# INTERVIEW

# Proportional Systems in the History of Architecture: A Conversation with James S. Ackerman

Matthew A. Cohen\*

In November 2010, James S. Ackerman, today the only living participant of the conference 'De divina proportione', which was held in Milan in 1951, sat for a video interview that was later shown at the conference 'Proportional Systems in the History of Architecture' in Leiden in 2011 to mark the sixtieth anniversary of the Milan conference. In this interview, conducted by Matthew A. Cohen, Ackerman discusses how the study of proportional systems has changed over the past six decades, and thereby provides a unique link between the two conferences. The interview begins with Ackerman's experiences in northern Italy at the close of World War II, and a few years later at the Milan conference, and compares them with prevailing medieval and Renaissance attitudes. Ackerman then shares his thoughts on the works and legacies of Rudolf Wittkower, Le Corbusier and Colin Rowe, before exploring the influences of architectural proportional theory on architectural design, and possible relationships between proportional systems and architectural beauty. After exploring changes in the uses of proportional systems that accompanied the rise of Abstract Expressionism, the arc of the interview concludes with Ackerman's thoughts about the future of proportional systems in light of the evolving role of the computer in architectural practice today.

### About James S. Ackerman

James Sloss Ackerman is a leading figure in the field of architectural history, having made foundational contributions to medieval, Renaissance and theoretical studies during his career of more than six decades. In 2001 he was awarded the Balzan Prize for lifetime achievement in the study of architectural history and urbanism. The prize committee noted that Ackerman's work 'contributed to the modern approach to architectural history based on a systematic critical examination of written and visual sources'. Ackerman combined this approach, as he notes in the interview below, with 'a broad cultural and political and economic and social interpretation of the history of architecture'. Born in San Francisco in 1919, he completed his undergraduate studies at Yale University (1938-41), where he studied under Henri Focillon. During World War II he served in Signal Intelligence; after the German surrender he briefly volunteered as a courier for the Milan office of the Monuments and Fine Arts Commission, and was assigned to transport archives stored for safekeeping at the Certosa of Pavia, which confirmed his interest in Renaissance architecture. Ackerman completed his graduate studies at the New York University Institute of Fine Arts (MA 1947, PhD 1952), where he studied with Richard Krautheimer and Erwin Panofsky. Subsequently, he was a Fellow at the American Academy in Rome (1949-52). He taught at the University of California at Berkeley

cohenm@wsu.edu

(1952–60), and at Harvard University as Arthur Kingsley Porter Professor of Fine Arts from 1960 until 1990 (at the time, Professors at all universities retired from teaching at 70). Ackerman received the Paul Kristeller Lifetime Achievement Award of the Renaissance Society of America in 1998, and became an honorary citizen of the City of Padua in 2008. In addition to his scholarly activities, Ackerman, as a filmmaker, has brought the history of architecture to general audiences.<sup>1</sup> He has been an outspoken advocate of historic preservation<sup>2</sup> and a beloved teacher and mentor to countless art and architectural historians.<sup>3</sup>

### About Matthew A. Cohen

Matthew A. Cohen is an architect and Associate Professor of Architecture at Washington State University. He received degrees in Renaissance art from Syracuse University (MA 1988) and architecture from the Harvard University Graduate School of Design (MArch 1994), before completing his PhD in architectural history at Leiden University (2010). He has worked as a design architect at Payette Associates, Inc. and William Rawn Associates, Architects, Inc. in Boston, Massachusetts. His book, *Beyond Beauty: Reexamining Architectural Proportion through the Basilicas of San Lorenzo and Santo Spirito in Florence* (Marsilio Editore, 2013), received the 2012 James Ackerman Award in the History of Architecture.

### Interview

**Cohen:** Hello, my name is Matthew Cohen, it is November 15, 2010, and I am here in Cambridge with Dr. James Ackerman (**Video 1**). We are here conducting an

<sup>\*</sup> Washington State University, United States



Video 1: James S. Ackerman in a video interview with Matthew A. Cohen, Harvard Media Center, Cambridge, Massachusetts, 15 November 2010. To view the full video interview, see DOI: http://dx.doi.org/10.5334/ah.bk.1.

interview to discuss proportional systems in the history of architecture, to be shown at a conference of that name to be held in Leiden in March 2011.<sup>4</sup> So, hello.

**Ackerman:** Hello! I am sorry I am not there in person. I'd like to have been, but it's become too difficult for me to make short trips of this nature because of my age. I look forward to knowing what occurs in this very imaginative reconstruction of a proportion conference that was held in Milan in 1951.

**Cohen:** We are going to be talking about that anniversary, but let me first talk about another anniversary: you just celebrated your ninety-first birthday, one week ago today. Happy Birthday!

Ackerman: Thank you. I'm still at it!

**Cohen:** Yes, you are. So, 1951 — you were invited to participate in the conference held in Milan on architectural proportion on the occasion of the *Triennale* in Milan (**Fig. 1**). That was your second trip to Milan, wasn't it, at that time?

**Ackerman:** Yes, well, at the close of the second war I was in the Fifth Army in Italy.<sup>5</sup> In the final stage [of the war, we] arrived rapidly in the north of Italy, all the way to Como. [I was] settled in barracks nearby, [and] I got bored and asked for permission to go to Milan and work with the Office of Monuments and Fine Arts.<sup>6</sup> I was sent at that time to Pavia to recover archival material from the Royal Palace in Milan, and I went there daily with a truck and waited while the workers that had been hired piled the archives into trucks. Meanwhile, I spent a lot of time wandering around the Certosa [of Pavia] and it became the stimulus for me to turn to architectural history. I wrote my master's thesis on the subject of this very strange church which was a revival of Romanesque rather than antique architecture.

**Cohen:** And then just six years later, you find yourself in Milan again.

**Ackerman:** Yes. At this conference where I was the youngest member, having been invited by Rudolph Wittkower as a result of my work on the documents of the Milan Cathedral, which were an extraordinary revelation of proportion in late medieval architecture. And after publishing this it got a lot of attention because it was much believed [to be] the sole source of understanding of this era in [terms of] Gothic [architecture] and proportions.

**Cohen:** As it happens, our conference is falling on the sixtieth anniversary of that conference in Milan, so it is a good opportunity to reflect on that moment in history, and what has happened since, and maybe what we should be looking for now in the study of proportion and proportional systems. Can you talk about that moment in history, 1951? Why was there this tremendous interest in proportion and proportion and proportional systems?

Ackerman: I think it was partly that it was very close to the end of the war, and the war had been so disruptive in Europe, and all the participants with the exception of myself were Europeans. It had been so destructive that there was a sense of seeking some kind of principle of order in the universe. It was incredibly ambitious in its program. The idea was that there was some kind of universal order in biology, physics, art - in the whole element of contemporary culture - that required a strong affirmation of positive thinking, I would say, in relation to contemporary culture. There was something almost religious about the commitment to the idea of universal harmony, and of course it was closely lodged in contemporary architecture; and what was also extraordinary about it was that Rudolph Wittkower and Le Corbusier were partners in organizing it. That a scholar like Wittkower who had dealt with proportions in the Renaissance in a recent book called Architectural Principles in the Age of



**Fig. 1:** James S. Ackerman presenting his paper at the conference 'La divina proportione', as part of the Ninth Triennale, Milan, 27 September 1951. By permission of Fondazione La Triennale di Milano.

*Humanism* (Wittkower 1949), and Le Corbusier, who had been working on a system of proportions of his own called the Modulor, wanted to join scholars and artists — not just architects — but painters and sculptors; painters like Fontana and Severini, and architects like Nervi and Ernesto Rogers, and then there was Max Bill, a sculptor. It was a very strong selection of participants. Sigfried Giedeon was an important part of it and he was a very influential voice in the understanding of contemporary architecture.<sup>7</sup>

**Cohen:** How would you characterize the study of proportion before that time, and what influence do you think that conference had on that study?

Ackerman: Before that time [1951] it [proportion] really hadn't become a reliable [area of] study. There was a lot of mysticism around it. Some of the mystics were part of the conference, too, which is only fair, but it was really the end of the mystical phase and the [beginning of the] effort to set it onto reliable, academic, practical grounds. My explanation for what went on, overall, was that in contemporary art of the early twentieth century – the whole revolution that was exemplified in the work of Le Corbusier – in this area ornament had been totally eliminated, and the entry of proportion into the architectural vision had to do with attempting to find a mathematical and aesthetic substitute for the ornament that had been rejected in modernism, and this underscores the architectural attitude of the time. It wasn't so easy to explain in the pictorial arts, except that they, too, had become abstract and not representational, and so that was another reason for finding an alternative aesthetic.

**Cohen:** It is interesting that there were historians, artists and architects all in one room together at this conference in 1951. Do you think what the artists and architects were looking for in 1951 had any relation to what architects and builders were looking for in the medieval and Renaissance periods?

Ackerman: Actually, I think it was something very different. In the medieval period maybe it was closer to us than [in] the Renaissance. The Renaissance, in its effort to revive antiquity, went back to a system of fixed laws of proportion; that is, proportion for Palladio starts with a Vitruvian system that was laid out in the first century, BC, and it became a dogma for the Renaissance, [i.e.,] the idea of classical proportions. Now, in Wittkower's exposition, he undertook to link it [architectural proportion] to musical proportions, but the way that was understood in the Renaissance also goes back to antiquity. There is a great difference in the approach to the classical tradition from what happened later on in the eighteenth century when that all began to dissolve, with a new idea generated by Burke and his contemporaries, of the sublime in the arts, that is to say, the thing that was fearsome and irrational; and this led to a rejection of classical certainty that never totally returned. In other words, the relationship [of] the arts to [that] tradition had been fixed and individuals had no role in determining how it should be. After the eighteenth century aesthetics was invented, and aesthetics proposes that the individual response to what is seen and what is made in the arts - the individual - becomes important; the *feelings* of an individual. And that makes it possible to break away from a fixed classical order, and to create new orders. There followed a whole long period of individuality and improvisation in architecture and the visual arts, the Gothic Revival being a particular example of this, that lasted all the way up to modernism.

**Cohen:** We have talked about two of the exponents, two of the leaders [in the study of proportional systems during the 1950s], Wittkower and Le Corbusier, and I would like to come back to them, but there is one more figure who was important in sparking this interest in proportion, Colin Rowe. He first published *The Mathematics of the Ideal Villa* in 1947 (Rowe 1947). They say that in 1948 you couldn't go to – I think Peter Smithson said, you couldn't go to – a Palladian villa in 1948 without tripping over an architect.<sup>8</sup> What would you say his role was in sparking this interest and continuing it throughout his long career?

Ackerman: Well, he had a great impact on architectural education. Everywhere in the country his book (Rowe 1976) was required reading. The main essay in the book demonstrates that Le Corbusier, in his building designs, was coming to the same kinds of conclusions as Palladio was, and he relates the two in a way that I don't think Le Corbusier would have liked because, well for one thing, Le Corbusier had to be the inventor of everything he did, and the conference in Milan was an opportunity for him to present his revised version of the Modulor, his proportional system. That was what was important to him. He gave it a Renaissance twist by using the human body as a paradigm for his proportions, not the way Leonardo [da Vinci]'s Vitruvian man did, but by a quite different system where parts of the height of a man with a raised arm would be applied to a geometrical system. So he welcomed the opportunity to join in this enterprise so that he could present the new Modulor. Of course he was the focus of great attention. It was a remarkable thing that he and Wittkower got together.

Also, this [conference] was an occasion of a very beautiful exhibition of books of the fifteenth and early sixteenth centuries relating to proportions that had been gathered by a Milanese publisher who was very wealthy and who acquired an extraordinary library of the original volumes, and then began to publish these volumes in her publishing business in very fine editions with commentary from leading experts.<sup>9</sup> She had a great role in organizing the practical ends of the conference, and so the books and the conference itself were combined into a very important event. It is extraordinary the number of people that were gathered who had been interested in the subject and went at it from very different points-of-view.

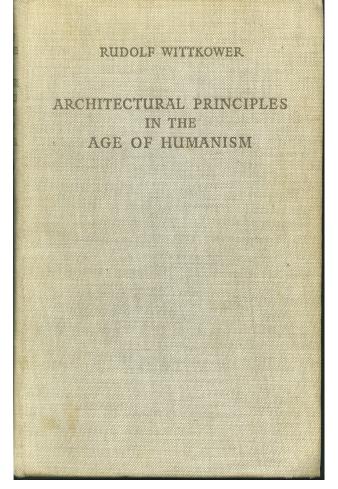
**Cohen:** So we have Colin Rowe's article of 1947, 'The Mathematics of the Ideal Villa', we have Le Corbusier's *Modulor* – the first version – in 1948, your article on the Cathedral of Milan in 1949, and Rudolph Wittkower's *Architectural Principles* in 1949, parts of which had been published earlier. All of these contributions are creating an intense moment here. Then in 1951 you wrote a review of *Architectural Principles* (Ackerman 1951; **Figs. 2** and **3**). Do you have any thoughts about that and how you might review that today?

**Ackerman:** Well, I certainly would want to review it differently. I was a graduate student at the time reviewing the book of the most influential architectural historian, so I behaved in a very proper academic manner and it looks rather pompous to me today, but then, given my naiveté I don't think it was so bad. It's just that in subsequent years I changed my style a lot. I [now] give much more weight to a broad cultural, and political and economic and social interpretation of the history of architecture.

**Cohen:** So what is the legacy of Wittkower's *Architectural Principles*?

**Ackerman:** Well, as always happens, really influential people get slammed by one or two generations later, and after the oncoming of heavy duty post-structuralist criticism in the '70s and '80s everybody was on Wittkower's back for his claims of Palladio's harmonic proportions based on music, showing that the proportional system, which he [had] deduced from the plates of the theory books, *The Four Books of Architecture* of 1570...; people found holes in the argument, persuasively; particularly Deborah Howard and Branko Mitrovic just went after it (see for example Howard and Longair 1982, Mitrovic 1990, Mitrovic 2001, and Mitrovic 2004).

The same was true of Panofsky, who was the person who led me to the documents of Milan, which was really very nice. I was in a course with him and he said: 'Look here, these documents have been published and nobody ever did anything with it,' so it started as a term paper and ended as an article and has been cited more than anything I have ever written. Panofsky came under fire from a number of different directions. Gombrich started going after him for his Hegelian approach (see for example Gombrich



**Fig. 2:** Cover of James S. Ackerman's review copy of Rudolf Wittkower's *Architectural Principles in the Age of Humanism* (1949), provided to him pursuant to his review published in *The Art Bulletin* in 1951.

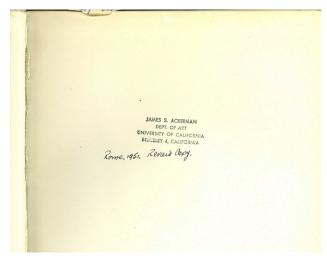


Fig. 3: Stamp and inscription in James S. Ackerman's review copy of Rudolf Wittkower's *Architectural Principles in the Age of Humanism* (1949).

1972 and Gombrich 1996) and then the younger generation jumped on board, and yet I think that Panofsky is maybe the most exciting art historian of our time. **Cohen:** I always think of Wittkower's *Architectural Principles* and your Milan article as two benchmarks in the history of architectural proportion, and yet I find them to be very different in method and approach. How would you characterize Wittkower's historical method in that work?

**Ackerman:** Well, Wittkower brought a whole new level to architectural history in two respects. Prior to him, theory had never been a very major interest. The publications on broader issues of the Renaissance didn't get into what had been written at the time [of the Renaissance]. An example of this 'not getting into it' is a book by Geoffrey Scott of 1914 called *The Architecture of Humanism* (Scott 1914), which treated the whole thing in a very subjective way, like Burke, and so theory enters [through Wittkower's work], and gives some kind of foundation for the way to approach design.

The other thing was drawings. That doesn't come into the book [Architectural Principles] so much, but Wittkower was a very significant contributor to the introduction of architectural drawings into the discussion of the history of architecture. It is amazing how little they [drawings] were considered at that time. It opened a new field. It led, in Wittkower's study of Bernini, for example, to a whole new approach. It is interesting that when I got to Italy to do my dissertation [1951; see Fig. 3 and Ackerman 1954], I started by working in the drawing cabinet of the Uffizi gallery, which had thousands of architectural drawings. These had been of so little interest up to this time that when the curators brought me folders of drawings, they were big sheets of butcher paper in which the drawings were just thrown, and they could easily have scattered all over the desk and fallen onto the floor. They were so indifferent to this that they allowed me to go out on a balcony and pin them, not through the paper but just by pressure, onto a board and take photographs. So you could see how primitive the interest in architectural drawings was, and these were the two major contributions of Wittkower.

I don't think that the book on architectural principles deals significantly with drawings. It might have been interesting in the case of, let's say, the Palladio works to compare what was in the *Four Books* to Palladio's drawings, many of which are preparation drawings for the *Four Books*, but I don't really criticize him for that because that wasn't the focus [of the book], and it had a great impact without drawings at that point. In any case, he was a very innovative historian. Also, thinking of him personally, he really encouraged a student — a whole period of students at Columbia [University] — to go into the field and to make really important contributions. Howard Hibbard, [Irving] Lavin, and others. So, he was a really important figure.

**Cohen:** Going back to the theory portion of his contribution, at what point does theory become reality? At what point does theory cease to be merely an interpretation but actually start influencing architecture in visible ways? Is there a Renaissance proportional system that helps creates the Renaissance style and a Gothic proportional system that helps create the Gothic style, or are these merely ways for us to understand these styles?

**Ackerman:** Renaissance theory, beginning with Alberti, who finished his book in 1450 – it was only published in the 1490s – well, as an example of the interest [in theory at that time], Lorenzo the Magnificent was building a villa on the outskirts of Florence at Poggio a Caiano and he ordered his sidekick to get the manuscript from Alberti in order for him to read what had happened there.<sup>10</sup> It influenced the design of that villa that has a very mathematical underpinning in [that] axes and cross-axes are imposed on it. Rather than distributing windows in terms of internal relevance, they were distributed in terms of a mathematical grid.

There was a lot of influence. Palladio's theory was far more influential than his work. For example, almost nobody ever went to see the Palladio villas or palaces. They looked at the book and they read the measurements and it was on this base that you had this incredible spread of Palladian architecture across the Western world. In the US, Thomas Jefferson had a very strong influence from Palladio, which he got from an edition, not very accurate, of Palladio's work published in 1715 in London, a very luxurious edition, and he used this for the design of his villas - country houses - in America. Then, when he was appointed to be the ambassador to France he made one trip to Italy and got to Milan and Genoa and didn't go the few hours over to Vicenza and Verona to see Palladio's works. What he did was to go in the opposite direction to Piedmont in order to get samples of rice because he wanted to encourage rice cultivation in the Carolinas very successfully, actually - and he came back to Paris smuggling, he wasn't allowed to do this, smuggling rice samples to take back home. But he really missed it with respect to Palladio. Inigo Jones, of the seventeenth century, was the only architect that I know of who bothered to go there. There is a very interesting book of Inigo Jones, [a copy] of The Four Books of Architecture by Palladio in which all the margins are filled with Jones's commentary on the subject [matter]. Jones brought Palladio's drawings back to London and they constituted the first core of the huge drawings collection at the Royal Institute of British Architects. But he was unique.

**Cohen:** In your 2007 essay you refer to Robin Evans's comment, or Robin Evans's exploding of the myth, that ideal proportions are somehow ideally beautiful (Ackerman 2007, 27; and Evans 1995, Chapter 6). And yet I think that a lot of people still on some level believe that maybe proportions [proportions-as-ratio] do create beauty in architecture in some way. What do you think about that? Is there any truth to it? Is there any aesthetic role to proportional systems in architecture?

Ackerman: Yeah, I think so. I think they have an impact. One reason that I think so occurs to me because I went to an exhibition at the Museum of Modern Art [in New York City] last week. The new building at the Museum of Modern Art is by an unknown Japanese architect [Yoshio Taniguchi] who had built about eight or ten museums in Japan. He was an expert in lighting and in organization of spaces to contain large pictures, but he hadn't the slightest sense of proportions and all the way through this museum you feel a kind of discomfort from the fact that these are just anonymous boxes rather than places where it is pleasant to be. I really think there is something there although I do not know how to explain it.<sup>11</sup>

**Cohen:** Maybe we can take a lesson from Palladio and Le Corbusier.

**Ackerman:** Well, as I have said before, I think that it became important to substitute the Beaux-Arts approach with something that was less arbitrary and less pseudo-historical [than] architecture based on ornament, and the proportions made it seem somehow fundamental and responding to human inner structure.

**Cohen:** So I think we have a minute or two left. How would you advise those of us who are studying proportion, those who are watching this video, this interview? Where do we go from here? This is such a complex subject; mostly there are historians at the [Leiden] conference but there may be others. Where do we take it from here?

Ackerman: Well, I think in architecture itself proportions dropped out of the picture partly because of the general reaction against systems of order that had been traditional, which are represented in the origins - at exactly the same time this conference took place in 1951 - of Abstract Expressionism. Abstract Expressionism abandoned the traditional concepts of how works of art are ordered, and substituted them with a more internal, more physical approach; not entirely, I mean, Barnett Newman is considered an Abstract Expressionist and his work is very strictly proportion-oriented. But generally speaking, well, Jackson Pollack was a kind of focal figure in that field and it is interesting that his painting, besides being entirely gestural, without the possibility of a proportional system, wasn't made even in an upright position but from moving around the canvas on the floor and working it from all sides, in complete negation of proportional systems. So you have this real upheaval in the tradition. Then what happened in later decades is a kind of dispersion of systems that were universal systems, and finally, where architecture is concerned, you have the beginning of design on the computer. After the initial awkward structures of CAD in architectural practice, when the computer became much freer, the idea of proportion was much less dominant and it hasn't, it seems to me, operated as a significant element in contemporary design on that account. I think that it was much easier to work with proportions at a time when you were using a T-square and trace paper to develop designs than it is today. But I don't know what architects would say to that.

**Cohen:** Well, I suppose some of them would think of computer code as a form of proportional system.

#### Ackerman: Yes.

**Cohen:** It is interesting that computers are also contributing to the study of the history of proportional systems with new metrological methods, measuring with laser point cloud technology combined in the computer to create accurate — extremely accurate — digital models of cathedrals. Maybe we will scan the Cathedral of Milan next and combine it with your study. **Ackerman:** Hey, that's a good idea! Well anyway, I think this conference is going to answer a lot of the questions you've raised, and I am delighted to hear how varied the conference is planned to be and how many of the things that we've been talking about stand to be resolved.

**Cohen:** We will let you know, and we will keep in touch with you.

**Ackerman:** Thank you, and thank you for listening, all of you.

**Cohen:** Thank you very much for sitting with us – sitting with me – and talking with everyone who is watching, about these topics.

Ackerman: Well, thanks for the idea.

## Author's note

I thank Leiden University Institute for Cultural Disciplines, Harvard University Department of History of Art and Architecture, and the Washington State University Interdisciplinary Design Institute, now part of the School of Design and Construction, for financial assistance and other support; and Pam Medley for her assistance with the transcription. In editing the transcript of this interview I have made certain minor changes for the sake of the clarity and syntax of the written text. I have indicated more substantial changes in brackets. This text also restores a few brief passages that were edited out of the final video, which was recorded at the Harvard Media Center in Cambridge, Massachusetts, 15 November 2010.

#### Notes

- <sup>1</sup> Ackerman conceived and narrated the films shot by John Terry, *Looking for Renaissance Rome* (1975, with Kathleen Weil-Garris Brandt) and *Palladio: The Architect and His Influence in America* (Fogg Fine Arts Films, Harvard University 1980), the latter now available on YouTube.
- <sup>2</sup> In 1996 Ackerman lent his voice to an ultimately unsuccessful campaign to persuade Harvard University to reconsider its controversial plan to demolish and subdivide the elegant Great Hall of the Union Building, designed by McKim, Mead and White and built in 1902. See quotations from Ackerman's letter to Harvard University President Neil L. Rudenstine in: Sara Rimer, 'Harvard Journal: A Tradition Is Pounded By Hammers and Nails,' The New York Times, 20 March 1996, A14; and Ackerman's subsequent letter to the editor of the same newspaper on 27 March 1996, which concludes: 'The loss of the Great Hall is the equivalent of the loss of a great novel of Henry James or a painting by John Singer Sargent. But the Harvard Corporation would be shocked at a proposal to burn books or cut up paintings'.

<sup>3</sup> International Balzan Prize Foundation, 2001 Balzan Prize for History of Architecture: James Sloss Ackerman, International Balzan Prize Foundation, http:// www.balzan.org/en/prizewinners/james-sloss-ackerman/profile-ackerman [Last accessed May 10, 2014]; Ackerman, James Sloss, 'Professional History', https:// sites.google.com/site/jamessackerman/bibliography [Last accessed May 10, 2014]; Sorensen, Lee. Ackerman, James S[loss]. *Dictionary of Art Historians*, http:// www.dictionaryofarthistorians.org/ackermanj.htm [Last accessed May 10, 2014].

- <sup>4</sup> 'Proportional Systems in the History of Architecture', hosted by Leiden University, 17–19 March 2011, organized by Matthew A. Cohen, Eelco Nagelsmit and Caroline A. van Eck.
- <sup>5</sup> Ackerman entered the US Army in January 1943. Around the spring of 1945 he was sent to northern Italy. See Ackerman and Gardner (1994: 36–38).
- <sup>6</sup> The Monuments, Fine Arts, and Archives (MFAA) program.
- <sup>7</sup> See Ackerman's additional comments on the Milan conference participants in Ackerman (2007: 19–22).
- <sup>8</sup> Peter D. Smithson quoted in Pevsner (1957: 461).
- <sup>9</sup> The publisher referred to is Carla Marzoli. The exhibition 'Mostra di studi sulle proporzioni', curated by Marzoli and designed by Francesco Gnencchi-Ruscone, accompanied the 1951 conference 'De Divina Proportione' during the ninth *Triennale* in Milan. For photographs of the exhibition, see Cimoli and Irace (2007: 238–251).
- <sup>10</sup> According to Ackerman, in 1485 Lorenzo de' Medici commissioned Giuliano da Sangallo (who was at that time primarily a woodcarver, and cabinet- and modelmaker) to supervise the construction of the villa at Poggio a Caiano. Ackerman (1990: 79) notes that 'while many elements are attributable to him, there is convincing evidence that Lorenzo himself conceived the essential aspects of the villa. [...] As Poggio a Caiano was being started, he insisted that each chapter of Alberti's *De re aedificatoria* be sent to him as it came off the presses.' Also in 1485, Lorenzo had commissioned the publication of Alberti's treatise; see Foster (1992: 99–100).
- <sup>11</sup> Additional comments by Ackerman on this topic, edited out of the video due to time constraints: 'The fact that I think everybody can attest to feeling "right" in a space which is properly proportioned, that is, proportioned so that you will feel right in it, this fact should lead us to an interest in how to create that situation and into a study of what determines this. I think you can think of engaging psychologists in modes of working with the question of proportions that would give us a hint. [...] I think there is something there and looking further for it is really important'.

## References

- Ackerman, J S 1951 Review of Architectural Principles in the Age of Humanism, by Rudolf Wittkower. Art Bulletin 33/3: 195–200. DOI: http://dx.doi.org/ 10.2307/3047360
- Ackerman, J S 1954 The Cortile del Belvedere, Biblioteca Apostolica Vaticana. Vatican City: Biblioteca aspostolica vaticana. (PhD dissertation, 1952, New York University).
- Ackerman, J S 1990 *The Villa: Form and Ideology of Country Houses*. Princeton: Princeton University Press.

- Ackerman, J S 1994 *Art Historian: James S. Ackerman.* Interview by J Gardner, Art History Oral Documentation Project, completed under the auspices of the Oral History Program, University of California, Los Angeles, and the Getty Center for the History of Art and the Humanities.
- Ackerman, J S 2007 Ricordi della Nona Triennale, De Divina Proportione. In: Cimoli, A C, and Irace, F (eds.), *La Divina Proportione: Triennale 1951*. Milan: Mondadori Electa. pp. 19–35.
- Ackerman, J S, and Terry, J 1975 *Looking for Renaissance Rome.* Fogg Fine Arts Films, Harvard University, and Centro internazionale di studi di architettura 'Andrea Palladio', Vicenza.
- Ackerman, J S, and Terry, J 1980 *Palladio: The Architect and His Influence in America.* Fogg Fine Arts Films, Harvard University, and Centro internazionale di studi di architettura 'Andrea Palladio', Vicenza.
- **Cimoli, A C,** and **Irace, F** (eds.) 2007 *La Divina Proportione: Triennale 1951*. Milan: Mondadori Electa.
- **Evans, R** 1995 *The Projective Cast: Architecture and Its Three Geometries.* Cambridge, Massachusetts: The MIT Press.
- **Foster, P E** 1992 *La villa di Lorenzo de' Medici a Poggio a Caiano.* Pisa: Nistri Lischi editori.
- Gombrich, E H 1972 *Symbolic Images*. London: Phaidon Press.
- **Gombrich, E H** 1996 Three Essays on Style and Perspective as Symbolic Form. *The New York Review of Books*, 15 February 1996: 29–30.
- Howard, D, and Longair, M 1982 Harmonic Proportion and Palladio's Quattro Libri. *Journal of the Society of Architectural Historians* 41(2): 116–143. DOI: http:// dx.doi.org/10.2307/989675
- **Mitrovic, B** 1990 Palladio's Theory of Proportions and the Second Book of the Quattro Libri dell'Architettura. *Journal of the Society of Architectural Historians* 49/3: 281–285.
- **Mitrovic, B** 2001 A Palladian Palinode: Reassessing Rudolf Wittkower's Architectural Principles in the Age of Humanism. *Architectura* 31(2): 113–131.
- **Mitrovic, B** 2004 *Learning from Palladio*. New York: W.W. Norton & Company.
- **Pevsner, N** 1957 Report on a Debate of the Motion 'that Systems of Proportion Make Good Design Easier and Bad Design More Difficult', held at the RIBA on 18 June. The President, Mr. Kenneth M. B. Cross, in the Chair. *RIBA Journal* 64(11): 456–463.
- **Rowe, C** 1947 The Mathematics of the Ideal Villa. *Architectural Review* 101: 101–104.
- **Rowe, C** 1976 *The Mathematics of the Ideal Villa and Other Essays.* Cambridge, Massachusetts: The MIT Press.
- **Scott, S** 1914 *The Architecture of Humanism.* London: Constable and Company, Ltd. (Reprint, New York and London: W.W. Norton & Company, 1974).
- Wittkower, R 1949 Architectural Principles in the Age of Humanism. London: The Warburg Institute.

Art.20, page 8 of 8

**How to cite this article**: Cohen, M A 2014 Proportional Systems in the History of Architecture: A Conversation with James S. Ackerman. *Architectural Histories*, 2(1): 20, pp. 1-8, DOI: http://dx.doi.org/10.5334/ah.bk

Published: 20 June 2014

**Copyright**: © 2014 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 3.0 Unported License (CC-BY 3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/3.0/.

**u** Architectural Histories is a peer-reviewed open access journal published by Ubiquity Press.

OPEN ACCESS