LITHIC ANALYSIS SEMINAR

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Course Description

This course is intended to provide an in-depth introduction to contemporary methods in lithic analysis, with a special application to the Middle Paleolithic. Most of the readings, as well as my lectures will be in English, and therefore a good passive knowledge of English is required, but you will have the option to complete your written assignments and oral presentation in German. The readings and discussion will revolve around five themes that concern lithic artifacts in general, namely Morphology, Function, Style, Technology, and Taphonomy. Each week will consist of a half-hour lecture on the topic of the day, and the rest will be spent on discussing the readings. At the beginning of the course, I will hand out three ‘assemblages’ knapped by me, and on the next to last meeting, each of the student groups will be required to hand in a report for their assemblage. In the last class, I will reveal how the assemblages were made, and what the groups were able to discover about them. The final mark will be 40% dependent on class participation and 60% dependent on the final report.

The final report should demonstrate that you thought about the stones, and that you tried to apply some of the theoretical and methodological insights obtained from the readings and lectures throughout the course to the material. I will be looking for clear and strong scientific reasoning more than getting the ‘right’ answers. Like most archaeological work, this is a cooperative project, so you are encouraged to talk to each other and to me about your assemblages.

Readings and course plan

The readings for this course are mostly journal articles published in major international English-language journals. Occasionally, I will assign new articles that pertain to the topic to be discussed that week. The list below also contains several books which are meant to serve as reference works.
(e.g., *The Neandertal Legacy*), as well as a handful of seminal articles/books that are in languages other than English or German (e.g., François Bordes’s Typology book). Think of these as study aids rather than reading burden. Normally, I will post readings on my website in .pdf format several weeks in advance, so you can download them. There is no official textbook for this class, but I encourage everyone who is serious about lithics to get a copy of Andrefsky’s Cambridge University Press manual, *Lithics: Macroscopic Analysis of Stone Artifacts*.

**Week 1: Introduction, Overview**

This first class will be entirely a lecture to cover the basic aspects and terminology of lithic analysis. It is meant as a refresher. Optional reading - introductory chapters 1 and 2 from Andrefsky.


**Week 2: Systematics and typology in the Middle Paleolithic**

What are typologies, and how are they created? Here we will discuss critically the typological frameworks of de Mortillet, Lartet, Peyrony, and more recently Bordes and Bosinski.


**Week 3: The Style-Function Debate**

In this week we will explore the famous Ford–Spaulding debate about the possibility of identifying style in the archaeological record, and its ramifications in current research.


**Week 4: Site function, mobility, and raw material economy**

We will discuss how lithic assemblages may differ based on distance to raw material sources, type of settlement, and intensity of occupation.


**Week 5: Mousterian Variability**

We will discuss the not-yet-solved question relating to the meaning of the Mousterian variability.


**Week 6: Lithics and Taphonomy**

The first half of the course will end with an exploration of the role of site-formation processes in creating the character of a lithic assemblage.


Week 7: Extracting behavior: Technology, the Chaîne Opératoire, and Intention

In the next half of the course we will begin our foray into questions of behavior, intention, individuality, and a discussion of the methods used for such inquiries.


Week 8: Recognizing technologies: Levallois

As a case study we will discuss the famous Levallois method, as well as a few of the main non-Levallois methods, such as the Quina debitage method.


Week 9: Reduction sequence and debitage analysis

In this week, we will look at attribute-based and quantitative approaches to analyzing debitage.


Week 10: Cognition and Stone Tools

What can lithics tell us about the cognitive abilities of ancient hominids?


Week 11: Function and Traceology

We will review the history and advances of functional analyses of stone tools, including low-power and high-power approaches, and residue analysis.


Week 12: The Formation of Flakes and Experimental Approaches

This week, we will review scientific controlled and replicative experiments in flintknapping.


Weeks 13: The Ethnographic Record

In the final week, we will look at what the ethnographic record can tell us about past technological systems. Report due.


**Week 14: Assemblage discussion & conclusions**

General discussion about the projects as well as final wrap-up of the course.