70 - 79 Points
D	60 - 69 Points
F	00 - 59 Points

Assessment: Graduate

1. Using resources from the Internet or your visits to sites, produce a map showing the location of images from different sites, 10 images from each continent (Africa, Asia, Europe, Australia and North and South America). It is essential to give the source for all your photographs, by stating the URL of the online site, the book from which you scanned it, or the name of the photographer (which ideally should be you). (10 points)
2. To what extent does knowledge of the role of art in modern societies help us to understand prehistoric art and cognition? Can we look at images and work out the ontological beliefs of prehistoric societies? (15 points)
3. To what extent do the anthropomorphic images of the Three Kings site near Vernal suggest that ritual was involved with their production? (20 points)
4. Online multiple-choice test on art and other archaeology. (10 points)
5. Did the fact that humans can produce art on rocks which endures to be seen beyond the moment of production have an impact on the evolution of human cognition, or is it just the case that art could only be produced once humans had come to have modern human cognition? (45 points)
6. As a graduate student, your final grade will be determined by the number of points that you receive out of a possible 100:

A	90 - 100 Points
B	80 - 89 Points
C	70 - 79 Points
D	60 - 69 Points
F	00 - 59 Points

Due Dates and Deadlines

The syllabus in Blackboard contains the deadline for each unit and specifies the dates by which the test must be completed. For each deadline, you have until 11:59 PM on the deadline day. Remember, these are DEADLINES. You are encouraged to stay well ahead of these deadlines. The sooner you complete the work, the sooner you'll be done with the course.

You must complete each unit by the specific date in the Blackboard version of the syllabus. Once that date has passed, you can still access the material in the unit, but you can no longer take the test associated with that unit. For example, if Unit 3 must be completed by Thursday, September 16, if you don't take Test 3 by 11:59 PM on September 16, you will receive a 0 for that test.

Dr. Davidson's Expectations of You

During completion of this course, you must abide by the UCCS Student Conduct Code. This code specifies what is considered proper and improper student conduct, including matters such as cheating and inappropriate behavior. Students who do not abide by the code can receive sanctions ranging up to expulsion from the course or the university.

Remember that this is a 3 credit-hour course. Please plan on spending a lot of time working on just this class. This time will include reviewing lesson plans, completing online lectures, reading from your textbook, answering practice problems, verifying your work, and completing test. We suggest that you plan to spend at least 10 hours per week on average.

Of course, the amount of time spent does not guarantee you any particular grade. Your letter grade will reflect the amount of material that you learned, as reflected in your test scores and the overall quality of your contributions to the course.

Solving Technical Difficulties

When you're having technical difficulties (pages not loading, connectivity problems, not able to view images, things not working as they should, etc.), please contact the Blackboard Helpdesk toll-free at 877.654.8309 or online at the UCCS Blackboard Support page. The Blackboard Helpdesk is available 24 hours a day, 7 days a week. Please note this service is separate from the UCCS IT Helpdesk.

Help Understanding Course Material

When you have questions regarding course policies, grading criteria, test administration, or course content, please email your professors for assistance.