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The Crac des Chevaliers – once again - Comments on the state of research

The Crac des Chevaliers in today's Syria (province of Homs), is one of the most famous castles in the world (fig. 1, 2) – and not just because this spectacular eye-catcher is often used as a prime example when talking in the broadest sense about crusades or the



Fig. 1: Crac des Chevaliers (Syria), the attack side from south, seen from the „triangular fore-work“. In the foreground of the south front of the defensive outer ward, the big square Qalawun tower and the round tower of the south gate right are Mameluk. Behind the front of the main castle with the southwestern or commander's tower (on the left, hidden), the main and southeast tower (right). (Reinhard Schmitt)

Middle Ages in the Near East. Moreover, scientists often dealt with the building, not only by mentioning it in their specialized literature and numerous articles about individual aspects, but also between 1934 and 2006 in not less than three extensive object monographs.¹

These three works were always made within or commissioned by high-ranking institutions in France and Germany², and were the result of research work done over any years by experienced specialists. For that reason, the Crac does not only rank beyond any doubt among the first-rate castles but is also one of the best examined at the same time.

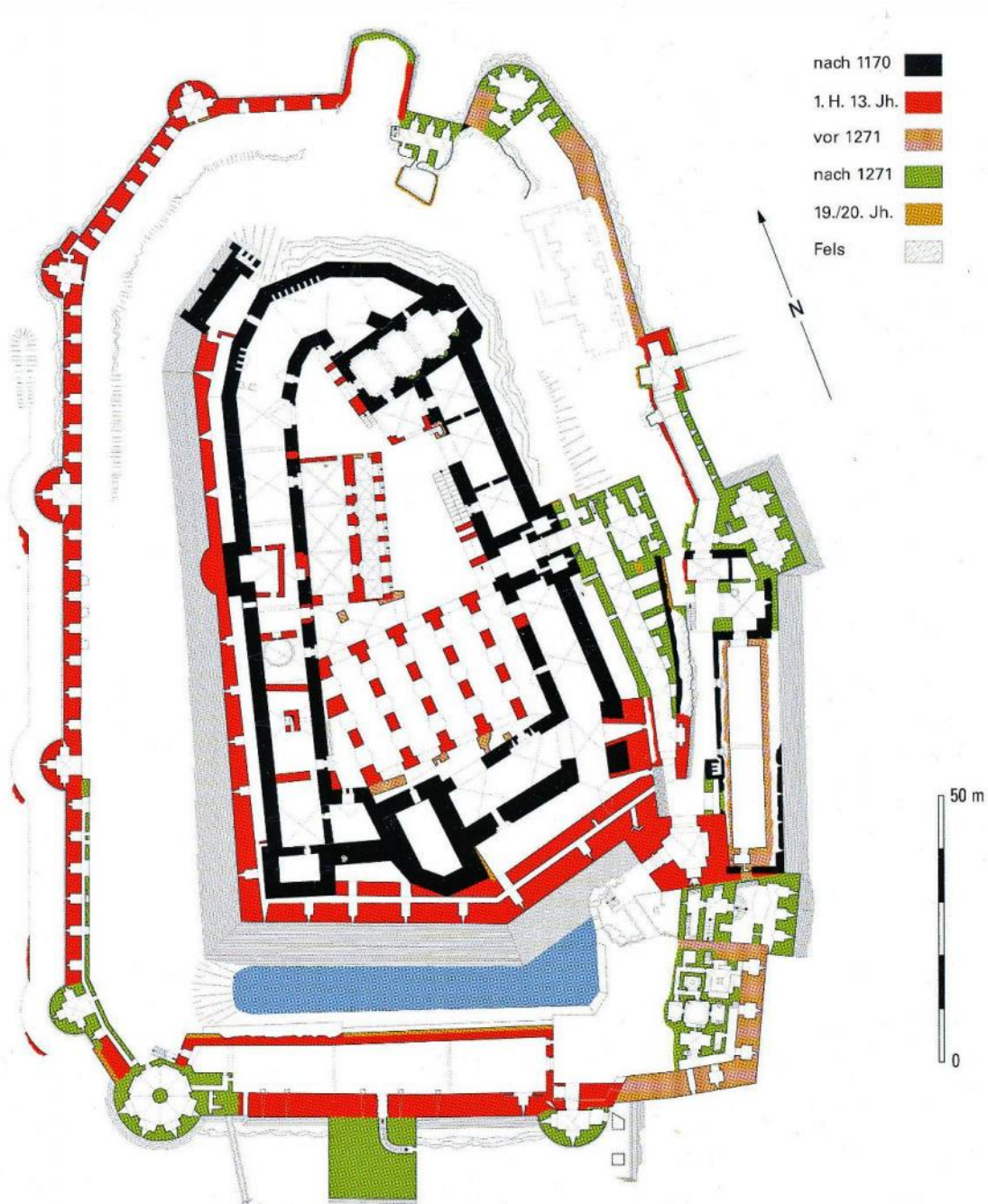


Fig. 2: Crac des Chevaliers, construction age plan on the level of the ground floor. (*Biller et al. 2006*)

Against this background, it will certainly be of interest that a fourth work has been published – the third one within the period of just eight years – dealing with this

important building and which – at least according to the authors’ explicit intention – will outshine³ all previous works to such an extent that any analysis of the former state of research becomes completely unnecessary. This is exactly what the reader already learns when reading the introduction, where the authors, without any false modesty, declare that they simply consider anything written about the Crac up to now to be superficial and incorrect or even “absurd”⁴.

Confronted with such statements, the impartial observer only has the choice between two diametrically opposed judgments. Either he thinks that he witnesses a great moment of science, in which everything that authors of outstanding competence wrote before vanishes into thin air – or the observer is confronted with an unusual kind of self-confidence, which already clearly exceeds the bounds of the problematic⁵!

Whoever dealt with the topic „Crusader Castles“ or even with the Crac des Chevaliers itself, feels obliged to comment on this new publication and this holds especially true for the authors of these lines, as they are the initiators and the majority of the authors who published only five years ago the last monograph about the Crac des Chevaliers. As these authors are at the same time responsible for the allegedly wrong and superficial findings and thesis, it is certainly helpful to briefly outline the relation between the two projects and the two groups of authors⁶.

In 1998, an excursion group came up with the idea to have the castle revised by the authors of this article within the organization of the „Wartburg-Gesellschaft zur Erforschung von Burgen und Schlössern e. V.“ – after having realized that the only comprehensive description existing of the castle by Deschamps/Anus (1934) definitely contained some inaccuracies and gaps. Not earlier than the project got the support of the Auswärtiges Amt (Department of Foreign Affairs) and the Deutsches Archäologisches Institut (Orientabteilung) ⁷ (German Archeological Institute – Orient Section), the idea, not only to deal with such individual aspects but to systematically examine the site as a whole, was born. Originally, Thomas Biller (Berlin), Daniel Burger (Nürnberg), G. Ulrich Großmann (Nürnberg), Hans-Heinrich Häffner (Weissenburg i. B.), Timm Radt (Stuttgart) and Reinhard Schmitt (Halle) belonged to the project group. On the occasion of our second stay at the site, Werner Meyer (Basel) joined, who was most welcome being a renowned researcher of castles; he was accompanied by his colleague and co-author Maria Letizia Boscardin, who had been working with him for many years; they were responsible for one important chapter of the book.

Only after finalization of the manuscript – which at that time after approval of the DAI had been presented to the „Deutschen Forschungsgemeinschaft“ (German Research

Foundation) for contribution to printing costs – John Zimmer (Luxembourg) offered to have new plans of the castle to be taken on account of his country of origin. This proposal was well accepted as an improvement of the plans published in 1934 was expected and therefore, several members of our group of researchers supported the measuring of the site anew; it was agreed to integrate the new plans into our publication. While these works were carried out, it was already noticed that J. Zimmer totally ignored the completed manuscript of our research work, which at any time had been available to him together with all drawings⁸.

The original initiators were, however, not involved into the new project agreed between Meyer, Zimmer, Boscardin and representatives of the Syrian Administration of Antiquities. When being asked, W. Meyer told us that only archeological test excavations would be carried out; further information about the progress of the works and results were - against agreements - not given in the following years. By doing so, the work team around W. Meyer unfortunately avoided to directly discuss their results with the already existing workgroup although such a discussion was offered to him, so that our interest in new knowledge was not satisfied and an exchange of interpretations on the site did not take place. Furthermore, first publications of J. Zimmer presenting examples of his plans were little helpful, as they did not mention the origin of the common research at all. Also the participants of the original project, who helped him in the survey of the site, were just called technical assistants or not mentioned at all⁹. Even our request, to still correct the plans handed over to us for printing purposes, which unfortunately contained severe mistakes and “free” additions¹⁰, remained without any reaction, although Zimmer extensively completed his measurement of the castle in the subsequent 18 months before the publication of our book. For that reason, we only had the unfortunate choice between not using the plans or to point out why we printed them despite of the faults easily recognizable for the reader.

Not only in retrospective, it can unavoidably be concluded that especially J. Zimmer’s behaviour already anticipates the refusal to discuss or to even notice different results, something also reflected in the foreword to the publication that followed. Under these circumstances, it is not pleasant to constructively criticize the publication of Zimmer, Meyer and Boscardin, as this unavoidably collides with the long-standing recognition of the highly scientific performance of Werner Meyer as well as the friendly relationship with him. The attempt, however, shall be made; the following will certainly make clear why a critical observation is particularly necessary.

Bearing this in mind, the new work has to be divided into several sections of different character, which must be discussed separately. The examinations the authors carried

out were on the one hand archeological; they were new and helpful at the Crac *a priori*. On the other hand, also reminding of the discipline of „Historische Bauforschung“ (building research) but mostly ignoring its methodology, many new thesis for the interpretation of the highly preserved wall are rendered¹¹, which often try to confront the former interpretations, however, in doing so, as a rule fail to discuss the issue clearly giving arguments.

First, the results of the archeological examinations, which were carried out at three different points of the ring of halls of the main castle and to a smaller extent outside the southern “Lion’s Gate” as well as beyond the southern outer ward, shall be discussed¹². The fact that when dealing with this subject it is necessary to go through detailed texts and drawings in kind of a laborious way, speaks more for the quality of the excavators’ performance than against it; the documentation meets the standards of today’s archaeology, if it is well-organized and financed.

Leaving the excavations apart, what kind of result has, however, been achieved in answering the question about the overall development of the castle and especially its early construction phases (as expected, from the excavations only little new information could be gained about the castle’s development since its reconstruction in 1170 onwards)?

Not considering at the moment the excavations at the outside of the main castle, in the south – its particular problematic nature shall be dealt with later – the most important issue, when analyzing the detailed stratigraphy and catalogue of finds, is dating not exclusively, but first and foremost, of the components and construction phases of the castle. Unfortunately, no real progress can be noted in that case – this is certainly not meant to criticize the excavators’ work, but is an unavoidable phenomenon often occurring in archaeology. In the catalogue of finds generally age determinations for ceramics and other categories of finds are indicated, however, usually they are only rough estimates („11th/12th century“ or similar.). As the attempt to achieve more precise age determinations on the basis of radiocarbon samples did not really bring about helpful results ¹³, it must still be the case that dates handed down in written sources are by far the best framework for analyzing the history of the castle’s development; our analyses (*Biller et al.*) were principally based on such sources.

The dating of a first, and just in one excavation area analyzed, oldest curtain wall (H15) into the „late 10th century“, appears to contradict the sources presented and analyzed by *Deschamps* – according to which the castle was founded in 1031. The question is, however, how reliable is this estimate, which in lack of alternatives can only

be based on the general dating of the ceramics as already mentioned? The question is, whether on ground of such a small basis the assumption is really allowed that already before the castle was founded, a fortification had existed, which just for unknown reasons was not classified as a castle and was not documented in any source? Doesn't it stand much more for reason to date the oldest finds more carefully and attribute them more to the construction founded in 1031?

The only structure from the early days of the castle registered during the excavations, which enriches our image of the oldest castle, exceeding the northeastern short curtain wall section, is a small rectangle of 1,8 – 2,0 m thick foundations (W11a, W11b, W20), which was attached on the northwestern side to the oldest curtain wall (here as almost everywhere replaced by the younger curtain wall) afterwards, and which protruded – its width is unknown - into the inner part of the castle at least by 3,5 m. The reporter, supposedly Werner Meyer, hesitated to call this feature a tower – this interpretation, however, is without any question most obvious, whereas the thesis, it could be a „sub-construction for a platform, on which a catapult could have been positioned“¹⁴, is just a free thought, which would have distinguished itself from a tower just by its height.

The conclusions, among others, which the authors try to draw from the already touched excavation in the ditch in front of the southern outer ward and from finds on the triangular fore-work, show in fact that a detailed documentation of archaeological results *per se* is no guarantee for reliable scientific results. Southeast of the preserved south gate of the outer ward, a semicircular gate tower from Mameluk times, a corner of a wall tapering on both sides and consisting of big ashlar can be found in the ditch (fig. 3). It is a vestige of a strong building, whose construction had been at least commenced; and as at the highly preserved wall of the semicircular tower and the wall, respectively, to which it is attached to, different observations suggest a totally differently conceived gate tower, which, however, obviously remained incomplete. We related these different observations to a rectangular gate tower from Frankish times, whose construction, however, had just begun and was only replaced by a differently shaped tower in Mameluk times.¹⁵ Zimmer *et al.* excavated now some additional foundation stones and claim – without further consideration, neither of the records of the highly preserved curtain wall, nor our line of arguments that the construction of a talus was commenced, however, that those stones were not at all the remains of a commenced „corner-tower“¹⁶. How do they come to this assertion? The foundations excavated have an overall length of 15 m from East to West, something that definitely would – when deducting the sloped wall - match a tower with the dimensions of 12 x 12 m, a measurement absolutely common in the region. The consideration that a lower bench of rock also excavated and extending the foundation line by 22 m in western direction, might hint to a planned talus in front of the Southern front of the defensive outer ward is

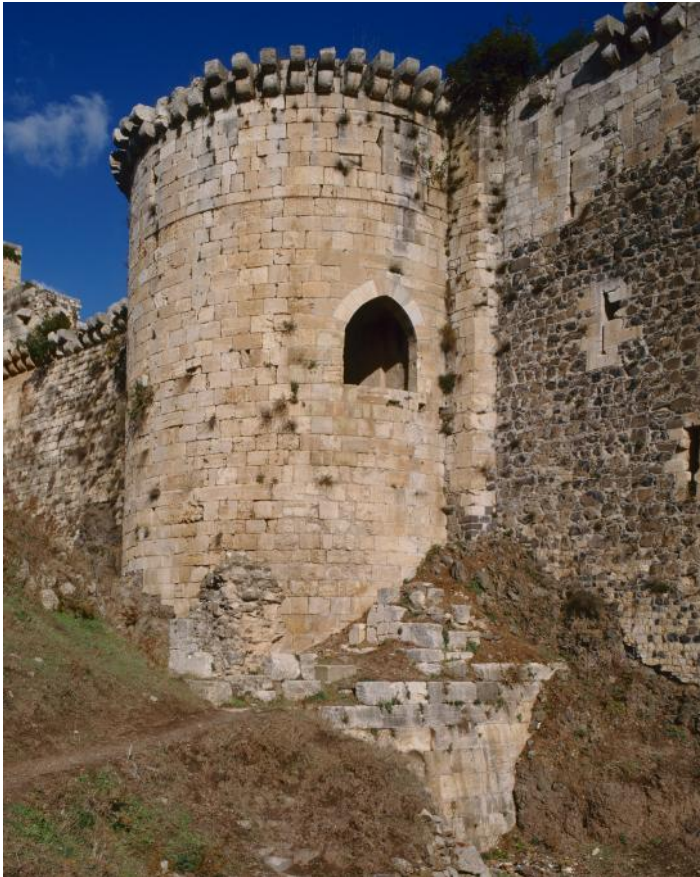


Fig. 3: Crac des Chevaliers, under the round, Mameluk tower of the south gate of the outer ward up to nine layers of a steeply rising wall of big ashlars are visible which belong to an older rectangular construction. According to further evidence inside the Mameluk tower, probably these are the foundations of a late Frankish gate tower which was presumably never completed. The recessed wall remains above the big ashlars belong to Mameluk bridge piers. (Reinhard Schmitt)

a quite plausible idea, however: Why should this exclude a gate tower at its eastern end? It is difficult not to suspect that at this point an already preconceived opinion shall be supported by considering from all facts available only the ones “fitting” best.

The allegations made by *Zimmer et al.* about the triangular fore-work at the south front of the castle (fig. 4) give also reason for skepticism. In older literature, especially by *Deschamps*, an interpretation and dating of this installation was avoided, as it is just marked by a moat of rock without visible older remains of the wall. In 2006, we were the first ones to try to make a classification by relating the fore-work in its original shape of the southern front of the outer ward - as there was a tower missing just in the middle of the attack side - to the famous

example of Château Gaillard in Normandy. Therefore, the working hypothesis was adopted that the installation had been planned and also commenced in the most important construction phase of the castle, in the first half/middle of the 13th century, however, remained uncompleted¹⁷. *Zimmer et al.* reply that they had made surface finds of ceramics dating from the 11th /12th century – consequently they argue that the moat around the fore-work and the fore-work itself must be an integral part of the earliest castle from the 11th c.¹⁸. This conclusion is unacceptable. There are many different possible explanations for surface finds of that date in the vicinity of a castle founded in 1031, e.g. a human settlement (fortified or unfortified) in front of the south gate of the castle, waste disposal or shifting of material during the numerous construction works; at any rate, the findings do not give any information about the age of the moat and the dating of the fore-work in the shape we can imagine today.



Fig. 4: Crac des Chevaliers, the „triangular fore-work“ from the wall walk at the southeastern corner of the outer wall towards southwest. The uncompleted hotel building on the hill on the right hand side is situated where 1271 mangonels of the Muslim besiegers stood. (Reinhard Schmitt)

Before dealing with the main section „analyses“ („Deutungen“), these two examples already show what unfortunately characterizes the major part of the work of *Zimmer et al.*, i.e. an interpretation often based on randomness and speculation, less frequent to be found at the excavation results, however, more common where the highly preserved building shall be interpreted. This kind of flaw can be found in the book to a great degree, here, however, only some further examples will be given to evidence this problem.

The multitude of plans attached¹⁹ and not the written explanations, which are kind of short, show how much importance the authors attribute to surveying and drawing plans – the list of plans is 15 pages long, the stack of plans 4 cm high²⁰. As a matter of fact, in this context the question of the benefit and correctness of the description should, of course, not be left aside, even if the impressive graphics appear to point into another direction. As two of the co-authors of the present text (Dr.-Ing. Th. Biller und Dipl.-Ing. H.-H. Häffner) participated in the first surveying campaign, and got to know the method of working of the surveyor J. Zimmer,²¹ we can judge exactly the second question, which shall be dealt with first for systematical reasons.

As a matter of fact, the numerous breakpoints, which are the backbone of the plans, were defined with high precision by a skilled surveyor with the help of modern,

computerized tachymeters („total station“); therefore, it can be assumed that the „big dimensions“ or proportions of the overall complex were recorded in Zimmer's plans more precisely than it was possible in the 80-year-old plans of François Anus (in *Deschamps'* book). When going into more detail, on the one hand an improvement in the measurement can be noticed, however, doubts arise about the extreme amount of work. For our book we were measuring new drawings of numerous small areas of the castle – individual rooms or limited groups of rooms – especially aiming at plans showing the different ages of the parts of the building, so re-measuring many dimensions of Fr. Anus. The result, which is in accordance with general experience, was that Anus' results – as far as the individual measurements did not exceed 20 m – are absolutely exact so that a new measuring requiring much more time and technical means was not necessary.

In so far, the criticism at Zimmer's plans is limited to the aspect that such a great effort can usually not be financed, or that scarce funds should generally be used more expediently; as many architectural historians know this can best be achieved with a dense tachymetrical breakpoint system taking only a couple of days and completed by architectural historians by manual measurements, which was easy to take, however, was dealing into too much detail with the object; the advantage of the method lies in the point that the architectural historians not only take measures, but that they look at and analyze every part of the building. This leads to the most problematic point of Zimmer's interpretation, i.e. the precision of the detail. The suggestion of his drafts relies to a high degree on their graphical perfect presentation in colour of countless fine details, which are suggestive of greatest realness. However, can this impression be correct? It is possible, though, to copy accessible excavation areas in every detail; for high walls this cannot be achieved without scaffolding. Therefore, Zimmer's presentation is just a graphical rendering of rectified photos taken from considerable distance; the walls can neither be examined from a near distance nor completed. As every methodically experienced architectural historian knows, such presentations bear a high potential of errors, that means, significant details can be overseen or misinterpreted. As far as Zimmer supplies sketches of high, not scaffolded walls – and this applies to the Crac des Chevaliers to a great degree – beyond any doubt the big dimensions were recorded precisely, as well as clearly visible features such as cracks, landings, openings etc. However, small details such as the masonry bond, the surface as worked by the stonemason, small ornamentation, or heavily weathered sections etc. cannot be reliably recorded with such methods applied.

The same has to be said about the presentation of contour lines on many site plans and ground plans, which at first sight are strikingly precise. They are definitely not the result of exact surveying, but were generated by computer programs often using only a few

points measured for their projection, so that just the illusion of an exactly represented terrain is created; the deviation from reality can be considerable.

These methods – revising pictures from a long distance and „calculated“ presentation of the terrain – are reason enough to judge the meaningfulness of the drawings with scepticism, however, the drawings J. Zimmer gave to us for our publication, unfortunately contained even more severe breaches of scientific methodology, such as additions made freehand based on inaccurate and obsolete documents²². We take it for granted that these defects were corrected during the final measurements – it was, however, not yet possible to check this on the site also due to the ongoing civil war in Syria. Nevertheless, they tell us a lot about the intentions of the surveyor or draughtsman. As a matter of fact, it was not intended to achieve a detailed, true documentation of the building for scientific interpretation, which is up to now limited to a few fields better accessible, also considering the fact that at the moment it is not possible to put up scaffolding around the biggest part of the high building. Furthermore, the suggestive effect of allegedly “complete”, however, formally attractive drawings is actually the main goal.

The final piece of evidence supporting the theory that not aspects of the history of the architecture of the building are focussed at, is the fact that when turning to the interpretations of the highly preserved building, which account for more than one quarter of the entire volume²³, these attempts of interpretation can also be found in the chapter called “finds” (“Die Befunde”) which claims to be an objective description. Under the title „Interpretations“ (“Die Deutungen”), the major part of the methodical faults can be detected, which shall be explained with the help of only some examples.

The first particularly interesting example is the representation of the upper floor of the east wing of the main castle, which shows a multitude of easily detectable construction phases, as it was used still until the 20th century. In our book, we had not only dealt with these phases in writing but have also given a construction age plan²⁴ (fig. 5). This plan is already based on surveys made by J. Zimmer, so that it does not only offer an analysis for the development of the construction, moreover it meets all requirements as to correctness of measurements. Nevertheless, *Zimmer et al.* renounce to use our plan as well as to give a different description of the construction phases - which of course is generally possible. In fact they give only plans without indicating the construction phases. Again, it has to be asked: Why? Is the determining of construction phases and their representation in drawings irrelevant? Or shall the confession be avoided that former examinations of the castle – in contradiction to denouncing them as

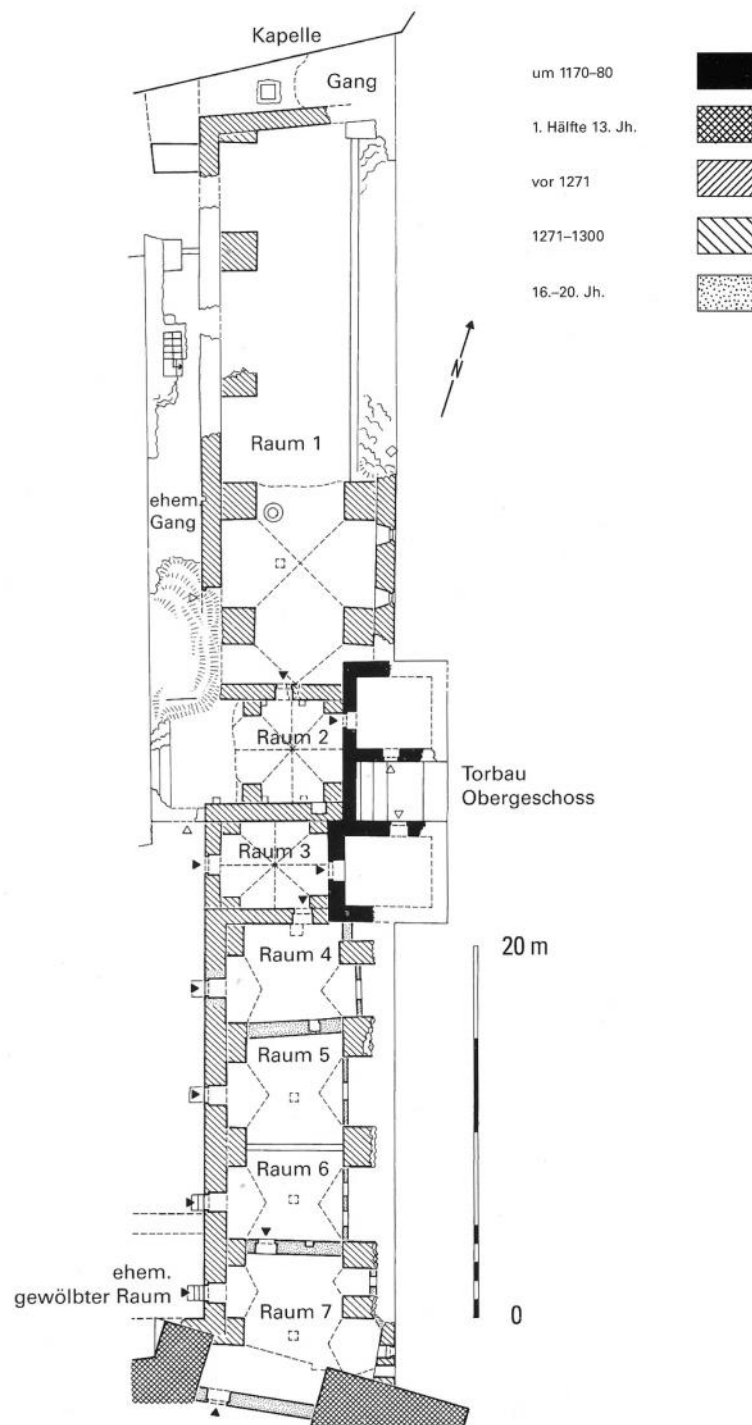


Fig. 5: Crac des Chevaliers, the upper floor of the east wing of the main castle, age construction plan. Basis of measurements: J. Zimmer; Interpretation: G. U. Großmann, Th. Biller (*Biller et al.* 2006)

inexact and incorrect – have in reality produced results which even *Zimmer et al.* have to accept?

The most serious shortcoming of the work discussed is the lack of basic knowledge in art history. Whoever is not in a position to realize that ribbed vaults, as on the ground floor of the Eastern gate tower (gate 2) or the upper floor of the western tower of the main castle, are “Frankish” or late Romanesque/Gothic is running the risk to arrive at far-reaching wrong conclusions. So, a theory is formulated for the development of the construction of the eastern side of the lower castle, i.e. the ramp and the northeastern original bailey, whose construction was complex and was made in several phases, and for the late Frankish wall components in the North and South, which totally denies any reality, as it was not realized that the core of gate 2 is still ascribed to Frankish times (which we proved by the arched form of the gate hall and other arguments also ignored by *Zimmer et al.*). The same methodical ignorance was applied when evaluating the western tower, whose upper floor is of particular importance as it has partly survived as the only one from the construction period after 1170. Not only this is declined by the authors without giving relevant arguments, what is more, they even present a reconstruction of this construction phase of the castle, in which no towers at all(!) are mentioned²⁵. Upper floors of towers and consequently towers are totally ignored for the phase the existing building was founded, despite the fact that in several cases the ground floors are completely preserved, that at the side of attacks their walls measure up to 6 m and that parts of the wall from the first construction phase of the main tower still exceed the ground floor of the main castle and contains a staircase leading into the upper floor later built anew.

The only well-founded explanation considering art history relates to the shapes of the capitals of the two components of the Crac, which are the only ones decorated more than the rest, that means the hall and the upper floor of the “commander’s tower” at the southeastern corner of the main castle²⁶. Here, W. Meyer and C. Meckseper (this is one of the few sections of the book where a name is indicated) come to conclusions, which absolutely are in accordance with the ones published by H.-H. Häffner, Th. Biller and G. U. Großmann five years earlier²⁷ - something that is indeed not really surprising when bearing the attention in mind that has been paid to the development of the Gothic period in France for many decades now. Unfortunately, another misconception of the authors relating to the southwestern tower is that the hall in the commander’s tower belongs to the first construction phase, which they date around 1210. In reality it is obvious that the hall was integrated secondary, as several clearly visible embrasures were provided on occasion of this second construction. (fig. 6) – something the author of the building description denied with an incredibly wrong reasoning²⁸.



Fig. 6: Crac des Chevaliers, the highest part of the southwest or commander's tower of the main castle from southeast. On the left and slightly deeper as the window, a high secondarily walled-up embrasure can be seen, and another one more to the left (arrows). At this level, such embrasures surround the entire outside of the tower. They evidence that the room of this floor characterized by rib vaults was created not so much later on the occasion of a reconstruction when the embrasures were abandoned. (Biller *et al.* 2006)

When dealing with the question, what meaning capitals for themselves do have for dating the integration of the hall into the tower, it would, however, be problematic to simply equate the dating of earlier known forms of this kind in France with the ones of the Crac. There has always to be calculated a certain „term“ of such forms, so that their occurrence has also to be considered one or several decades later - in this case approx. until the middle of the 13th century; this necessary care has especially to be applied to regions as far away as the Middle East. For this reason, in our book we have not overestimated the dating of style of the form of decoration within our interpretation of the castle but have tried to date the „big rebuilding“ of the castle, i.e. talus and renovation of the main castle's tower (fig. 7), defensive outer ward in the north, west and south – under consideration of several aspects (form of tower, shape of embrasures, inscription at the northern sally port etc.). It is clear that no precise and reliable dating can be achieved in this way; we also think that the attempt to precise the dating with reference to earliest known dates of a couple of capitals is problematic as to methodology.



Fig. 7: Crac des Chevaliers, the south front of the main castle, with three towers above a high sloped wall/talus, was created on the occasion of the “big renovation” in the first half of the 13th century. The towers were built, however (not noticeable from the outside) on the ground floors of older rectangular towers. (Reinhard Schmitt)

A further reason for criticism of the authors' procedure does not relate to their lack of knowledge in art history but of their little knowledge of other research carried out in the „Holy Land“. The decisive, however, hard to be dated construction phase of the castle, which determines its appearance to this day, was the “big renovation” mentioned-above. We have doubted the early dating of *Deschamps* (around 1200) with careful argumentation based on extensive comparative examples and the inscription on the northern sally port and pleaded for a dating from circa 1220. Instead of discussing this in more detail, the author of the corresponding chapter at *Zimmer et al.* focusses on a simplifying interpretation, which *Deschamps* had presented in 1934: around 1212 the pilgrim Wilbrand of Oldenburg mentioned that during times of peace, 2000 men defended the Crac²⁹ – already *Deschamps* draw the simple conclusion: a great number of people requires a very big castle. As a matter of fact, numbers indicated in medieval times are often extremely exaggerated; for example according to the report of the pilgrim Theoderich, the stables of the templars in Jerusalem were said to accommodate not less than 10.000(!) horses, modern examinations of the preserved building,

however, resulted in a maximum of 500 horses – the ratio between source and reality therefore is 20:1! There are even more precise examples to remind us to make more careful estimates. The castle at “Jacobs Ford” (*Vadum Jacub*, Galilee/Israel) excavated lately, which was erected from October 1178, was already one year later conquered in an incomplete state and destroyed by Saladin. Allegedly, it was defended by 1500 men, which should have squeezed into a space of 50 x 120 m (0.6 ha). The main castle of the Crac measured about the same surface in its state from 1170, that means before the „big renovation“ took place, and adding the exterior eastern and southern construction accounting for almost the same surface you can double that dimension³⁰. The meaning of this comparison for the accommodation of 2000 defenders is obvious: even when taking the 2000 defenders absolutely literal (plus the 1500 in *Vadum Jacub*), they are certainly no proof for consequently dating the “big renovation” before 1212.

The fact that the author grossly neglects, when dealing with the substance of the preserved building, to differentiate between finds, interpretation and speculation, is even more evidenced in his statements about the southwestern corner of the defensive outer ward. Since the time Sultan Baibars had destroyed the exposed corner by undermining it in 1271 (*Biller et al.*: outer tower 7; *Zimmer et al.*: tower 39) there stands a round tower erected after the siege. Not only the written sources but also the parts of the “Frankish” outer wall leading on both sides towards the tower suggest that at that corner already before the destruction a tower stood, however, it has disappeared completely³¹. In our attempt to reconstruct the southern front of the outer ward we found this out³² and offered just a reconstruction from bird’s eye view of the state of the castle around 1250 which was a hypothetical idea of the approximate shape of the tower³³. Against this background it is just amazing that at *Zimmer et al.* now a ground-plan (plus additional drawings) was presented³⁴, on which the *totally vanished* tower is represented in every detail from the gate to the arrow-slits and even with several construction phases. In the face of the findings this is just pure fiction.

The fact that the author in question cannot differentiate between scientific analysis and speculation, is finally underlined by his particularly overwhelming insinuation that the famous inscription at the western tower of the north sally port mentioning a “barbacane” and its historical identifiable constructor, were transferred from another place, i.e. from the “north tower” of the main castle. Everything about this statement that could be wrong is wrong.

First, the author totally avoids dealing with the question what the word „barbacane“ might have meant in the 13th century, although this matter was lately discussed extensively³⁵; moreover, he insists without questioning on the disproved assumption of *Deschamps*, that advanced gates were called “barbacane” at that time. Secondly, he claims for the “north tower” a development which due to lack of evidence cannot be proven to a great extent³⁶, and by doing so he also neglects the decisive fact that in this

tower (fig. 8) neither a gate can be found, nor a destroyed spot, where such a gate could have existed; – apart from the fact that this would have been a second main gate of the main castle and not at all just a „barbacane“ in the meaning of the 19th century. Thirdly, there cannot be found any clue at the existing building that the inscription had been embedded there later³⁷. That leads us to the only conclusion: When this kind of totally invented allegations neglecting „superiorly“ the current state of research is the basis of publication, consequently architectural archaeology³⁸ as a scientific method is made nonsense of – because any inscription and any workpiece could principally originate from everywhere, so that any meaningfulness is lost.

As a summary we arrive at the following evaluation of the publication of *Zimmer et al.* The carefully carried out and documented archaeological excavations in the main castle have principally confirmed the conception of the shape of the oldest part of the castle based on current written sources and consideration of the building site without, however, producing a larger number of new details. Even if minor rebuilding of the former complex became comprehensible, the fragmentary findings only can tell us little about the greater context or functions of the rebuilt sections. In how far the findings will promote the archaeology of the Middle Ages in the Near East beyond the Crac, remains to be seen; the difficult stratigraphic conditions allowing only for a general dating will remain to be a problem.

The documentation of the highly preserved building in measurement or draft, as far as the „big“ measurements are concerned, is certainly a progress, even if a lot has already been summarized correctly by *Deschamps/Anus* and our research also brought about some completions, such as in the field of the Hammam excavated in the 1980s and 1990s. In detail the methodology of taking measures generalizing and simplifying the architecture has to be dealt with reserve. Real progress could only be achieved at the preserved walls with the help of accompanying building research supported by extensive scaffolding, something that in view of the tragedy taking place in Syria since 2011 will certainly not be realized soon.

The allegedly new results of building research or attempts of interpretation of the construction phases, however, suffer from serious methodical flaws, so that they have to be regarded with full reservation. The authors of this chapter of the book apparently are not only misguided by the error that suggestive graphics could replace the analytical approach of serious building research, but again and again get lost in the wide realm of speculations.



Fig. 8: Crac des Chevaliers, the north tower from northwest. The brightly illuminated stones on top of the left wall belonged to the partition walls of a row of twelve latrines in the thickness of the wall. They were emptied through the three high blind arches in the lower part of the wall into the moat. The pointed arch in the wall above on the right hand side evidences that originally only the floor with the latrines could be reached from the platform of the main castle from a "bridge", under which a narrow wall walk with an outer parapet was passing; the wall walk and the lower part of the high openings of the arches disappeared during the "big restoration" in the 13th century behind the talus. Before this renovation, the north tower was comparable in function and form with a "Danzker" (advanced latrine towers) of some castles of the Teutonic Order, which were, however, erected only from the second half of the 13th century on. (Reinhard Schmitt)

The extensive occupation of two qualified project groups with the same high ranking object just within a couple of years could have offered the rare chance for a fruitful discussion of different interpretations especially as both groups initially had worked together. Unfortunately, this chance was not taken as the authors of the later work preferred to terminate the contact, obviously in order to present their own point of view “undisturbed” by the argumentation and opinion of other specialists. The volume and quality of the results, which are only to a small extent new, and the numerous allegations, which cannot be proven, show in our opinion that such an isolation of other researchers does certainly have no advantage at all. At any rate, the attempt to leave aside the reasoned discussion of the state of research simply describing it to be totally wrong – especially when bearing in mind that central points of their own argumentation were based on this state of research – must be called unscientific.

For that reason, to our regret the conclusion must remain unsatisfactory. The latest excavations have absolutely confirmed the scientific findings of building research, however, this is never explicitly confirmed by the authors so that the reader has to read between the lines in search of these findings; a method at least unsatisfactory under scientific aspects. Furthermore, *Zimmer et al.* let their imagination run wild, something which could be scientifically acceptable, however, only if speculations would have been clearly marked as such. The readers were, however, confronted with sometimes very dubious theories which were presented as proven knowledge. Hope remains that it will soon be possible again to examine at the building itself thesis and argumentation – if the castle survives the civil war undamaged, which we all can only hope.

¹ - Paul Deschamps, *Les Châteaux des croisés en Terre Sainte*, t. 1: *Le Crac des Chevaliers, Étude historique et archéologique ...*, plans of François Anus, text volume and album, Paris 1934 (Bibliothèque archéologique et historique); will be referred to in the following comments as „*Deschamps*“ (usually meaning the text volume).

- Jean Mesqui under cooperation of Benjamin Michaudel: *Quatre châteaux des Hospitaliers (Crac des Chevaliers, Marqab, Qal'at Yahmur, Coleiath)*, to be recalled under: <http://www.castellorient.fr/0-Accueil/indexfran.htm> (recalled on 14.6.12, text, however, probably from 2003). Will be cited in the following comments as „*Mesqui et al.*“.

- Thomas Biller (ed.), *Der Crac des Chevaliers - die Baugeschichte einer Ordensburg der Kreuzfahrerzeit*, Regensburg 2006 (Forschungen zu Burgen und Schlössern, Sonderband 3); Authors: Th. Biller, Daniel Burger, G. Ulrich Großmann, Hans-H. Häffner, Werner Meyer/Maria-L. Boscardin, Timm Radt, Reinhard Schmidt. Will be cited in the following comments as „*Biller et al.*“.

² The work of Deschamps was published by the „Service des Antiquités“ of the High Commissariats of the French Republic in Syria and Lebanon, supported by the „Institut de France“, whose member the author was. Jean Mesqui was et al. the chairman of the „Société française d'archéologie“ and publisher of the „Bulletin Monumental“. *Biller et al.* was published by the „Deutsches Archäologisches Institut“/Orientabteilung and financially supported by the „Deutsche Forschungsgemeinschaft“. Certainly, high-ranking institutions are not automatically a guarantee for a high quality of their publications; it is, however, not plausible on the other hand that they are all necessarily superficial nonsense (cf. annotation 4).

³ John Zimmer, Werner Meyer, Letizia Boscardin, *Crac des Chevaliers in Syrien*, Archäologie und Bauforschung 2003-2007, with articles of further authors Koblenz 2011, Text volume and plan

supplements (publication of the Deutschen Burgenvereinigung e. V., Reihe A, Forschungen, Band 14). Will be cited in the following comments as „*Zimmer et al.*“.

⁴ *Zimmer et al.*, page 15 (in German): „Even a brief examination of the literature about the Krak – even the latest one – uncovers a multitude of mistakes of all kinds, contradictions and absurdities. Most of them are based on inadmissible speculations, incorrect and incomplete documentation and errors which usually are the result of superficial observations“. Here (and almost everywhere), the interested reader is only marginally informed where he might find the „latest“ literature; obviously he shall be spared to waste his time with nonsense but be lead directly to the only truth.

⁵ It can, however, not be avoided to mention that an occupation with the allegedly incorrect former publications has actually taken place, however, mostly in a form contradicting any scientific standard. Even when quickly scanning through, it can be noticed that many results achieved by *Deschamps, Mesqui et al.* and *Biller et al.* are contradicted, in most cases, however, without citing these other works and in particular with almost no exception without giving reasonable arguments. It is especially striking that the essential features of building chronology – especially the creation of the main castle from 1170 on – are adopted from *Biller et al.*, without making this evident, let alone to deal with the reasons given there.

⁶ Creation and progress of our project have already been described in the book itself (*Biller et al.*, p. 11-13).

⁷ Special thanks go to Prof. Klaus Freyberger, former head of the subsidiary in Damaskus of the DAI, and the director of the orient department, Prof. Ricardo Eichmann.

⁸ In the book itself (*Zimmer et al.*) – with the exception of some short articles especially of natural-scientific experts – it is not made evident, who is the author of which part; for that reason all three authors must be considered to be responsible for (almost) the entire publication. We know, however, from observations made during the work and conversations after the completion of our work that the division of work was mainly as follows: W. Meyer, supported by M.-L. Boscardin, guided (most or all?) the test excavations in the field of the main castle, J. Zimmer carried out a complementing archaeological test excavation at the “Lion Gate” and one in the south moat in front of the defensive bailey. All measurements and drawings (with the exception of only a few details) come from J. Zimmer, and apparently almost all attempts of interpretation relating to the highly preserved building.

⁹ Krak des Chevaliers, Récents travaux de mesurages et observations sur l'histoire architecturale, Levé et dressé par John Zimmer, levé complémentaire par Thomas Biller, Hans-Heinrich Häffner, Letizia Boscardin et Werner Meyer, in: *Revue technique Luxembourgeoise* 3 (2004), p. 93-104; to a great extent identical, however, without mentioning the «measuring helpers» Biller and Häffner: John Zimmer et Werner Meyer, *Le Krak des Chevaliers, Travaux de mesurage et observations sur l'histoire architecturale*, in: *Château Gaillard* 22 (Voiron 2004), Caen 2006, p. 359-373.

¹⁰ *Biller et al.*, p. 446 (Preliminary remarks to as-built plans); the concrete faults listed there (a selection) could be verified at any time by comparison on the existing building.

¹¹ Essentially in the sections 4 and 5, but also here and there in previous sections, that means without clear separation between observation and interpretation.

¹² Our research brought about important information, that the oldest bailey was located northeast of the main castle (*Biller et al.*, chapter 5) and that this probably was the only area where parts of preserved brickwork, i.e. the curtain wall, survived from the times of the earthquake in 1170. The reason why no test excavations were made exactly there remains unclear; maybe generally nobody paid too much attention to the defensive outer bailey complex anyway.

¹³ *Zimmer et al.*, S. 169 (in German): „... resulting in a time frame from 975 and 1180 when considering the error rate.“

¹⁴ *Zimmer et al.*, p. 62.

¹⁵ *Biller et al.*, p. 214-218, fig. 166, 167.

¹⁶ *Zimmer et al.*, p. 79-80. The author appears to have overlooked that we have referring to the most important evidence in the highly preserved wall not reconstructed only a *corner* tower but first and foremost a *gate* tower.

¹⁷ *Biller et al.*, p. 43-46.

¹⁸ *Zimmer et al.*, p. 80-81.

¹⁹ The impression, that Zimmer has *completely* mapped the castle in drawings is, however, wrong; there are e.g. still ground-plans of many bailey towers missing, and it has also generally to be stated that the consideration of *Zimmer et al.* concentrated on the main castle, whereas the defensive outer wards including the oldest bailey in the northeast important for the development of the castle was neglected.

²⁰ *Zimmer et al.*, p. 173-175.

²¹ *Biller et al.*, p. 393-394, where we not only address the new measuring made by Zimmer - other than the presentation of *Zimmer et al.* giving the impression that he was the only one to have ever taken measures

at the castle - but also comment on the survey of Fr. Anus (before 1934) and its usability, as well as mention our own survey partly referring to Anus' and Zimmer's.

²² cf. annotation 9.

²³ *Zimmer et al.*, p. 242-337.

²⁴ *Biller et al.*, fig. 68.

²⁵ *Zimmer et al.*, p. 378, upper picture.

²⁶ *Zimmer et al.*, p. 336-344.

²⁷ Meyer/Meckseper date into the „beginning 13th century“ (*Zimmer et al.*, p. 336), at *Biller et al.* (p. 183), formulated H.-H. Häffner the dating as „probably not before 1210, but more likely around 1220“ – something that does not result in a considerable difference. Another difference highlighting once again the negative attitude of the authors towards the history of art, does lie, however, in Häffner presenting his examples for comparison on several pages together with pictures, whereas for apparently comparable explanations of Caroline Frébutte (*Zimmer et al.*, p. 344, annotation 119) no space could be found on 400 pages not even for a summary written by herself.

²⁸ *Zimmer et al.*, p. 190 seq. That these embrasures were later walled up from the inside with individual stones can clearly be seen in many cases – even from a bigger distance. It remains unclear how the fact that one of the slits after having been walled up is only 3 cm deep, something that according to Zimmer can be proven “with the help of new measuring instruments“, shall proof the contrary. Are measuring instruments now in a position to determine construction phases?

²⁹ *Deschamps*, S. 87, with sources.

³⁰ *Biller et al.*, Fig. 15, 16. *Zimmer et al.* have not considered this at all as they deal with the areas beyond the main castle in a poor fashion.

³¹ *Zimmer et al.*, S. 281, are trying to suggest with a mysterious formulation that something has been preserved (in German: „the recessed part of the ... wall walk ... does make in its precise course only sense if it was connected to the postulated casing of the tower“), but the drawings of Zimmer cannot explain how exactly this connection of existing walls to only postulated ones should have functioned.

³² *Biller et al.*, S. 243, 245f.

³³ *Biller et al.*, S. 439 (Bird's view reconstruction 2: around 1250). The idea of the two rectangular towers at the south corners of the outer ward (page 248) is explicitly called there „consideration“ and „hypothesis“.

³⁴ *Zimmer et al.*, S. 281, annotation 5.65.

³⁵ *Biller et al.*, S. S. 257f.

³⁶ *Zimmer et al.*, S. 278 seq. It is undisputed that the existing north tower did not correspond to the initial planning of the main castle 1170 seq., because already *Deschamps* excavated behind it the foundation of a less protruding tower, which corresponded to the other towers of this construction phase. We are of the opinion that the north tower *represents a change of plans during the construction phase* of 1170 seq. and was not added several decades later by tearing down the older tower; we think that this results from the clean ashlar brickwork of the circle wall in the area where the foundation of the older tower is protruding. If this older tower had existed in its full height and if it had been demolished, most probably the places of connections to the cited part of the circle wall would be visible on both sides. In view of the provable repair carried out with great care at the Crac, finally nobody can be really sure about this theory. It is, however, clear that the north tower already existed at the time when the talus around the main castle was added.

³⁷ *Zimmer et al.*, S. 280, mentions that already Van Berchem and Rey were of the opinion that the inscription was secondarily integrated at its present place. Even when paying greatest respect to these patriarchs of orient research, we would like, however, to mention that members of expeditions in the 19th century, who only could visit and inspect the castle just for a couple of days or even several hours, undoubtedly could evaluate some poorly executed masonry in the brickwork less precise than experienced building researchers working several months on the site almost 150 years later. It is beyond any doubt that it is difficult to explain the sequence of construction – original or secondary – for worse brickwork where small fragments of stone were put between larger stones for getting accurate layers and a solid wall, but especially for that reason it is a typical beginner's mistake to consider a secondary integration to be the only possibility; it is crucial in such cases if the environment of the allegedly secondarily integrated stones shows much more severe poorly executed masonry than the piece of the wall itself in general – something, however, that is not the case.

³⁸ Cf. the habilitation coached by Cord Meckseper: G. Ulrich Grossmann: *Einführung in die Historische Bauforschung*, Darmstadt 1993 (revised: *Einführung in die kunsthistorische und historische Bauforschung*, Darmstadt 2010).