The production of mosaics in Palestine and Transjordan reached in the sixth century a climax that reflects the flourishing of the communities who commissioned them. Many aspects of these mosaics have already been well studied and especially pavements in religious context received much attention from the point of view of iconography and iconology. Archaeological excavations of recent years enrich us with an ever-growing corpus of representations, some confirm earlier observations, while others raise new questions and provide new insights. One of the still unsolvable problems in the study of mosaics is the process of their production and the identification of the teams that produced them. It has been argued in the past that no teams could be identified in the region due to the fact that not enough material has yet come to light to permit such investigation. However, despite the amount of mosaics that researchers have today at their disposal, no fundamental change took place in this field. It seems that the difficulty lies not in the amount of material, but in the applied research methods. Therefore, the main question that the present study focuses on is whether it is possible to identify the team of producers of a mosaic pavement, with what method and according to which criteria. The study of workshops and producers of mosaics throughout the Mediterranean region receives much attention lately. It is therefore all the more conspicuous that the study of mosaics has not yet developed a clear set of criteria for the identification of production-teams. The current research explores the preconceptions that dominated the study up until recently and suggests the method of application procedure as the main criterion for the identification of production-teams.

Pioneer research in this direction has already been conducted by various scholars, but despite the promising results, has not yet become a very popular investigation-field. The reason for this is probably that none of these studies formulated an empiric set of criteria that can be applied on any mosaic for the sake of studying and identifying the team of producers, let alone draw conclusions as to the construction or organisation of the production team. Many of the questions still remain relevant: Were mosaic craftsmen itinerary artists who moved from place to place following their commissions?
Or were they regionally based organisations that moved about within a limited geographical range or even within the limits of one urban centre? Was the ancient mosaic workshop a hierarchical organisation with clear task-division or rather small-scale businesses? Could small-scale family businesses possess all necessary expertise in order to produce large-scale commissions? How many craftsmen cooperated in such a team? And what was the work division between them?

Whether a team of producers can be identified at all on the basis of its artistic output is in itself a complex question. The present research does not aim at solving all these questions, but it provides a first step towards understanding the problems at hand and suggests an initial method for their study. It provides in the first instance an overview of the study methods that have been applied for the study of workshops, beginning with the material and technical aspects involved in the production of mosaics (Chapter 2) and covering various disciplines, from the study of iconography and style to the analysis of the repertory of geometric designs and lay-out patterns (Chapter 3). All these aspects were, and still are, important for the study of ancient mosaics and were therefore also applied as criteria for suggesting the identification of production-teams. None of these methods, however, confronted the basic problem concerning workshop identification, namely: the workshop-construction. Most of the investigations methods assume that workshops had a continuous existence, and that craftsmen worked together as a permanent team, assuming that an oeuvre of one team can be distinguished from another on the basis of the repertoire (either iconographic, geometric, lay-out, etc.). The possibility that at least some of the teams were ad-hoc organisations or that continuity of cooperation was rather temporary, makes the analysis more complex as it demands an attempt to identify the individual working-hand or the ‘signature’ of an individual producer. The identification of individual craftsmen, however, is a complex process not devoid of its own pitfalls.

The present study focuses on the analysis of repetitive patterns of production procedures. This aspect is conceived as a crucial aspect in the process of mosaic production, and one that can provide the key for understanding the production-team construction. Following the successful observations of previous studies in this field, it is for the first time attempted to develop the analysis of repetitive application patterns into an empiric method for the identification of individual artistic product.
The hypothesis at the basis of this research is that artistic production is a procedure-guided activity. Mosaic art was in antiquity a craft and as such was transmitted from one generation of producers to the next. A young apprentice probably started his training at a young age with an initial training by a family relative (the inscriptions that mention this refer to a father-son training construction) or by joining as an apprentice to a local craftsman. He went through a laborious training process until becoming a professional mosaicist. During this process he learned all the necessary aspects of production, and undoubtedly continued to develop his expertise until becoming a ripe artist. He undoubtedly repeated procedures that he learned from his own master, from other colleagues he worked with or models he encountered, but he probably also experimented with the material that he learned through the years. In the course of time, he developed his own artistic preferences and, depending on his talents and virtuosity, he developed his own specialisations. These preferences and specialisations, whether a genuine development or application of old patterns albeit in a new variation or combination, include the repetitive elements that embody the procedure of that specific individual craftsman.

The present study suggests seven criteria for the study of repetitive characteristics (Chapter 1): 1) illusionistic overlapping; 2) internal division of the figure; 3) repetitive forms of gestures; 4) recurring features; 5) size and shape of the tesserae; 6) colour and the sorting level of the tesserae; 7) inlay patterns.

These criteria were tested on two main case studies: the one is the Mount Nebo region in Jordan, which yielded a large group of relatively well-preserved mosaics (Chapter 4). The other is the group of mosaics that were in the past attributed to the so-called ‘Gaza-workshop’, scattered in the Negev region and the Gaza strip (Chapter 5).

The Church of Holy Martyrs Lot and Procopius at the village of Nebo (Khirbat al-Mukhayyat) from AD 557, served as a main case study for the notion of identification of a specialized mosaicist. The analysis of this floor shows a remarkable consistency of inlay. Inlay patterns and production procedures, not only of the human figures but also plant, geometrical motifs and even the filling of the background, are highly repetitive. The consistency of the human figures according to all seven criteria gives a convincing impression that one craftsman is responsible for their production. However, others assisted him, and it seems that at least three producers cooperated in the production of
the pavement. But can this team be recognised as a ‘workshop’? Can the work of this team also be identified in other locations? The analysis of other mosaics in the region, such as the Chapel of the Priest John (AD 565), The Old Diakonikon (AD 530) and the Church of the Deacon Thomas (undated) show that this specific team cannot be identified elsewhere. Specific repetitive elements, however, can be identified, and these may be attributed to a specific hand. The construction of the team, however, changed from one project to another and therefore does not support the identification of a ‘workshop’ as a permanent team. The same conclusion is made even more explicit in the Gaza region, where the former identification of the ‘Gaza workshop’, appears not to withstand the test of the seven criteria. Despite the fact that none of the floors in the Gaza region were produced by the same team, it is conspicuous that they do share certain repetitive inlay patterns, such as the parallel length strokes, the application of crescent lines for the creation of anatomy and division of the animals bodies, and the stressed spine-line. These can certainly be distinguished as characteristics that define the local production tradition of the Gaza region and were probably transmitted from one generation of mosaicists to the next in a process of training, indicating a lively local industry with a certain measure of continuation. Each mosaicist, however, developed his own production procedure, and good examples are the master of Kissufim (AD 575/6) and the clear distinction that can be made between the three producers of the mosaic of Maon (ca. AD 538). However, the only individual who could artistically be identified as possibly working in more than one location in the Gaza region is the craftsman who produced the vine-scrolls in Moan, Shellal (AD 561/2) and probably Beer-Shema’ (undated), with their typical ring-construction and a specific grape type. However, also he was not working alone and in each case was helped by others.

The evidence collected in this study shows that workshop construction in Palestine and Transjordan is sometimes a complex issue. It seems that the region enjoyed the existence of many small-scale businesses (that could be as small as a single craftsman) that often cooperated in different constructions in order to produce large-scale commissions. The teams, however, were not permanent, and the cooperation had a temporary nature, at times limited to a single project. The variety of ‘styles’, encountered by art-historians and archaeologists in the past and the difficulty to identify teams in the region can thus be explained as a result of the temporary nature of cooperation between individual craftsmen. This temporary cooperation, however, has not erased the traces of the
individual producers who were involved in the production and a systematic analysis of their production procedures yields valuable results.