From the east or the west?
Blade production in the Levant and northwest of Europe during the Middle Pleistocene

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The latest chronological and geographical data suggests a multi-bond appearance of the laminar phenomenon: in the heart of Palaeolithic. The oldest indications of blade production are from Africa around 545 000 BP and later c. 400 000 BP in the Levant. Only about 300 000 BP does the production appear in Europe. This activity seems to have developed over a long period and reflects different production strategies that always led to the production of an elongated support.

In the Levant, the systematic production of blades emerged during the transition between the LLP and the EMP. During the LLP research clearly shows two distinct industries Pre-Aurignacian and Amudian. These industries reflect a great ability to systematically produce blades and present a new approach to core volume management. Despite the significant similarities between those two industries, there are some differences, which can be related to the nature of the raw material and/or site function. The Pre-Aurignacian and Amudian have been associated with term Acheulean-Yabrudian.

The EMP industries also contained systematic production of blades and are esteemed directly under the Levantine Mousterian. They are known under different names, Hummalian, Abou Sifi an, or Tabun D and aimed to produce elongated, converging or parallel blanks using different core reduction strategies. Beside the Levallois system of debitage, the existence of Laminar system of debitage is also confirmed. In the case of Hummalian, the Levallois and the Laminar debitage systems seem to be used successively during the same core reduction process. Some of the EMP blade industries also included cores on flake and bladelet production.

In the northwest of Europe, the shift from Lower to the Middle Palaeolithic is characterized by the emergence of new behaviours. The first record from this period has undergone changes concerning the core reduction strategies; an increase in predetermined flaking systems. Blade production appeared mainly at the end of MIS 9. The oldest evidence of blade production is from Cave d’Alléau (Italy) and Mousterian Fr (Belgium). MIS 5 see blade production spread across a widespread area of Europe, including northwest of Germany and central and southern France. The blade production is never exclusive and usually coexists with other core reduction strategies for flake production.

The EMP and the LLP industries are not related to the nature of the raw material hard hammer percussion, there are significant differences between them. Both EMP assemblages from the Levant and Europe (e.g., Cave d’Alléau, Mousterian Fr) show simultaneously the use of Levallois and Laminar reduction strategies to produce their blanks. Yet in the Levant blade production is most prominent whereas in Europe blades appeared as a marginal phenomenon alongside flake production. Furthermore, there is a fundamental difference concerning the appearance of blade and Levallois technologies in Europe. The oldest evidence of blade production is from MIS 13-11 in France, MIS 10 in Italy and only at the end of MIS 9 beginning of MIS 8 did the Levantine industry start to appear. While in the Levant, the Laminar system began around 400 000 BP before the emergence of the Levallois system in the EMP.