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Studied Physics, Philosophy and Musicology (Master in 1996 with a thesis on Monteverdi's concept of Seconda prattica), then changed for his PhD to architectural history (PhD in 2002 with a thesis on drawings from the Berlin Codex Destailleur D regarding St. Peter's in Rome). Since October 2013 he could continue his work on this Codex and its related drawings in Vienna and New York (and, perhaps, London, Florence, Vicenza, Stockholm etc.), most of them containing very detailed, un-paralleled measurements of antique buildings in Rome and elsewhere. His contribution today is based on his working hypothesis, that these drawings have been commissioned by the Roman *Accademia della Virtù* – what led him to focus its very vast research and publication program.

In Search of the true Vitruvius - The Accademia della Virtù and its scientific project

Following the guidelines for a good *rhetor* I try to start my paper with a *captatio benevolentiae* – in fact, even with two: First, I have to beg your pardon because I will not present today final results of a finished research but rather a starting work hypothesis, and secondly: the topic is rather a side-step to my own research project about a very large group of architectural drawings from the Renaissance, created around 1545 in Rome by French draftsmen. I have to admit that it is still only a working hypothesis, that these group of drawings was commissioned by the Roman *Accademia della Virtù*, and if there should be left some time at the end I could give you some examples of what led me to this hypothesis. – So, being no specialist in the history and theory of science or the humanities, my paper may contain errors, misconceptions and see false relationships that I hope you may help me to discover and avoid: I would like to add, that this is the main purpose of my paper: When I read the CfP for this session, I thought, that it would be the right place to discuss my ideas – especially with colleagues from other areas of studies in the Renaissance history of arts and sciences, who may help me to widen my rather drawing-focused horizon.

When the Sienese humanist Claudio Tolomei (1492–1556) published his own letters in 1547, the *terzo libro* included one piece from november 1542 directed to the **conte Agostino Landi**, then in Venice, that found some – but, though often mentioned, I would say: rather superficial – interest among scholars dealing with the studies of Antiquity during the Renaissance. The letter contains the program of a very large publication project the Roman *Accademia della Virtù* (sometimes also called: *Accademia Vitruviana*) planned to realize and for which some preparatory work had already been done. The centre of the project would focus the only surviving ancient book on architecture – but to understand it correctly (and therefore: to verify its content and its relation to the "real world") the *Accademia* also wanted to publish all available information about almost all other surviving artifacts from Roman Antiquity – not only including architecture, but also inscriptions, machines, medals and coins, vases and reliefs, paintings

etc., as we will see. Of course, this undertaking required not merely recording these massive amounts of information in the first place, but to collect and compile all of it in a manner that I would like to suggest to be seen as "scientific" in a very modern sense – and therefore, as the first formulation of a (or *the*) program of Classical Archaeology as a *Science* and not only as some antiquarians' hobby project. This project was not only intended to just collect information in a systematic manner, but rather to have a practical purpose: The *Accademia*'s explicit aim was to improve and verify the only classical text on architecture by using and comparing *all kinds* of available information from material and textual sources. This, in turn, would contribute to establishing a correct theory of (not only) antique architecture and its cultural context, as a basis for the improvement of modern architecture.

The letter starts with an introduction setting the stage by echoing the famous line attributed to Jean Mignot in the discussions about the Milan cathedral 150 years ago: "Ars sine scientia nihil est.": E perché quasi tutte l'arti, e principalmente l'Architettura son composte di teorica, e di pratica, è necessario per venire a qualche excellenza, non solo speculare, ma ancora porre in opera. — And it is obvious that Tolomei in this case does not primarily point at the practical building process in architecture, but at the realization of the opus he is to describe on the following pages. Tolomei then gives two reasons why Vitruvius' 10 Books should stand in the centre of the project: not just only because his text is the only surviving from Antiquity, but also, because he wrote about "tutte le parti de l'Architettura" – pointing us to the underlying intention of the project to give a comprehensive view of architecture in a basic sense: not only the ancient buildings or techniques, but rather a complete view – or, one might eve say: – theory of architecture. Therefore, Tolomei states, it is necessary not only to collect the information from the ancient text and the surviving buildings, but also "alter cose congiunte, e connesse".

To find out what had to be done to achieve this vast purpose, let's have a closer look on the letter and make some guesses regarding its structure and content: [1] Because there were already some Vitruvius editions on the market, in Latin as well as in Italian, the first volume was not reserved for the text itself but for an explanation of its difficult parts. It seems to me as if this was placed by Tolomei at the beginning of the enormous publication project, because the work was already done: In 1544 Guillaume Philandrier, one of the very active members of the Accademia had already published his "Annotationes" to Vitruvius, containing exactly what Tolomei describes as the first volume of the Accademia's edition. Therefore, this might have been intended as some sort of "appetizer" to the Conte Landi as future sponsor. [2] Only as a second volume, the Accademia then planned to publish "una opera d'annotazioni di le diversità de testi, massime ne le varietà notabili, e di qualche importenza, con le risoluzioni di qual lettura sie piu piaciuta, e per quali ragioni." [3] Finally, only as the third volume, Tolomei's list arrives at the publication of a "corrected" Vitruvius taking into account all the texts "che saranno con ragione approvati".

In case of volumes [2] and [3], one may think of another publication by Philandrier that appeared a few years after the author returned to France in 1550: Complementing Philandrier's Annotationes with the full Vitruvian text, Jean de Tournes at Lyon printed in 1552 the full text of Vitruvius' 10 Books with the remarkable addition: "Omnibus omnium editionibus longè emendatiores, collatis veteribus exemplis". Though Fredérique Lemerle thinks that Philandrier himself could not have been responsible for this particular edition (but a later reprint), "because the corrections he puts forth in presenting his annotations are taken into account for only half of them", it is not clear who else could have been the compiler of this edition. And the change in the dedication from the late François Premier to Philandrier's patron Georges d'Armagnac as well as an added portrait of Philandrier makes it possible, that Lemerle's view may not be entirely correct... As far as I know, no-one ever compared this edition with others and manuscripts to find out if it really is what it claims to be... [3a] This third volume should also be extended by the illustrations Vitruvius mentions but that did not survived. Citing explicitly the commendable edition by Fra Giocondo, Tolomei states, that the Veronese pater not only erred in some places, but also left out many other drawings that are needed to understand the text.

The following volumes were intended to include a Latin [4] and a Greek [5] vocabulary, a book [6] describing the *"strano modo di parlare di Vitruvio*" who's Latin is far from the best examples of Classical Authors – and therefore, there should be even a *"translation"* of Vitruvius into *"better"*, correct Latin as a 7th volume [7]! – Up to now, the *Accademia*'s project just seems to be aimed for the learned scholar, but because most of the architects of that time did not read Latin, the *Accademia* did not only plan a translation into the *"bella lingua Toscana"* [8], but wanted to add also an Italian lexicon [9] of all important terms and an Italian lexicon [10] of all parts of the orders and how to design and produce them.

And with this we come to the more interesting parts: Because Vitruvius gives not fully consistent rules to design the orders, the next volume [11] should show Vitruvius' *regole* in comparison to the examples of orders found in the surviving antique architecture. One may think here of a book like the *Reigle generalle d'architecture*... published by **Jean Bullant** in 1564. But if one would have studied all the antiquities in Rome in search for a *systematic set of rules*, he would finally have to admit, that *there is nothing like that* ... and therefore, perhaps, come up with his own set of rules, derived from the best examples and fully consistent with each other: It is *exactly this* what **Jacopo Barozzi da Vignola** did around 1562 with his *Regola delli cinque ordini d'architectura*. And it is Vignola of whom **Vasari** says that the *Accademia* ordered him to measure *tutte le anticaglie di Roma* during the years of his youth. None of Vignola's own drawings and measurements have survived, but maybe he was just instructing other draftsmen...? Because: no-one could measure even a smaler triumphal arch by himself. – With this volume, the *Accademia* would also step out of the realm of *Theory* into that of *Praxis* by securing its

findings from the Vitruvian text through comparison with the built architecture. And, consequently, the next volume [12] would be a real "field research": It's aim was to establish a historical overview of the development of *tutte l'anticaglie* [!] in Rome by creating historical maps showing the development of the Eternal City over time – beginning with the *Roma quadrata*. This volume then sets the frame for the following one, *una vaghissima e utilissima opera* [13] showing *tutte l'antichità di Roma, e alcune ancora che son fuor di Roma*. And: These depictions should be enhanced by historical descriptions regarding purpose and construction history of the buildings.

So far we still may see the Accademia's program as a late echo of Raphael's so-called "Letter" to Pope Leo X in which he describes his plan (commissioned by the Pope, as he says) to measure Rome and its antique buildings. It might be added, that **Ingrid Rowland** has made it very plausible (as I see it), that the translation of Vitruvius done by Fabio Calvo for Raphael, together with corrections by Angelo Colocci, may have been intended for a publication together with the Map of Rome. But, as I think should be obvious already by now, the Accademia's project seems to reformulate this first – sometimes even already called "archaeological" – project in the frame of a much more scientifically grounded way taking into account many more possible sources and aspects. But it goes even farther: The following volume [14] should show all the remaining tombstone and similar reliefs (*"pili"*), because they could help to understand molte cose de l'antichità, and – by giving explanations about the material and the manufactoring process – this volume should help modern sculptors to learn from Antiquity. In addition, at least some representations of antique architecture in ancient reliefs could help to reconstruct the depicted buildings. The first aim of the 14th volume, to help sculptors, is also the aim of the following two: a book [15] of all surviving sculptures and one [16] of all other reliefs. Since 1986 it is clear that the Codices Pighianus and Coburgensis contain much of the preparatory work for these 2 (or 3) volumes. – The next volume [17] should contain all surviving sculpted parts of buildings that Tolomei calles "Modenature" like doors, friezes, architraves etc. An here, a large amount of potentially related drawings comes to mind ...

With the following volume [18] the program leaves the realm of architecture in a narrower sense by showing vases, again with descriptions of material and use: This seems to be a logical extension of a scientific way to document the entire material culture of Roman Antiquity, and so is the following book [19] about antique instruments from any field of religion or technique to medicine and agriculture. Finally, the program leads back into the traditional field of antiquarianism with *un altro libbro di tutte le iscrizzioni*, *che siano a Roma, o intorno a Roma.* [20] These, also, were to be described with historical and technical explanations, and one may guess that for instance the vast collections of inscriptions by Jean Matal, active in Rome at this time and in close contact with the *Accademia*, may be counted as some sort of preparatory work for this volume. — Of course, a scientific program of Classical Archaeology (as I would

call it) would be incomplete if it would not record the remains of Roman paintings [21] (including mosaics) as well as one about medals and coins [22]. Here we could think of Jacopo Strada's 9000 drawings of coins with explanations, who also was working in Rome until 1555 with close relations to Marcello Cervini, later Pope Marcellus II, from the *Accademia*. – Turning finally back to architecture itself, the program includes also a book about machines [23] but not only those mentioned by Vitruvius himself, but also those described by others, among them, of course, the *aquaeducts* by Frontinus.

Please excuse me for boring you with this long citations from Tolomei's letter: Beside any consideration of what elements of the program may have been realized – at least in parts –, I hope to have given you an impression not only about the far-reaching extensions of this program but also about its clear scientific conception: All parts fit very well together, but all could also be realized by dividing the workload among many specialists – as Tolomei says the Accademia intends to do: That's why he could dare to proclaim that its realization would not take more than three years ... Its main aim, to establish a scientifically secured theory of (not only antique) architecture could only be achieved by collecting, ordering, interpreting and publishing all available information from antique sources – material objects as well as surviving text. But by doing so, the Accademia proclaimed what I would dare to call the unprecedented basic and (almost) complete program of a scientific Classical Archaeology in a strict, modern sense. I am convinced, that further investigation into the many surviving anonymous or seemingly isolated collections of antiquarian information about buildings, medals and coins, inscriptions, reliefs etc. in an interdisciplinary approach could reveal interrelations among them. At least in the case of the *Codices* Coburgensis and Piqhianus this has been successful – and I hope to show with my ongoing project, that we also still have the preparatory work for the volume about antique architecture: By containing more than 200 sheets with over 1000 drawings, this is in any way and by far the biggest group of such drawings - and it's containing more information than all others that I know of. So, there is a lot to do to regain this information and put it (back) into its right place in the histories of humanities, science, archaeology, architecture and art history – and thereby help us to understand, what our colleagues 450 years ago understood under scientific verisimilitude: My guess is, it is very close to our understanding.

Possible Addition: I am convinced that we still have the preparatory work for the 13th volume in the aforementioned sets of drawings by mostly French draftsmen in Berlin, Vienna, New York and other collections: *First*, because these drawings show the antique buildings in an accuracy and under consideration of parts almost never drawn by others; *secondly*, because most of the draftsmen must have been craftsmen (stonemasons, carpenters, but *not* architects) who surely would not develop the complex methodology to record e.g. waterpipes and *hypocausta*; and *thirdly*, because inscriptions in their drawings adress other persons in French and in Italian, presumably persons who commissioned the drawings.