



**Prêt entre bibliothèques
- Document expédié**



No emprunteur

Expédié via: Courriel colombo-ill.library@mcgill.ca Ariel: 132.206.204.38

Adresse: Central Interlibrary Loans
Humanities and Social Sciences Library, McGill University, Redpath Library Bldg 2nd floor, Room 2-00
3459 McTavish Street
Montreal, QC
Canada H3A 0C9

Téléphone: (514) 398-4731

Télécopie: (514) 398-7184

FTP: 132.206.204.38

Courriel: colombo-ill.library@mcgill.ca

De: Prêt entre bibliothèques
Université Laval, Pavillon Bonenfant, local 1162
2345, allée des Bibliothèques
Québec QC G1V 0A6

Téléphone: (418) 656-2131

Télécopie: (418) 656-3048

FTP: 132.203.136.74

Courriel: colombo.peb@bibl.ulaval.ca

Fournisseur: QQLA

Demande: QMM 816984

Dem 02-OCT-2014

reçue:

Notre No réf: 1553535

Expédié: 08-OCT-2014

Titre: A second modernism : MIT, architecture, and the 'techno-social' moment

Auteur: Massachusetts Institute of Technology.

Titre article: The MIT Chapel: An Interdiscursive History

Auteur article: Reinhold Martin

Pages: 72-105

Nombre d'unités: 34

Frais: .00 CAD

Assuré: CAD

Signature usager
requis

Reproduction
interdite

Consultation sur
place

Utilisation supervisée

Notes:

CECI N'EST PAS UNE FACTURE/THIS IS NOT AN INVOICE

The MIT Chapel

An Interdiscursive History

We begin on the afternoon of 31 March, 1949, in MIT's newly completed athletic facility, the Rockwell Cage, which had been designed by two members of the architecture faculty, Lawrence Anderson and Herbert Beckwith, and built of repurposed wartime aircraft hangars. The occasion is a two-day convocation held there to celebrate the inauguration of MIT's tenth president, James R. Killian. The architectural historian John Ely Burchard, who had been appointed Dean of Humanities in 1948, presides over the event and will later edit the published proceedings. The inaugural convocation begins with an invocation addressed to "God of our fathers" and delivered by Everett M. Baker, a Unitarian minister who had become MIT's Dean of Students in 1947.¹ In itself this is not unusual, though it does remind us of the non-secular origins of higher education in the United States.

More notable was the subject matter addressed by the pre-inaugural convocation itself, which explored "the social implications of scientific progress." Burchard's annotated collection of the presentations reveals a bias, not limited to its editor, toward "spiritual" matters as they impinge on scientific and technological research and education, particularly in the aftermath of the world war. Such matters were most explicitly addressed in a panel on "Science, Materialism, and the Human Spirit," which featured the philosopher and theologian Julius Seelye Bixler, the physicist Percy W. Bridgman, the Thomist philosopher Jacques Maritain, and the philosopher Walter Terence Stace. In his opening remarks for the convocation, Burchard suggested that this panel would also address, albeit indirectly, "the meaning of contemporary art." Given Burchard's vocation as an architectural historian, and other writings of his from the period, we can assume that "contemporary art" included architecture. Hanging over all of this was what Burchard called "the mushroom cloud of 1945," though his worries over the possibility of technologically-enabled thought control drew greater attention in press coverage of the event.²

Interior of Chapel
showing altar, 1957, MIT.
Photo: Ernest Hill.

Note: I am grateful to
Stephanie Tuerk for her
invaluable assistance with the
research for this essay.

¹ John Ely Burchard, ed.
*Mid-Century: The Social
Implications of Scientific
Progress* (Cambridge, MA.:
The Technology Press and
Massachusetts Institute of
Technology, 1950), 3.

² *Ibid.*, 8-10, 6.

Here already are the discursive figures within which the MIT chapel, which was completed in 1955, was inscribed. In 1938, William Welles Bosworth, the architect of the main campus, had in fact projected a campus chapel in the vicinity of the President's House on Memorial Drive. To the two domes that surmounted the central academic complex constructed between 1915 and 1930,³ Bosworth's design would have added another neoclassical domed structure echoing that of McKim, Mead, and White's Low Library at Columbia University (1898). By the time Bosworth made this proposal, a number of monumental chapels had been built on campuses across the country, often in the recently formulated "collegiate Gothic." Other neoclassical American campus plans, including Columbia's, had also successfully integrated chapels into their fabrics, with the notable exception of Thomas Jefferson's University of Virginia, which added a neo-Gothic chapel beyond the perimeter of its colonnaded lawn in 1889. As evidenced even by Bosworth's unbuilt 1938 proposal, the chapel therefore came late to MIT, almost literally as an afterthought which awaited a subtle but important epistemological realignment, rather than as the fulfillment of a preordained plan.

As built, the chapel was part of an ensemble designed by Eero Saarinen and Associates, with the collaboration of the Boston architect Bruce Adams, that included the domed Kresge auditorium. The ensemble occupies an open site just across Massachusetts Avenue from the domed entrance to Building 7, and by extension the system of corridors which run through the main academic complex. Saarinen also projected a linear student center at the northern edge of the site and included it in his early plans; however, that building was eventually designed by MIT faculty member Eduardo Catalano and completed in 1965.

The small cylindrical brick chapel, which seats about 100, stands just slightly off-axis with the much larger auditorium, the top surface of which consists of one-eighth of a sphere connected to the ground only at its three apices. Where the auditorium lobby opens onto the surrounding plaza with a transparent skin stretching down from the concrete roof shell, the chapel is separated from the plaza by a narrow, circular moat, across which spans an enclosed entry passerelle that connects the cylinder to a small rectangular service wing. As we shall see later, there are a number of formal and technical precedents and

³ On Bosworth's designs for the MIT campus, see Mark Jarzombek, *Designing MIT: Bosworth's New Tech* (Boston: Northeastern University Press, 2004); Jarzombek discusses the chapel proposal on p. 112. For a more general contextualization of college and university chapels in the history of campus planning in the United States, see Paul Venable Turner, *Campus: An American Planning Tradition* (New York: The Architectural History Foundation and MIT Press, 1984).



accompaniments to both the firm that help us situate the ultimately aporetic relations between the secular auditorium and the

As we shall also see, in both the anomalous character of the chapel is principally dedicated.⁴ This documentation is assembled in spheres of discourse to which and aesthetic. By reconstructing

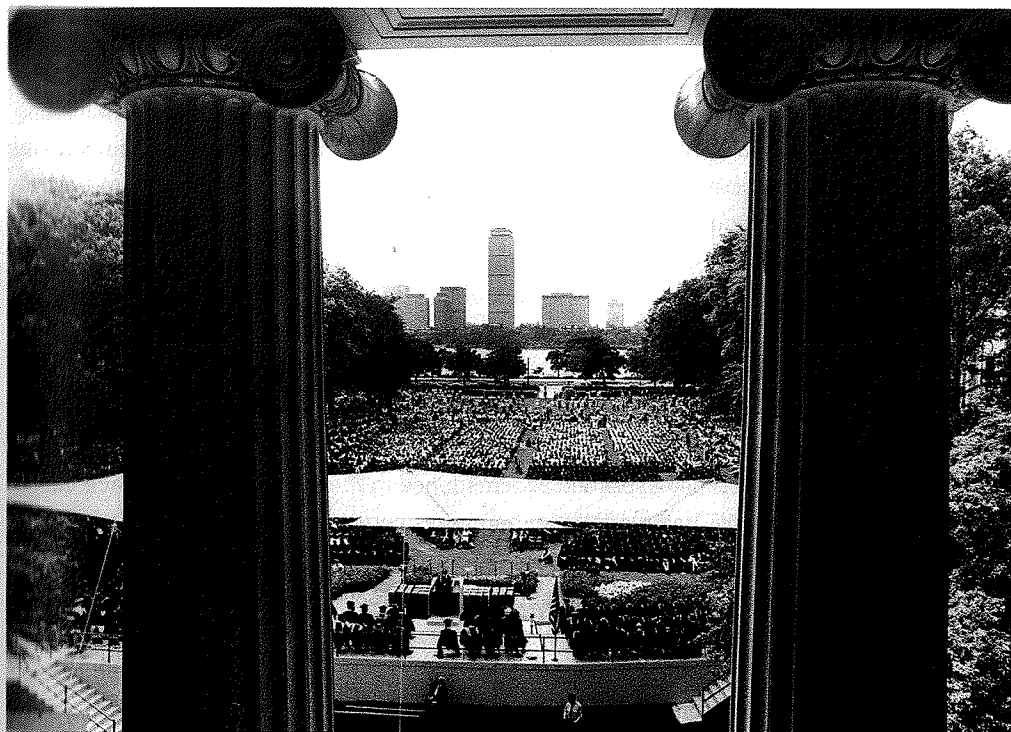
⁴ MIT Convocation, looking to Killian Court from Building 10, MIT, 1949. Photo: William Porter.

⁴ The below the c scienc educ of S and Rolo Inst in the M. C

T chapel, which was completed
 the architect of the main
 ty of the President's House
 central academic complex
 would have added another
 d, and White's Low Library
 e this proposal, a number of
 e country, often in the recently
 n campus plans, including
 eir fabrics, with the notable
 ch added a neo-Gothic chapel
 idenced even by Bosworth's
 T, almost literally as an
 ological realignment, rather than

ero Saarinen and Associates,
 that included the domed
 t across Massachusetts Avenue
 e system of corridors which
 ected a linear student center at
 s; however, that building was
 no and completed in 1965.

ands just slightly off-axis with
 ts of one-eighth of a sphere
 e auditorium lobby opens onto
 wn from the concrete roof shell,
 moat, across which spans
 small rectangular service
 d technical precedents and



accompaniments to both the auditorium and the chapel within the work of the Saarinen firm that help us situate the two buildings genealogically. However, it is the unresolved and ultimately aporetic relationship between the two otherwise distinct architectural types, the secular auditorium and the interdenominational chapel, that gives each its specific meaning.

As we shall also see, in both buildings this meaning is inflected by the apparently anomalous character of the chapel, to which the historical sketch that follows here is principally dedicated.⁴ This overdetermination becomes intelligible only when the extant documentation is assembled in a manner that emphasizes the distinct yet overlapping spheres of discourse to which the chapel belongs: institutional, social, techno-scientific, and aesthetic. By reconstructing its history as a history of the partial overlap of these

MIT Convocation, looking to Killian Court from Building 10, MIT, 1949. Photo: William Porter.

⁴The aporias discussed below are heightened by the chapel's relationship to scientific and technological education. For a comparison of Saarinen's MIT chapel and Ludwig Mies van der Rohe's chapel for the Illinois Institute of Technology (1952) in this context, see Margaret M. Grubiak, "Educating the

Moral Scientist: The Chapels at I.I.T. and M.I.T.," *Arris: Journal of the Southeast Chapter of the Society of Architectural Historians* 18 (2007): 1-14. Grubiak's thoroughly documented account accepts the category of the "moral scientist" conditioned by theology as an a priori against which to

evaluate the two buildings, and modern architecture in general, for their capacity to convey religious meaning as a counterbalance to scientific rationality.

spheres, we will be able to better understand the larger relationship between architectural discourse and practice and the historical "contexts" in which it takes shape. My hope is that this can be read as an object lesson in interdiscursivity that, if extrapolated back outward in any one of its several directions, disrupts but also complements those narratives concerning the secular character of modernity and by extension, of "enlightenment," which account for the devastations of the twentieth century by emphasizing the mythologization of technoscientific rationality. Our small historical sketch does just the opposite; it emphasizes the instrumental character of sacral or spiritual discourse and practice at a moment when modernity's two ideological poles, the rational and the spiritual, were in the process of trading places.

Returning to the MIT presidential inaugural of 1949 we note its humanistic overtones, which can be readily if not fully explained as a response to the traumas of war. Since its inception in the 1860s, MIT had made little room in its curriculum for what eighteenth and early nineteenth century pedagogy called "moral philosophy," a branch of humanistic learning descended from theology that proposed a universal ethics compatible with Christianity. Nor was a curricular or cultural role originally allotted to the newly defined "humanities," which by the turn of the century had emerged out of classical learning to supplant religious doctrine as a core component of the modern liberal curriculum.⁵ Only in 1932 was a Division of Humanities created at MIT, with its mandate gradually expanded in the 1940s as faculty and administrators began to plan the Institute's postwar mission. The war itself was manifestly a turning point, and in 1947 a "Committee on Educational Survey" was set up to reevaluate curricular priorities in "a new era emerging from social upheaval and the disasters" brought on by the conflict.⁶ Recognizing that "the world of 1940 is not the world of 1950," the committee observed in the foreword to their report, which appeared in December 1949 (nine months after Killian's inauguration) that "the release of nuclear energy is having a profound effect upon the course of human events, but other forces are also at work on society. They were beginning to modify our way of life long before the atomic bomb."⁷ As a corrective, the report recommended broadening the Institute's curriculum especially at the undergraduate level, to require more thorough exposure to nonspecialized knowledge, particularly in the humanities.⁸

⁵ On "moral philosophy" and higher education in the American colonies and early republic, see George M. Marsden, *The Soul of the American University: From Protestant Establishment to Established Nonbelief* (New York: Oxford University Press, 1994), 50-64. On the role of the humanities, see

Jon H. Roberts and James Turner, *The Sacred and the Secular University* (Princeton: Princeton University Press, 2000), 75ff.

⁶ Ronald H. Robnett, C. Richard Soderberg, Julius A. Stratton, John R. Loofbourow, Warren K. Lewis, *Report of the Committee on Educational Survey to the Faculty of the*

Massachusetts Institute of Technology (Cambridge, MA: The Technology Press, 1949). <http://libraries.mit.edu/archives/mithistory/pdf/lewis.pdf>, 3.

⁷ *Ibid.*, 4.

⁸ As the report puts it: "In the past [during which vocational training was unduly emphasized], the humanities

have necessarily been service fields concerned primarily with instruction at the elementary level. Now, however, there is a growing concern with human and social problems, an increased awareness of the interplay between science and technology on the one hand and the conduct of human affairs on the other,

Noting that steps taken in the development of MIT from 1930-1948, were consistent with the educational mission at MIT in addition to engineering: the inclusion of architecture and planning.⁹ The report foresaw "great opportunities" and that it can be closely associated with the investigation of social and cultural issues. Correspondingly, it proposed a curriculum where, as with the humanities, students of "general backgrounds" of engineering and science report recommended established departments of Science, and Architecture and Planning. The new School was intended to include undergraduate and graduate programs in social sciences, history, modern languages, business and engineering and architecture.

Largely as a result of this report, MIT was poised to become (in part) responsible for an independent system of schools.¹² In fact, during this position was noted by the Institute aside to Compton, the Institute's Dr. Compton, in this great report of Humanities and give him the knowledge can outweigh the sciences and history walk hand in hand in this one in Churchill's speech

and an awakened realization of the fruitfulness of the techniques of the natural sciences in the study of human and social problems. We believe that these trends now make possible the study of the humanities and social sciences at advanced professional levels in the environment of a

relationship between architectural takes shape. My hope that, if extrapolated back complements those narratives n, of "enlightenment," which asizing the mythologization just the opposite; it course and practice at a and the spiritual, were in the

s humanistic overtones, traumas of war. Since its lum for what eighteenth hy," a branch of humanistic ethics compatible with ted to the newly defined ut of classical learning to n liberal curriculum.⁵ Only in andate gradually expanded nstitute's postwar mission. Committee on Educational w era emerging from social gnizing that "the world of e foreword to their report, s inauguration) that "the e course of human events, nning to modify our way of t recommended broadening el, to require more thorough manities.⁸

stitute have necessarily been service rbridge, fields concerned primarily with y Press, instruction at the elementary s.mit.edu/ level. Now, however, there y/pdf/lewis. is a growing concern with an increased awareness of ts it: "In the interplay between science hich and technology on the one was unduly hand and the conduct of humanities human affairs on the other,

Noting that steps taken in this direction by the administration of Karl T. Compton, president of MIT from 1930-1948, were interrupted by the war, the report asserted that a broadened educational mission at MIT would entail greater leadership in three primary areas in addition to engineering: the natural sciences, the humanities and social sciences, and architecture and planning.⁹ The report also anticipated the conditions of 1950 when it foresaw "great opportunities for the field of architecture and planning at M.I.T., where it can be closely associated with engineering and science on the one hand and with the investigation of social and cultural problems related to science and technology on the other." Correspondingly, it proposed that architecture be more fully integrated into the Institute, where, as with the humanities, exposure to its traditions would expand the "cultural and general backgrounds" of engineers and scientists.¹⁰ Much more specifically, however, the report recommended establishing a fourth school alongside the Schools of Engineering, Science, and Architecture and Planning: a School of Humanities and Social Science. The new School was intended as an integrated academic unit that would offer both undergraduate and graduate education based on current offerings in economics and other social sciences, history, modern languages and literature, and (somewhat incongruously) business and engineering administration.¹¹

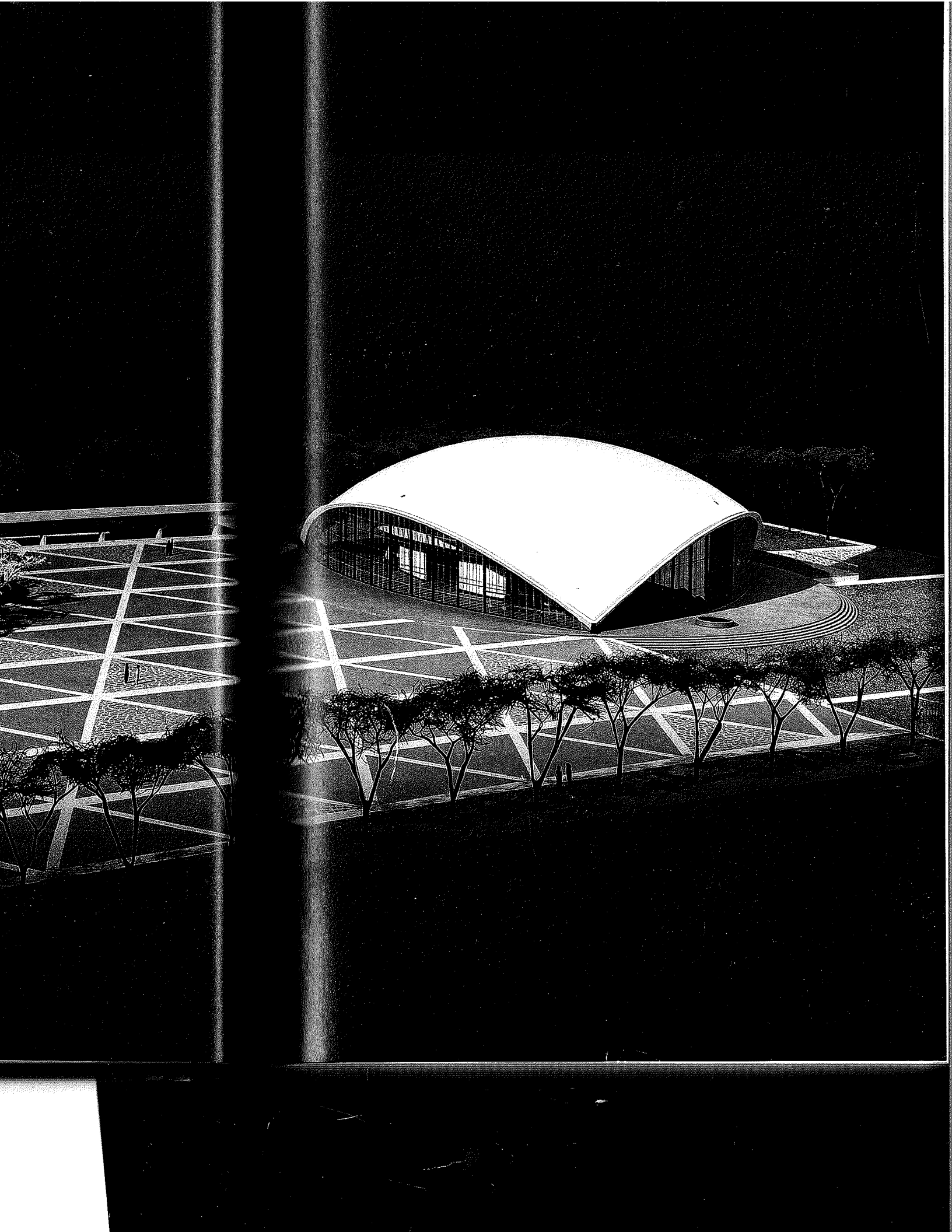
Largely as a result of this report, by the time of the 1949 inaugural convocation Burchard was poised to become (in 1950) the Institute's first Dean of Humanities and Social Studies, responsible for an independent school on equal footing with the scientific and professional schools.¹² In fact, during the first evening of that convocation Burchard's visibly anomalous position was noted by the event's keynote speaker, Sir Winston Churchill. Addressing an aside to Compton, the Institute's outgoing president, Churchill declared: "How right you are, Dr. Compton, in this great institution of technical study and achievement, to keep a Dean of Humanities and give him so commanding a part to play in your discussions! No technical knowledge can outweigh knowledge of the humanities in the gaining of which philosophy and history walk hand in hand."¹³ But for our purposes, the passage immediately following this one in Churchill's speech is more revealing still. Several lines on, he suggests:

and an awakened realization of the fruitfulness of the techniques of the natural sciences in the study of human and social problems. We believe that these trends now make possible the study of the humanities and social sciences at advanced professional levels in the environment of a

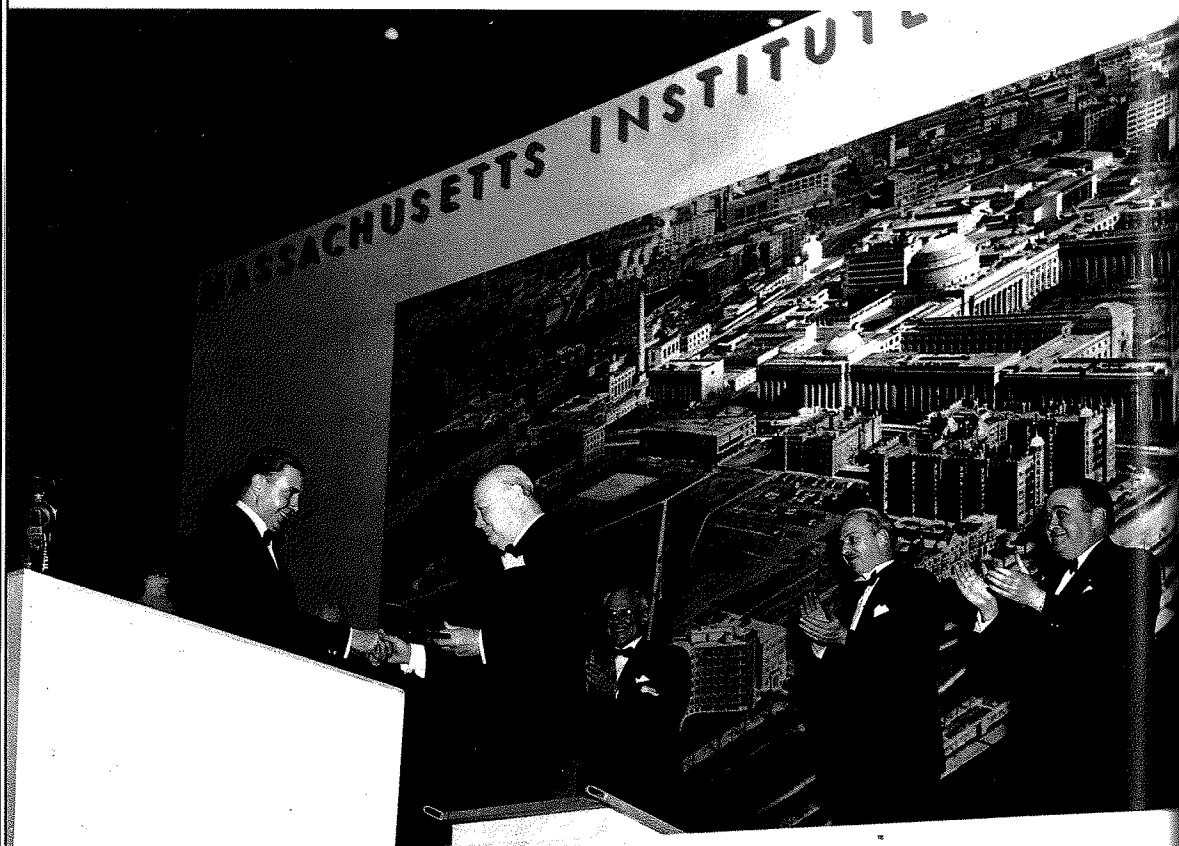
technological institution," *ibid.*, 27. ⁹ Although architecture had been taught at MIT since 1865, the first half of the twentieth century suffered from what the report politely calls an "emphasis on the aesthetic" that alienated a Beaux-Arts derived curriculum from an

institutional milieu dominated by engineering. With the advent of modernism, this was no longer true. Thus the statement that "architecture as presently constituted derives much of its strength from the areas of engineering and science" would not have drawn much objection even in 1940.

¹⁰ *Report of the Committee on Educational Survey*, 43.
¹¹ *Ibid.*, 40-44.
¹² Though Burchard was not a member of the Committee on Educational Survey, he did sit on an auxiliary committee set up to concentrate on the details of "providing undergraduates at the Institute with







James R. Killian Jr. presents a lectureship to Sir Winston Churchill, Keynote Speaker at the MIT Convocation in 1949. Behind Churchill, *left to right*, are Karl T. Compton, John E. Burchard, and Governor Paul A. Dever.

previous page, Model of the MIT Chapel and Kresge Auditorium. Photo: Richard Shirk.

The problems of
much the conditi
bloom and die, a
wholly related to

And here I speak
revealed religion,
say that the flam
is our first interes
our daily life is vi

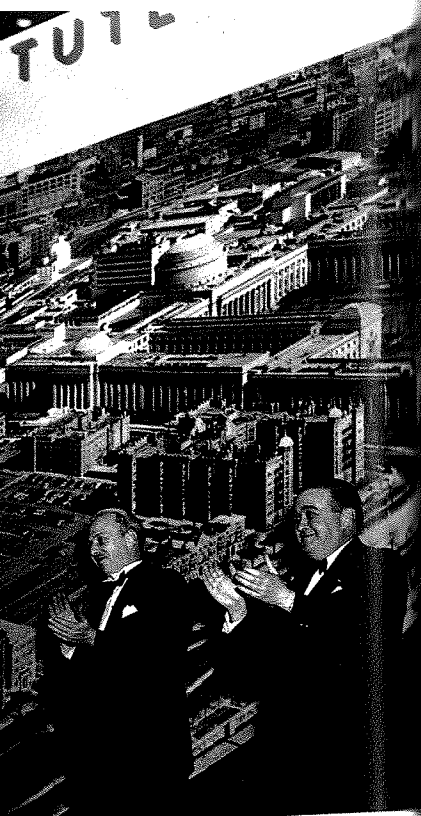
The implications of th
its new president. O
auditorium and chape
ethics," to situate the
Churchill had, in effec
of Humanities at a tel
of all citizens in a nuc
this developing disco

But we are still in the
his speech to politics

I must not concea
have been comm
time ago but for t

In that sense, just fo
Burchard had called
shadow over the ent
Dean of Humanities

broader and more effective
cultural training," called
the Committee on General
Education (Ibid., 83). That
committee's report, which
is appended to that of
its sponsoring entity,
interprets the role of the
humanities in a technical
education more broadly still,
recommending a series of



The problems of victory may be even more baffling than those of defeat. However much the conditions change, the supreme question is how we live and grow and bloom and die, and how far each human life conforms to standards which are not wholly related to space or time.

And here I speak not only to those who enjoy the blessings and consolation of revealed religion, but also to those who face the mysteries of human destiny alone. I say that the flame of Christian ethics is still our highest guide. To guard and cherish it is our first interest, both spiritually and materially. The fulfillment of Spiritual duty in our daily life is vital to our survival.¹⁴

The implications of this passage were apparently not lost on MIT's administrators, including its new president. Over the next few years, in the discourse surrounding the Kresge auditorium and chapel, Killian would repeatedly cite Churchill's phrase, "the flame of Christian ethics," to situate the new MIT chapel in the institutional context for which it was conceived. Churchill had, in effect, connected the dots in advance by associating the presence of a Dean of Humanities at a technical institute with the perceived need to attend to the "Spiritual duty" of all citizens in a nuclear age. Saarinen's buildings would add another set of statements to this developing discourse, while giving occasion for the repetition of others.

But we are still in the Rockwell Cage, on 31 March 1949. Churchill devoted the remainder of his speech to politics, building in crescendo to a characteristically dramatic *mise-en-scène*:

I must not conceal from you tonight the truth as I see it. It is certain that Europe would have been communized like Czechoslovakia, and London under bombardment some time ago but for the deterrence of the Atomic Bomb in hands of the United States.¹⁵

In that sense, just four months before the first successful Soviet atomic test, what Burchard had called in his opening remarks the "mushroom cloud of 1945" cast its shadow over the entire event. And there was no one in the room more suited than MIT's Dean of Humanities to resolve its contradictions on a campus newly populated with

broader and more effective cultural training," called the Committee on General Education (*Ibid.*, 83). That committee's report, which is appended to that of its sponsoring entity, interprets the role of the humanities in a technical education more broadly still, recommending a series of

curricular reforms that build on the reorganization of humanities teaching at the Institute that began when a four-year humanities and social science requirement for all undergraduates was instituted for in 1944.

¹³ Sir Winston Churchill, "The Twentieth Century," in Burchard, ed. *Mid-Century: The Social Implications of Scientific Progress*, 60-61. In his otherwise enthusiastic annotations to the transcription, Burchard regretfully noted that most newspaper accounts of the speech had concentrated

on Churchill's subsequent remarks on nuclear armament rather than on the importance of humanistic knowledge (61).

¹⁴ *Ibid.*, 62-63.

¹⁵ *Ibid.*, 67.

returning veterans whose general education would now be extended, symbolically at least, toward those "spiritual matters" which science and technology, on their own, had been judged incapable of addressing.

This is not merely a way of setting the stage, so to speak, for the entry of Saarinen's strange pair of buildings onto the MIT scene. Since if anything, they were late arrivals to this scene, which by 1955 (the date of their completion) had been preoccupied for over a decade with smoothing over the roughest edges of technoscience with a humanistic polish. But nor is architecture here a mere mechanical expression of some pre-existing institutional ideology; it is part of a conversation that had been going on for some time. To get a better feel for this, we need to change venues and times, and move just south from the Rockwell Cage into the newly completed Kresge auditorium where, on 8 May 1955, the auditorium and the not-quite-complete chapel were dedicated.

Somewhat unwillingly, Burchard had organized the event, which was again (though not atypically) framed in religious terms. It began with an invocation by Rabbi Herman Pollack, advisor to the MIT Hillel Foundation, was punctuated by an affirmation by the Reverend Theodore P. Ferris, Rector of Trinity Church, Boston, and ended with a benediction delivered by Father Edward J. Nugent, Chaplain to the Technology Catholic Club.¹⁶ If this combination emphasized the "nondenominational" (i.e. Judeo-Christian) program for the chapel (particularly resonant in the aftermath of the Holocaust), it also underlined an apparent conflict physicalized in the ambiguous space that separated Saarinen's brick cylinder from the concrete-domed auditorium. This was the conflict between secular and religious symbolization, and between the gathering of secular communities (in the auditorium) and the gathering of religious ones (around the chapel). This conflict shadows both buildings and their discourse. And just as Saarinen's site planning attempted to resolve it by staging, unsuccessfully, a compositional equilibrium in which the two elements would hang suspended, the dedication ceremony replayed the discrepancy between them in each of its parts.

16 "Dedication of the Kresge Auditorium and the M.I.T. Chapel, Massachusetts Institute of Technology, May 8, 1955," Karl T. Compton and James R. Killian Administrations (1930-1959), Records, 1930-1959; Institute Archives and Special Collections, Massachusetts Institute of Technology (hereafter MIT Archives AC004), Box 131, Folder 10.

17 John E. Burchard to James R. Killian, Confidential report to President Killian, Subject: Aaron Copland, 29 December 1953, MIT Archives, Box 131, Folder 6.

18 James R. Killian, "Our Religious Program," in "Dedication of the Kresge Auditorium and the M.I.T. Chapel," n.p.

19 John E. Burchard, *Q.E.D.: M.I.T. in World War II* (New York: Wiley, 1948).

20 See Julius A. Stratton, "Harold Eugene Edgerton (April 6, 1903-January 4, 1990)," *Proceedings of the American Philosophical Society* 135, n. 3 (1991): 447-448.

For example, at Burchard's suggestion, Copland prepared an overture suited to the occasion. Copland's political affiliations, and the context that contextualized Copland's work, were investigated by Sena Jovani, who represented the Institute publicly. Burchard adapted the text of *The Bard* to the Scottish wars of independence. The refrain—"Ah Freedom is a word so ambiguous enough, and yet (do not) elicit a pious equivalence between the secular and the religious; an equivalence was reinforced in every aspect of the event, in the transition to the status of a metaphysical space that acquired a distinctly theological character."

This theologization parallels Killian's work that were printed in the dedication ceremony. It had been inaugurated with the symbol of the war, was calling upon the full force of the flame of Christian ethics." Killian's work character, but also to name a

has lighted the institution of the chapel. The consequence we have a community of mediation, reconciliation and a passion for truth, freedom and a community generous in its support of men of many faiths and backgrounds committed to the ideals of advancing learning and cre

These are the spiritual bonds that are developing spiritual programs consonant with the environment.

This was the same society of work that is documented in a recently published book. It was Harold (Doc) Edgerton. In 1947, Edgerton, together with the firm of Edgerton, Germeshausen

extended, symbolically at least, by the architecture, on their own, had been

for the entry of Saarinen's design, they were late arrivals to a building that had been preoccupied for over a decade with a humanistic polish. Some of the pre-existing institutional arrangements had for some time. To get a better view, we went just south from the Rockwell Center. On 8 May 1955, the auditorium

which was again (though not explicitly) mentioned by Rabbi Herman Pollack, and the affirmation by the Reverend John J. Conboy with a benediction at the Technology Catholic Club.¹⁶ If the program (a Judeo-Christian program on the Holocaust), it also underlined the conflict between secular and religious communities (in the chapel). This conflict shadows the planning attempted to create a forum in which the two sides replayed the discrepancy

For example, at Burchard's suggestion the composer Aaron Copland was commissioned to prepare an overture suited to the occasion. Apparently in response to concerns regarding Copland's political affiliations, Burchard had compiled a confidential background check that contextualized Copland's testimony in 1953 before the Permanent Subcommittee on Investigations headed by Senator Joseph McCarthy.¹⁷ Having been judged appropriate to represent the Institute publicly, Copland composed "Canticle of Freedom," a choral work that adapted the text of *The Brus* (1375) by the Scots poet John Barbour, which celebrated the Scottish wars of independence with England in the thirteenth and fourteenth centuries. The refrain—"Ah Freedom is a noble thing!"—and the orchestral accompaniment were ambiguous enough, and yet (during the McCarthy period) they were also precise enough to elicit a pious equivalence between religious "tolerance" and secular, political liberty. Such an equivalence was reinforced elsewhere in the event's rhetoric; indeed, its thematization in every aspect of the event, including the architecture itself, elevated a hackneyed formula to the status of a metaphysical axiom, in which the unity of secular and religious purpose acquired a distinctly theological cast.

This theologization parallels Killian's repeated citation of Churchill's 1949 speech. In remarks that were printed in the dedication pamphlet, it was as if Killian, whose presidency had been inaugurated with the symbolic, moral authority that Churchill's name bore after the war, was calling upon the full force of this authority when he cited Churchill's phrase, "the flame of Christian ethics." Killian did this not only to name MIT's "nondenominational" character, but also to name a principle that

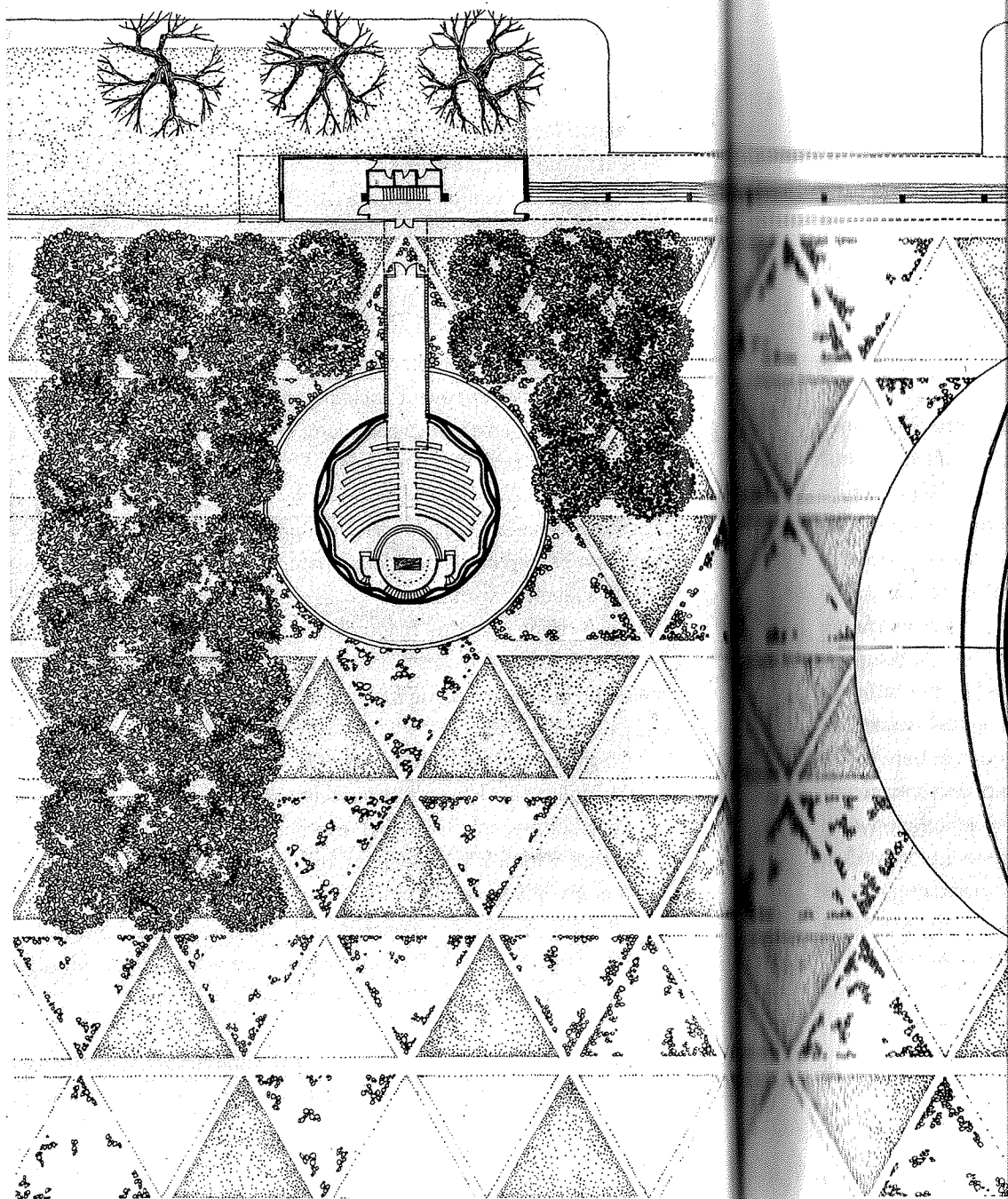
has lighted the institution throughout its history and given it direction and spirit. As a consequence we have a community held together by a humane and tolerant spirit of mediation, reconciliation and reverence for the individual, a community governed by a passion for truth, freedom of inquiry and a preoccupation with ideal aims. We have a community generous in its opportunities to live and let live; a community where men of many faiths and backgrounds are free to interact on each other; a community committed to the ideals of professional service, of ministering to the public, of advancing learning and creating beauty.

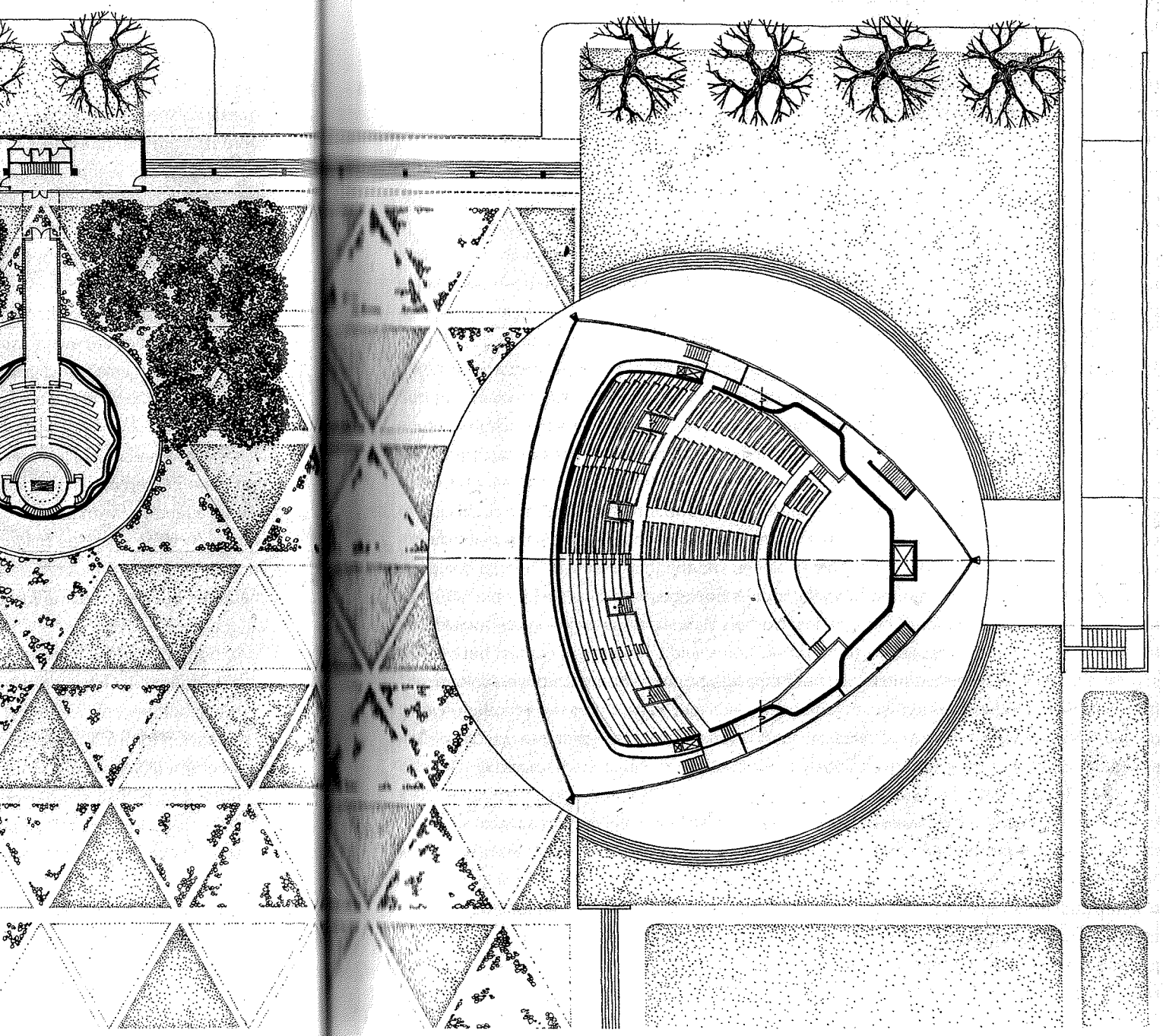
These are the spiritual bonds that hold together our society of scholars. Our developing spiritual program, to be valid, must embrace them, exalt them and be consonant with the environment they have created.¹⁸

This was the same society of scholars whose wartime work Burchard himself had documented in a recently published book, *Q.E.D.: M.I.T. in World War II* (1948).¹⁹ Among them was Harold (Doc) Edgerton, an engineer who had invented stroboscopic photography. In 1947, Edgerton, together with two former MIT graduate students, set up the consulting firm of Edgerton, Germeshausen, and Grier to contract with the military on the design of

¹⁹ John E. Burchard, *Q.E.D.: M.I.T. in World War II* (New York: Wiley, 1948).
²⁰ See Julius A. Stratton, "Harold Eugene Edgerton (April 6, 1903-January 4, 1990)," *Proceedings of the American Philosophical Society* 135, n. 3 (1991): 447-448.

Eero Saarinen & Associates, drawing for Kresge Auditorium shows the near-final scheme of the cylindrical brick chapel and three-pronged auditorium positioned on a diagonally-gridded plaza, 1952.





firing mechanisms for atomic bomb tests, adapting the high-speed photography techniques that they had developed during the war.²⁰ MIT, seeking to rebalance sponsored research with educational autonomy (another subject of the 1949 curricular report), had begun to recommend that faculty take on such work independently rather than through the Institute. In this case, the result was not only Edgerton's high-speed photographs of what we can call "the mushroom cloud of 1952" (the hydrogen bomb), but also the firing mechanism for the bomb itself. Rather than suggesting, however, that such work and the images it produced dismembered the academic community idealized by Killian into a cadre of guns for hire, the evidence we have compiled thus far suggests that it did just the opposite: it produced an instrumentally invaluable phantasm—the metaphysical union of the sacred with the secular under the sign of the bomb—in an environment previously thought to have been dominated by purely secular, instrumental reason.

To investigate further, we return to the Kresge auditorium that rainy Sunday afternoon in May 1955. The keynote speaker for the dedication ceremony was Eelco Nicolaas van Kleffens, the Netherlands minister to Portugal and President of the General Assembly of the United Nations. Van Kleffens was actually Killian's (and probably also Burchard's) third choice for keynote speaker, after *New Yorker* essayist E.B. White and the nuclear physicist and Washington University chancellor Arthur Compton, both of whom declined. In his consecutive letters of invitation to all three, Killian suggested that the dedicatory exercises would "emphasize the importance of human values and the 'human use of human beings.'" This last phrase directly quoted the title of a popular book published in 1950 by the MIT mathematician and originator of cybernetics, Norbert Wiener, an association that would have resonated with the respective addressees. Nor would the apparent conflict between secular and religious symbolization have been missed, prompting a preemptive apology from Killian that "[e]ven though we are dedicating a chapel along with the auditorium, we do not plan a conventional religious occasion but instead an academic festival which will stress our dedication here to those things which sustain and enrich the human spirit."²¹

Van Kleffens complied with a workmanlike speech, notable mainly for its repetition of themes that by then had been thoroughly developed in the MIT discourse. Praising the "Verities which are taught by religion," van Kleffens pleaded: "Let the new chapel, and also the auditorium, remain a constant warning that, just as technology cannot exhaust truth, it is not qualified, and therefore should not attempt, to monopolize belief."²² He also joined his hosts in linking religion with the study of the humanities as he acknowledged MIT's recent investment in humanistic education as a source of "measure" and "reason" when applied to the "advanced technology [that] has found the means to split or fuse nuclei of certain atoms."²³ Reflecting further on the Institute's move to implement a religious program, van Kleffens celebrated the choice of a (nominally) "nondenominational" monument over a "state religion." This, said the UN official, was "Americanism at its best,"

an expression of "that broad
upon religious "tolerance" v
breathe here the fresh, unst
an face to face with the car
This was the same sentimen
had, unbeknownst to him, b
check conducted by Burcha

In delivering this homily on
Kleffens cited at length Kill
of 1954 and included in the
as a pamphlet titled "A Reli
Killian's 1954 report was on
noted, and it restated many
Survey, including that of an
education. It is also, with re
knowledge and practice, pe
the aftermath of the war.²⁵
to Churchill's phrase "the f
excerpted in the dedication
version of these remarks al
reference, in another, unda
an interior photograph of th

These are the kinds of discu
even before they were com
at every step along the way
between Killian and his new
Killian's statement on religio
favorably to the draft, which
issue, however, with a line

- 21 James F. Killian to E. 22
- 22 E.B. White 20 October 1954; "The
- 23 Killian to Arthur H. Compton Tech
- 24 20 November 1954; Killian (Jun
- 25 to Eelco H. van Kleffens, 23
- 26 21 December 1954; MIT 24
- Archives AC004, Box 131,
- Folder 7

...-speed photography techniques
 ...balance sponsored research
 ...ricular report), had begun to
 ...rather than through the Institute.
 ...photographs of what we can call
 ...so the firing mechanism for the
 ...ork and the images it produced
 ...into a cadre of guns for hire, the
 ...t the opposite: it produced an
 ...n of the sacred with the secular
 ...thought to have been dominated

...at rainy Sunday afternoon
 ...ony was Eelco Nicolaas van
 ...t of the General Assembly of
 ...probably also Burchard's) third
 ...White and the nuclear physicist
 ...h of whom declined. In his
 ...d that the dedicatory exercises
 ...e "human use of human beings."
 ...ublished in 1950 by the MIT
 ...er, an association that would
 ...the apparent conflict between
 ...npting a preemptive apology
 ...along with the auditorium, we
 ...academic festival which will
 ...d enrich the human spirit."²¹

...mainly for its repetition of
 ...MIT discourse. Praising the
 ...: "Let the new chapel, and
 ...technology cannot exhaust
 ...o monopolize belief."²² He also
 ...manities as he acknowledged
 ...ce of "measure" and "reason"
 ...the means to split or fuse
 ...e's move to implement a
 ...nominally) "nondenominational"
 ... was "Americanism at its best,"

an expression of "that broad tolerance which is one of the mainstays of your great Nation." Again religious "tolerance" was conjoined with the "free" spirit of scientific inquiry: "We breathe here the fresh, unstifled air of free thought, free inquiry, free expression, and we are face to face with the care of scientific liberty, the essence of our Western tradition."²⁴ This was the same sentiment that Copland's overture had promulgated, once its composer had, unbeknownst to him, been granted the liberty to do so on the basis of a background check conducted by Burchard, MIT's loyal custodian of the humanities.

In delivering this homily on the reciprocity of science, religion, and Cold War politics, van Kleffens cited at length Killian's statement on religion, formulated in his presidential report of 1954 and included in the dedication pamphlet, which had also been published separately as a pamphlet titled "A Religious Program for the Massachusetts Institute of Technology." Killian's 1954 report was one outcome of the curricular reorientation that we have already noted, and it restated many of the programs elaborated by the Committee on Educational Survey, including that of an enhanced commitment to general as well as professional education. It is also, with respect to the discursive realignment of secular and religious knowledge and practice, perhaps the most synthetic statement made by the Institute in the aftermath of the war.²⁵ Though he had included it in earlier drafts, Killian only referred to Churchill's phrase "the flame of Christian ethics" in the version of this report that was excerpted in the dedication pamphlet and not in the published report itself.²⁶ Another version of these remarks also appeared, in abbreviated form and without the Churchill reference, in another, undated pamphlet titled "Religion at MIT," which was illustrated with an interior photograph of the new chapel.²⁷

These are the kinds of discursive networks into which Saarinen's two buildings were woven even before they were complete, with their competing meanings produced and altered at every step along the way. A particularly subtle instance of this is given in an exchange between Killian and his new Dean of Students, William Speer, regarding an early draft of Killian's statement on religion at MIT, titled "The Chapel and Its Use." Speer responded favorably to the draft, which was substantially the same as the printed version. He took issue, however, with a line from Killian's text that originally read: "In the twentieth century,

²¹ James R. Killian to E. H. White 28 October 1954; Killian to Arthur H. Compton 30 November 1954; Killian to Eelco N. van Kleffens, 31 December 1954; MIT Archives AC004, Box 131, Folder 7.

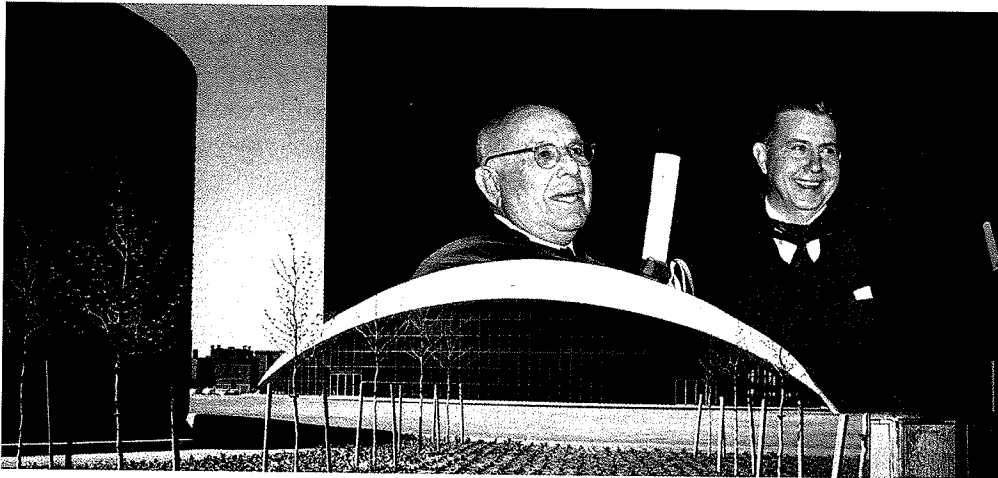
²² Eelco N. van Kleffens, "The Dedicatory Address," *The Technology Review* 57, n. 8 (June 1955): 404.

²³ *Ibid.*, 405.

²⁴ *Ibid.*

²⁵ In his 1954 report, Killian wrote: "...an institution of science may well be an environment favorable to deeper spiritual insights. More important than its practical achievements are the spiritual contributions of science, its emphasis on the importance of truth and of the value of brotherhood and

its revelation of the beauty, the order and the wonder of the universe. Through these contributions it shares with the great faiths opportunities for furthering man's spiritual understanding; and creative minds and spirits, availing themselves of the resources of both science and religion, may advance men's search for



Sebastian S. Kresge, *left*, delivers scroll to J.R. Killian Jr. at the dedication of the Kresge auditorium and the MIT Chapel in May, 1955. From *MIT Technology Review*, June 1955.

an institution of science may well be an environment especially conducive to new spiritual insights and new religious syntheses."²⁸ Speer observed that (Christian) theologians might interpret this statement as implying "that M.I.T. believes that science is going to provide something necessary for man's salvation which God has not already supplied in the revelation of himself in Christ." He therefore suggested changing "new spiritual insights and new religious syntheses" to "deeper spiritual insights," which is the phrasing that Killian ultimately adopted.²⁹ A technical matter, perhaps, but one that draws the fine line on which the MIT chapel was balanced, while also reflecting the actual, quasi-political pressure that the self-described "secular" Institute was under to incorporate religion in some formal way into its campus. Metonymic discourse, in which the complex and often contradictory intentions of the institution as a whole are collapsed into the statements of its representatives, circulates and recirculates through the course of the project, culminating, in this instance, in a collection of Killian's statements on religion at MIT upon the project's completion, but now addressed, in a religious publication, to the same audience imagined in the above exchange.³⁰

virtue and understanding with new vigor and in new ways. The chapel is in this sense but a part of a broader spiritual program long evolving at the Institute. The future direction and method of this program must rest upon community acceptance and desire, and coordinate with our developing program in

the humanities and social studies. It should grow naturally out of the spiritual values which are inherent in our institution." James R. Killian, "A Religious Program for the Massachusetts Institute of Technology: A Statement by Dr. James R. Killian, Jr.," in *Annual Report of the President of the*

Massachusetts Institute of Technology, 1954, n.p.; MIT Archives AC004, Box 131, Folder 7.

²⁶ Killian had actually added this passage to another, undated draft of his 1954 presidential report, "The Chapel and Its Use" (MIT Archives AC004, Box 131, Folder 7, p. 3), and then

apparently deleted it. It did not appear in the report's final published version, but it reappeared in the dedication program for the auditorium and chapel.

²⁷ "Religion at M.I.T.," n.d., n.p.; MIT Archives AC004, Box 131, Folder 10.

²⁸ Killian, "The Chapel and Its Use," 3.

A central document in this project dates from 1950 to the Kresge Foundation and Christian Character."³¹ The report of the entrepreneur Sebastian Kresge to educational institutions.³² The report, which was now serving as Chairman of the endeavor between successive reports, was about a month earlier by a rather different (and to the recently inaugurated President, Killian's vice president) which stated that the Kresge Foundation should be for a purpose which Kresge is not interested in but

In probable recognition of this project, the "Kresge School of Human Relations" was to be education by increased emphasis on science and religion."³⁴ Compton's commission report by the Committee on Education and Religion and had not yet been made public. Its recommendation for a new school of science, although some of the major current development campaigns for professorships, library acquisitions,

The application prospectus reported in the Educational Survey's report, which was begun in 1944, to reassess its categories emphasized by this project. Advanced scientific research of the Hayden Memorial Library, described in the Charles Hayden Found-

²⁹ William Speer to James R. Killian, 29 July 1954, MIT Archives AC004, Box 131, Folder 7. Speer's emendations appear on the marked-up copy of Killian's text, referenced above.

³⁰ James R. Killian, Jr., "The Scientist in the Community, the Classroom, the Chapel," *The Christian Register*

(January 1955), "An Atmospheric Freedom," ³¹ "An Atmospheric Freedom," ³² "An Atmospheric Freedom," ³³ "An Atmospheric Freedom," ³⁴ "An Atmospheric Freedom," MIT Archives



ly conducive to new spiritual
 (Christian) theologians might
 science is going to provide
 already supplied in the revelation
 spiritual insights and new
 the phrasing that Killian ultimately
 the fine line on which the MIT
 political pressure that the self-
 in some formal way into its
 en contradictory intentions of
 of its representatives, circulates
 g, in this instance, in a collection
 completion, but now addressed,
 the above exchange.³⁰

stitute of
 n.p.; MIT
 box 131,
 ally added
 other,
 s 1954
 "The
 e" (MIT
 box 131,
 then

apparently deleted it. It did not appear in the report's final published version, but it reappeared in the dedication program for the auditorium and chapel.

27 "Religion at M.I.T.," n.d., n.p.; MIT Archives AC004, Box 131, Folder 10.

28 Killian, "The Chapel and Its Use," 3.

A central document in this process was the application made by the Institute in April of 1950 to the Kresge Foundation "in support of a program in Development of Citizenship and Christian Character."³¹ The Kresge Foundation, based in Detroit under the leadership of the entrepreneur Sebastian S. Kresge, was well known for its support of religious and educational institutions.³² The MIT proposal was signed by former president Karl Compton, who was now serving as Chairman of the MIT Corporation, indicating continuity in the endeavor between successive MIT administrations across the war years. It was preceded about a month earlier by a rather urgent memorandum from the MIT Development Office to the recently inaugurated President Killian (who had previously served as Compton's vice president) which stated with conviction that "the proposal submitted to the Kresge Foundation should be for a project concerning humanities and character building. Mr. Kresge is not interested in buildings or equipment for the technical side of M.I.T."³³

In probable recognition of this preference, the application submitted by MIT proposed a "Kresge School of Human Relations, which would enrich the existing program of technological education by increased emphasis on humanities, social sciences, character building activities, and religion."³⁴ Compton's cover letter to the application went on to refer to the 1949 report by the Committee on Educational Survey, which was then under internal review and had not yet been made public. He summarized the report's basic arguments, including its recommendation for a new School of Humanities and Social Sciences, and indicated that although some of the material needs for such an initiative were addressed in MIT's current development campaign, substantially greater funding would be required to support professorships, library acquisitions, and an "Auditorium-Chapel building."³⁵

The application prospectus reproduces much of the language of the Committee on Educational Survey's report, which it sets against the background of MIT's overall effort, begun in 1944, to reassess its curriculum and needs in anticipation of the war's end. Four categories emphasized by this initial study are listed: enhanced resources to continue the advanced scientific research concentrated by the war; the opening of a new library (the Hayden Memorial Library, designed by Voorhees, Walker, Foley, and Smith, and supported by the Charles Hayden Foundation) and the founding of the Division of Humanities; increased

29 William Speer to James R. Killian, 29 July 1954, MIT Archives AC004, Box 131, Folder 7. Speer's emendations appear on the marked-up copy of Killian's text, referenced above.

30 James R. Killian, Jr., "The Scientist in the Community, the Classroom, the Chapel," *The Christian Register*

(January 1956): 10-11, 29; and "An Atmosphere of Religious Freedom," 12-13, 32.

31 "An Application to the Kresge Foundation from the Massachusetts Institute of Technology in Support of a Program in Development of Citizenship and Christian Character," 11 April 1950; MIT Archives AC004, Box 131,

Folder 12.

32 An internal MIT document summarizes the purpose of the Kresge Foundation as being the "promotion of eleemosynary, philanthropic and charitable mean of any and all of the means of human progress, whether they be for the benefit of religious, charitable,

benevolent or educational institutions or public benefaction of whatever name or nature." In "The Kresge Foundation," n.d.; MIT Archives AC004, Box 131, Folder 12. Killian had apparently first approached Kresge's son, who served as the foundation's vice president, in personal

endowment; and improvements in student life and extracurricular activities. This framework formed the basis for a \$20 million development effort, which Compton admits had been more successful in raising funds from industrial sources in expectation of a technological "quid pro quo," than it had in supporting the "spiritual" components of the long-term program.³⁶

MIT therefore proposed that the Kresge Foundation especially consider supporting those activities dedicated to "Education for Better Character and Citizenship" through a combination of 1) formal study within the new School of Human Relations, 2) endowed lectures similar to those currently arranged by Burchard on an ad hoc basis as Dean of Humanities, and 3) extracurricular activities (including religious ones). Specific requests were made for \$2 million for endowed professorships in the humanities and social sciences; \$250,000 for library acquisitions related to these fields; \$100,000 for visiting lecturers; and \$750,000 for the construction of an Auditorium-Chapel with an estimated seating capacity of 1,200. Plans are also mentioned for separating the smaller chapel (seating approximately 100), from the larger auditorium "which, though less distinctively religious in atmosphere, could be used for larger religious gatherings with some advantage of common facilities."³⁷

But it was the chapel, and not the larger and more public auditorium or the expensive professorships, which carried the symbolic burden of the proposal, thus blending the secular and religious symbolizations associated with the two buildings, as well as the forms of academic community they supported. This impression is reinforced in the application by a reference to the mandate handed to MIT's recently appointed Dean of Students, Everett M. Baker who, as the application notes, was an ordained Protestant minister:

The particular challenge which was put up to him, when the position was first discussed with him, was to develop a program and an attitude at M.I.T. which could supplement the natural interest of our students in materialistic things by an increasing attention to environment and activities which would develop civic responsibility and moral character.³⁸

correspondence in late 1949, James R. Killian to Stanley S. Kresge, 7 November 1949, MIT Archives AC004, Box 131, Folder 4.
33 L. F. Lybarger to James R. Killian, Killian, 2 March 1950; MIT Archives AC004, Box 131, Folder 12.
34 Karl T. Compton to The Trustees of the Kresge Foundation (cover letter to Kresge application), 11 April 1950, MIT Archives AC004, Box 131, Folder 12.
35 Ibid.
36 "Enclosure to Application to the Kresge Foundation from The Massachusetts Institute of Technology (Statement of Background and Details)," 8; MIT Archives AC004, Box 131, Folder 12.
37 Ibid., 21.
38 Ibid., 18.

... years earlier, in 1948, the building of faculty and student life located in some existing buildings on religion and philosophy. ... had and others, Baker ... President Killian. This ... several months prior to the ... 1,200 seat auditorium that ... would resonate through the ... church and the meeting ... its many responsibilities to ... house."³⁹ He followed this ... for the auditorium chapel. A ... application to the Kresge Fo ... the request to Kresge reflect ... possibly encouraged by Ba

On 1 July 1950, Killian announced a "meeting house" (the image and religious convocations). School of Humanities and S ... He summarized the details ... tensions between secular and the "meeting house" (which in the hybrid auditorium/chapel wherein Burchard's new School dimensions of the enhanced comparative religion, leaving of the chapel, to the Dean ... is easily understood as a ... application left Burchard's r

39 Everett M. Baker, Memorandum to James R. Killian Re: "The Need for a Chapel Auditorium," 3; MIT Archives AC004, Box 131, Folder 6.
40 "Special Chapel" 1950, Box 131, the Kresge building still a building, sequ

activities. This framework
mpton admits had been more
of a technological "quid pro
long-term program."³⁶

consider supporting
and Citizenship" through a
n Relations, 2) endowed
ad hoc basis as Dean of
ones). Specific requests
umanities and social sciences;
000 for visiting lecturers; and
n estimated seating capacity
chapel (seating approximately
ely religious in atmosphere,
tage of common facilities."³⁷

atorium or the expensive
posal, thus blending the
buildings, as well as the forms
inforced in the application by
ed Dean of Students, Everett
restant minister:

he position was first
titude at M.I.T. which
materialistic things by
ch would develop civic

Two years earlier, in 1948, Baker had communicated to (then vice president) Killian a buildup of faculty and student requests for a campus chapel, which Baker recommended be located in some existing room on campus, possibly in proximity to the library's books on religion and philosophy. After Killian suggested that Baker discuss the chapel idea with Burchard and others, Baker replied with a memorandum, written in December 1949 to now President Killian. This memorandum outlined "The Need for a Chapel Auditorium" several months prior to the Kresge proposal. In recommending that the Institute build an 1200-seat auditorium that contained within it a 75-seat chapel, Baker struck a chord that would resonate through the discourse: "It is difficult to think of America without the village church and the meeting house. It is equally difficult to imagine M.I.T. of tomorrow fulfilling its many responsibilities to our nation and our world without its chapel and its meeting house."³⁹ He followed this memorandum with another, more formal set of specifications for the auditorium chapel. Although these documents appeared three months after the application to the Kresge Foundation was submitted, it is most likely that the details of the request to Kresge reflected the ongoing discussions on the campus, coordinated and possibly encouraged by Baker, around the need for a combined auditorium/chapel.⁴⁰

On 1 July 1950, Killian announced a \$1,500,000 grant from the Kresge Foundation for a "meeting house" (the image first conjured by Baker) dedicated to public gatherings and religious convocations.⁴¹ In the meantime, Burchard had been preparing plans for a School of Humanities and Social Sciences, apparently in relation to the Kresge proposal. He summarized the details in a memorandum of 2 June 1950 that also reproduces the tensions between secular and religious educational activities inherent in the figure of the "meeting house" (which Baker had initially conjoined with a "village church") and in the hybrid auditorium/chapel. These appear most clearly in a jurisdictional distinction, wherein Burchard's new School of the Humanities would be responsible for the curricular dimensions of the enhanced spiritual education of MIT students, including courses in comparative religion, leaving the administration of extracurricular activities, including those of the chapel, to the Dean of Students (a post that Baker vacated in 1950).⁴² Though this is easily understood as a conventional division of labor, the results of the Kresge grant application left Burchard's new school empty-handed. Instead, the entire \$1,500,000 grant

older 12.

³⁹ Everett M. Baker, "Memorandum to James R. Killian Re: The Need for a Chapel Auditorium," 3; MIT Archives AC004, Box 131, Folder 5.

⁴⁰ Everett M. Baker, "Specifications for Auditorium-Chapel for M.I.T.," 17 July 1950, MIT Archives AC004, Box 131, Folder 5. Although the Kresge proposal suggested two separate buildings, Baker's memo still contemplates a single building, but now with a separate entrance for the

chapel. It also seems from this document that the site for the building had been decided by this time, since Baker suggests that the proposed building should have a secondary entrance from Memorial Drive, with a primary entrance from the "playing field side of the building" (4).

⁴¹ News Service, Massachusetts Institute of Technology, "For Release in the Morning Papers of July 1, 1950," MIT Archives AC004, Box 131, Folder 12.

⁴² John E. Burchard, "Objectives of M.I.T. School of Humanities," 2 June 1950, MIT Archives AC004, Box 131, Folder 12.

was devoted to the construction of what would eventually become two buildings which, accommodating extracurricular activities both secular and religious in nature, were meant to fulfill the initial program of enhanced spiritual education.

But the institutionalization of the humanities at MIT would continue to echo through the project in other ways. In 1951, with the design process well under way, Burchard delivered an address to the annual convention of the American Institute of Architects. Titled "Humanity: Our Client" and published in *Architectural Record*, the bulk of the talk consisted of a series of historical "lessons" concentrated in the earlier twentieth century. Burchard's main interlocutor was Sigfried Giedion, whom he interprets as having assigned to architecture the role of restoring "feeling" to a technocratic, atomic age.⁴³ But where Giedion's "feeling" was ultimately a form of aesthetic experience derived from the neo-Kantian tradition and redirected by the Hegelian *Zeitgeist*, Burchard's implications were more overtly theological in both tone and substance. One of the history lessons he offered to architects, which he amplified with words from André Malraux on the expressive character of church architecture, was that

there have been agnostics in every culture, but no agnostic cultures until now. Even when great leaders of a time themselves were agnostic, they have not felt it prudent or wise or perhaps even comfortable to evade the responsibilities of the believer. Though Cesare Borgia may have blasphemed in his cups, he nonetheless continued to build St. Peter's. Thus living religions have, regardless of their absolute values, managed to afford a transcendent communion linking every man of the culture to the fellowmen of his culture and have created in this sense a sort of anonymity in which the individual was of minor consequence.⁴⁴

Burchard's published text, which begins and ends with excerpts from Psalms, concludes with an image of what appears to be a New England village centered on a church spire, the very figure of the secular/religious "meeting house" and "village church" which was also circulating through the discourse around MIT's planned auditorium/chapel. And, especially given his references to religion as a binding agent for a unified "humanity" over and against

⁴³ John E. Burchard, "Humanity: Our Client," *Architectural Record* 110, no. 1 (July 1951): 97.
⁴⁴ *Ibid.*, 95-96.

⁴⁵ James R. Killian to Robert M. Kimball, 3 October 1950. MIT Archives AC004, Box 131, Folder 5.

Inside the MIT Chapel, n.d..

isolated individuals, who b
architects than the new D
that, perhaps more than a
deleterious effects of an
England meeting house ar

Meanwhile, it appears tha
sometime in the fall of 19
seems to have been selec
still called the "auditorium
Kimball. Here again it is v
of the two building compo
they might now seem. Re
the image of a Cambridge
processional occurring th
describing it as "a place v
for the structure itself, in
an ensemble. Neverthele
Killian imagined the "dev
an ambulatory or some s
a few months earlier, inc
secular/religious function
building's overarching sy
what a meeting house st

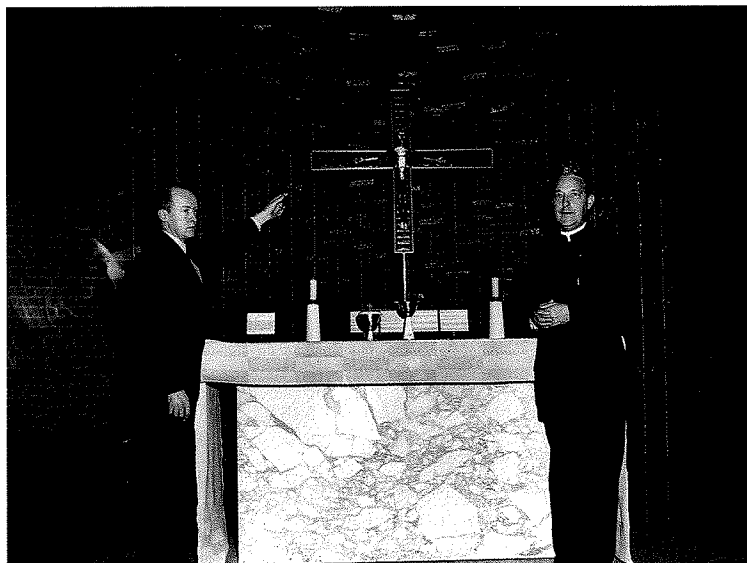
become two buildings which, religious in nature, were meant to

continue to echo through well under way, Burchard an Institute of Architects. *Record*, the bulk of the talk the earlier twentieth century. interprets as having assigned ic, atomic age.⁴³ But where ience derived from the neo-urchard's implications were the history lessons he offered alraux on the expressive

c cultures until now. Even they have not felt it prudent sibilities of the believer. he nonetheless continued of their absolute values, ry man of the culture to the sort of anonymity in which

rpts from Psalms, concludes centered on a church spire, the "large church" which was also torium/chapel. And, especially ed "humanity" over and against

Inside the MIT Chapel, n.d..



isolated individuals, who better to deliver such a message to a professional assembly of architects than the new Dean of Humanities and Social Studies at MIT, a secular institution that, perhaps more than any other, was symbolically associated with the allegedly deleterious effects of an "agnostic" science, and now required a St. Peter's—or a New England meeting house and village church—of its own?

Meanwhile, it appears that Saarinen first visited the MIT campus to discuss the project sometime in the fall of 1950. In preparation for the architect's visit to the site (which also seems to have been selected by this time), Killian summarized his thoughts on what he still called the "auditorium-chapel" in a letter to the Institute's project manager, Robert Kimball. Here again it is worth noting that at the outset the secular and religious functions of the two building components were less distinct both symbolically and practically than they might now seem. Regarding the auditorium, Killian conjured for his project manager the image of a Cambridge University professor delivering a formal lecture, or an academic procession occurring there, or a performance of the London String Quartet, while also describing it as "a place where a distinguished minister might hold religious services." As for the structure itself, in Killian's description it still appeared more as a single building than an ensemble. Nevertheless, the auditorium and the chapel seemed to be drifting apart. Killian imagined the "devotional" chapel as perhaps "connected with the auditorium by an ambulatory or some similar architectural device," rather than, as in Baker's description a few months earlier, incorporated into a single volume. But he still associated the dual secular/religious function with the New England meeting house, by which he defined the building's overarching symbolic requirement: "to express the fact that we are interested in what a meeting house stands for and can accomplish."⁴⁵

During the next few years, Killian frequently invoked this “meeting house” image in reference to the project, describing it at the dedication ceremony as a “house of many uses” in which “men and women went to worship God, to hold their town meetings, and to further their cultural and civic interests.”⁴⁶ Earlier, in requesting that Burchard plan the dedication ceremony, Killian had written:

I feel that the dedication of these two buildings can serve to call attention [sic] and demonstrate the humanistic aspects of our program at the Institute and the richness of our community life. I would like to see us build on the concept of the meetinghouse, where the community comes together to transact its business, to develop its solidarity, and to enrich its intellectual life.⁴⁷

About a year later, an event-planning sub-committee assembled by Burchard recorded the underlying conflict (and, it seems, the internal debate) in the minutes of a meeting: “Is the dedication going to stress dependence on the creator, on a power greater than man, or not? The related question is: If we do not stress this dependence, do we silently affirm the opposite? Do we silently say that humanism is the answer?” In returning to the idea of “the auditorium as the New England Meeting House” and “the chapel as the one building on campus in scale with man” (both attributed to Killian), this committee essentially resolved the issue by converting the conventional opposition between theology and secular humanism into an uncomfortable identity.⁴⁸ Just as the imaginary of the “New England meeting house” also conjured the village church, so did the auditorium (which would eventually receive a plaque describing it as a “meeting house”) require the chapel to complete its meaning. Correspondingly, just as the “human” scale and inwardness of Saarinen’s chapel, juxtaposed with the monumental buildings surrounding it, implicitly reconciled the individual human with an encompassing, monotheistic deity, the “meeting house” extrapolated an only apparently secular community of human souls out of the anonymous corridors of “big science.” In other words, coupled with the auditorium and read into the network of discursive practices woven around the institutionalization of the humanities and social sciences at MIT, Saarinen’s little chapel actively participated in the desecularization—or sacralization—of humanism.

During this period, other American architects were grappling with the proposition that, far from being inherently secular, modern architecture was in fact capable of the sort of spiritual expression associated with historical styles like the Gothic, particularly as these were used in religious buildings. A telling instance of this was a roundtable discussion published in *Architectural Forum* in December 1955—with an interior photograph of the MIT chapel as its frontispiece—on “theology and architecture.”⁴⁹ The *Forum* panel responded to a lecture by theologian Paul Tillich on artistic expression and theology and focused on “protestant Church architecture,” which had recently become a object of architectural

Eero Saarinen &
Associates, rendering of
the interior of the Kresge
Chapel. From MIT
Technology Review, June
1952.

attention due in part to the
receiving for such structure
Architecture and Planning
regularly as an interpreter
was among the panel’s pa
compatibility of modernism
number of Protestant church
in symbolism among archi
problem, which articulated
Giedion with Josep Lluís S
then rippling through the f
was recast by the *Forum* p
symbolic communication.

⁴⁶ Press Release, “Full text
of an address prepared by
James R. Killian, Jr., President
of the Massachusetts
Institute of Technology, for
delivery at the Dedication of
the Kresge Auditorium and
MIT Chapel at 3:30 o’clock
on Sunday afternoon, May 8,”
9 May 1955, 6; MIT Archives
ACDD, Box 131, Folder 8.

⁴⁷
E. B
MIT
Fol
⁴⁸
Dec
Che
Me
195
Fol

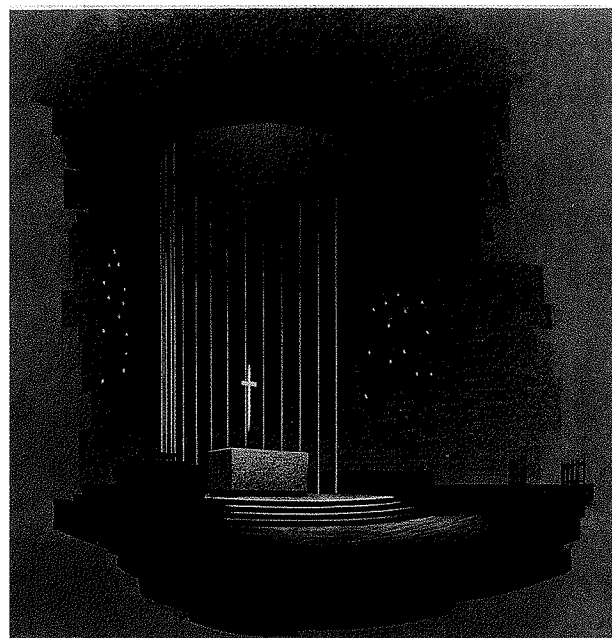
meeting house" image in
 mony as a "house of many
 hold their town meetings, and
 esting that Burchard plan the

ve to call attention [sic]
 at the Institute and the
 ild on the concept of the
 o transact its business, to

bled by Burchard recorded
 the minutes of a meeting:
 , on a power greater than
 s dependence, do we silently
 e answer?" In returning to
 use" and "the chapel as the
 to Killian), this committee
 l opposition between theology
 t as the imaginary of the "New
 o did the auditorium (which
 g house") require the chapel
 an" scale and inwardness of
 s surrounding it, implicitly
 otheistic deity, the "meeting
 of human souls out of the
 led with the auditorium and
 the institutionalization of the
 el actively participated in the

g with the proposition that,
 n fact capable of the sort of
 Gothic, particularly as these
 as a roundtable discussion
 an interior photograph of the MIT
⁴⁹ The *Forum* panel responded
 and theology and focused on
 e a object of architectural

Eero Saarinen &
 Associates, rendering of
 the interior of the Kresge
 Chapel. From MIT
Technology Review, June
 1957.



attention due in part to the commissions that many architects, including Saarinen, were receiving for such structures. Pietro Belluschi, who was the dean of MIT's School of Architecture and Planning for the duration of the chapel/auditorium project, and who acted regularly as an interpreter and friendly critic of Saarinen's project for the administration, was among the panel's participants. Responding to Tillich's talk, which emphasized the compatibility of modernism with Protestant theology, Belluschi, who had also completed a number of Protestant church commissions of his own, mentioned the heightened interest in symbolism among architects at the time.⁵⁰ In effect, the entire discussion turned on this problem, which articulated a version of the "new monumentality" proposed in 1943 by Giedion with Josep Lluís Sert and Fernand Léger.⁵¹ As in the new monumentality debates then rippling through the field at large, the old problem of theology and architecture was recast by the *Forum* panel in terms of modern architecture's newfound capacity for symbolic communication.

⁴⁶ Press Release, "Full text of an address prepared by James R. Killian, Jr., President of the Massachusetts Institute of Technology, for delivery at the Dedication of the Kresge Auditorium and MIT Chapel at 3:30 o'clock on Sunday afternoon, May 8," 9 May 1955, 6; MIT Archives AC004, Box 131, Folder 8.

⁴⁷ James R. Killian to John E. Burchard, 14 Aug 1953, MIT Archives AC004, Box 131, Folder 6.

⁴⁸ Sub-committee on Actual Dedication Ceremony for Chapel and Auditorium, Meeting minutes, 23 July 1954, MIT Archives, Box 131, Folder 7.

⁴⁹ Forum Paul Tillich, Pietro Belluschi, Darby Betts, Marvin Halverson, Morris Ketchum, Paul Weaver, "Theology and Architecture," *Architectural Forum* 103, n. 6 (December 1955) 130-136.

⁵⁰ *Ibid.*, 136

⁵¹ Sigfried Giedion, Fernand Léger, and Josep-Luis Sert, "Nine Points on

Monumentality," reprinted in Giedion, *Architecture You and Me: The Diary of a Development* (Cambridge: Harvard University Press, 1958), 48-51. Burchard's own contribution to this discussion is summarized in John Ely Burchard, *Symbolism in Architecture: The Decline of the Monumental* (New York:

Mary Lynn Smoot and Pfr. Piet Bauke Bos. June, 1955.
Photo: Associated Press.



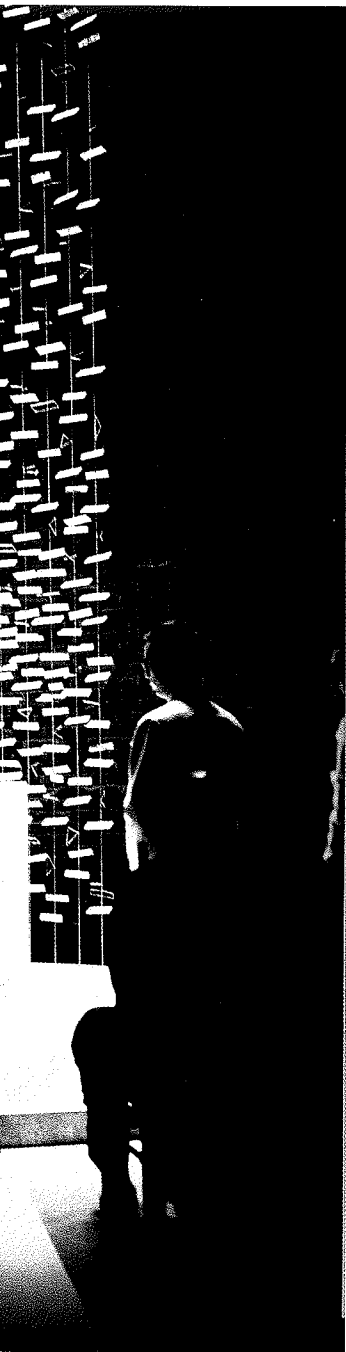
For related reasons
in professional circles
symbolic expression
a brief, unpublished
while defining the c
"derived ... from bas
the dark materials, t
sense."⁵³ In contras
the auditorium and c
between—and ultim
also concerned que
of church architectu
representatives of M
renewal of "spiritual
objection was such
in the School of Arc
survey of American
Herald. In this respo
the building "was in
Innovations, a respo
professor the day af

Less discussed by e
ambiguous formal a
evidence suggests t
components of the p
one of establishing a
this relationship wou
nature, between sec
what we can call a t
on slippages from or
merely guided or me

Harper and Brothers, 1955).

52 The chapel and
auditorium were widely
covered in the architectural
press in the United States
and internationally. See
for example: "Saarinen
Challenges the Rectangle,"
Architectural Forum 98
n. 1 (January 1953): 126-
133; "Saarinen Dome a Year

Phot and Pfc. Piet Bouke Bos. June, 1955.
ed Press.



For related reasons, Saarinen's auditorium and chapel were much discussed and debated in professional circles, mostly for their departures from modernist orthodoxies in favor of symbolic expression, or, in the case of the auditorium, for their technical achievements.⁵² In a brief, unpublished text composed in 1959, Saarinen acknowledges some of the criticism, while defining the challenge posed by the chapel as one of creating an atmosphere "derived ... from basic spiritual feelings," with all of the architectural devices—the lighting, the dark materials, the interior undulations—coordinated to produce an "other-worldly sense."⁵³ In contrast, amongst the several MIT communities we have been following, the auditorium and chapel were discussed primarily as symbols fraught with the tension between—and ultimately, the convergence of—secularism and religiosity. The discussion also concerned questions of aesthetic taste as it was associated with the popular imagery of church architecture. The buildings' controversial departure from the latter had caused representatives of MIT like Killian to respond by rhetorically assimilating the postwar renewal of "spiritual values" with the innovations of modern architecture.⁵⁴ The popular objection was such that it even prompted Albert Bush-Brown, then an assistant professor in the School of Architecture and Planning and later Burchard's co-author on an important survey of American architecture, to write an impassioned letter to the editor of *The Boston Herald*. In this response to published criticism of the chapel, Bush-Brown declared that the building "was in fact created according to God's law" by virtue of its evolutionary innovations, a response that drew an approving note from President Killian to the junior professor the day after its publication.⁵⁵

Less discussed by either the architectural press or the reading public, however, was the ambiguous formal and programmatic relationship between the two buildings. Available evidence suggests that from the beginning Saarinen treated the auditorium and chapel components of the project as separate entities, with the principal design problem being one of establishing a syntactical relationship between the two. Implied was the hope that this relationship would sustain a distinction, which we can now interpret as ideological in nature, between secular and religious forms of monumentality, while assimilating both into what we can call a theological humanism. Such humanism is inter-discursive in that it relies on slippages from one symbolic register to another; where instrumental knowledge is not merely guided or mediated by moral-theological training, it depends on it.

- | | | | |
|-------------------------------|---------------------------------------|-------------------------------------|--------------------------------------|
| Harper and Brothers, 1955). | Later," <i>Architectural Record</i> | 36, n. 7 (July 1955): 74-75; | n. 1 (January 1956): 65-67; |
| ⁵² The chapel and | 115, n. 5 (May 1954): 20, 318, | "Building in the Round: M.I.T. | Bruno Zevi, J.M. Richards, |
| auditorium were widely | 320, 322; Edward Weeks, | Completes Two of Today's | Sigfried Giedion, "Three |
| covered in the architectural | "The Opal on the Charles," | Most Talked about Buildings," | Critics Discuss M.I.T.'s New |
| press in the United States | <i>Architectural Record</i> 118, n. 1 | <i>Architectural Forum</i> 104, n. | Buildings," <i>Architectural</i> |
| and Internationally. See | (July 1955): 131-137; "M.I.T. | 1 (January 1956): 116-121; | <i>Forum</i> 104, n. 3 (March 1956): |
| for example: "Saarinen | Dedicates New Auditorium," | "Chapel: Interdenominational," | 156-157, 174, 178, 180, 182; |
| Challenges the Rectangle," | <i>Architectural Forum</i> 103, n. 1 | <i>Architectural Record</i> 119, | "La cappella e l'auditorium el |
| <i>Architectural Forum</i> 96 | (July 1955): 128-129; "New | n. 1 (January 1956): 154- | Massachusetts Institute of |
| n. 1 (January 1953): 126- | M.I.T. Buildings Opened," | 157; "New Chapel at M.I.T.," | Technology," <i>Casabella</i> 208 |
| 133; "Saarinen Dome a Year | <i>Progressive Architecture</i> | <i>Progressive Architecture</i> 37, | (November-December 1955): |

Saarenin's initial attempts at developing a syntax adequate to this task first show a small domed chapel attached to a larger, four-pronged, domed auditorium in an offset echo of Bosworth's earlier pair of domes on the central academic campus across the street. These studies are followed by a scheme that sets a vaulted chapel in front of a three-pronged auditorium dome and another scheme that offsets a rectangular chapel, designed as a glass box with an external ambulatory enclosed by solid brick walls, against the three-pronged dome. As published in *Architectural Forum* in January 1953, the near-final scheme shows a cylindrical brick chapel semi-connected to a three-pronged auditorium dome by an exterior breezeway. Both buildings are positioned on a patterned, diagonally-gridded plaza with parking below, and a pedestrian bridge connects back across Massachusetts Avenue to the main campus.⁵⁶

Already, this first publication interprets the juxtaposition of brick cylinder and thin-shell concrete dome as solving the underlying stylistic problems associated with the demand for symbols of an ambiguously secular/religious nature:

In the brick cylinder chapel Saarenin and his associates have out-traditionalized today's traditionalists just as conclusively as they out-modernized today's modernists in using a dome instead of the familiar wedge shape for the auditorium. More specifically, the chapel is as timeless as the dome is timely.⁵⁷

Thus modern-versus-traditional is converted into a "timely," transparent, thin-shell concrete dome set against a "timeless," dense, and opaque brick cylinder. But, as interpreted several years later by the historian Bruno Zevi, this resolution was hardly satisfactory. In critical commentary on the project which also included remarks by Giedion and by J. M. Richards (the editor of *The Architectural Review*), Zevi referred to the "unhappy" experience of modern architects in Italy trying to adapt the traditions of church architecture to the expressive medium of modernism, which typically resulted in a compromise that was "half modern and half old." Zevi, who really was demanding nothing less than the full capitulation of the secular to the sacred, explained:

16-20.

53 Eero Saarinen, "Auditorium and Chapel, Massachusetts Institute of Technology, Cambridge, Mass.," January 1959, 2. Eero Saarinen Papers, Yale University Manuscripts and Archives, Box 28, Folder 121. **54** See, for example, Killian's remarks at the dedication

ceremony, op. cit.

55 Albert Bush-Brown, "M.I.T. Chapel Created According to God's Law," letter to the editor of *The Boston Herald*, 12 June 1955, and James R. Killian to Albert Bush-Brown, 13 June 1955; MIT Archives AC004, Box 131, Folder 8.

56 Ongoing discussion at MIT regarding the suitability of the chapel form was apparently concluded in late 1953, when Burchard wrote to Killian on behalf of the building committee endorsing the cylindrical brick form, which was approved shortly thereafter. John E Burchard, Memorandum to President

The bell tower and spire, designed by Theodore J. Roszak, being installed atop the MIT Chapel, January 1956.



to this task first show a small auditorium in an offset echo of campus across the street. These in front of a three-pronged angular chapel, designed as a brick walls, against the three-pronged auditorium dome by patterned, diagonally-gridded brick back across Massachusetts

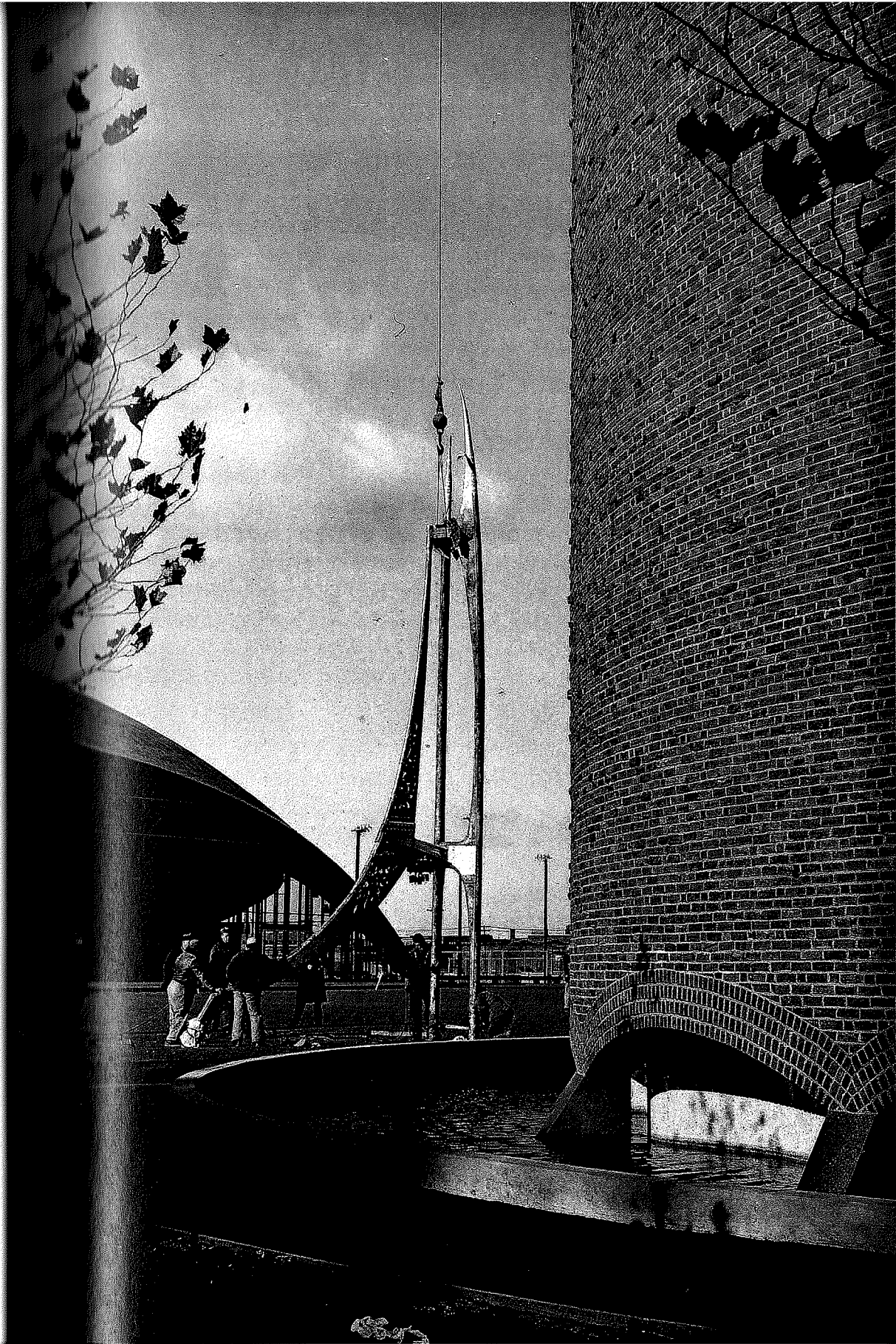
brick cylinder and thin-shell associated with the demand for

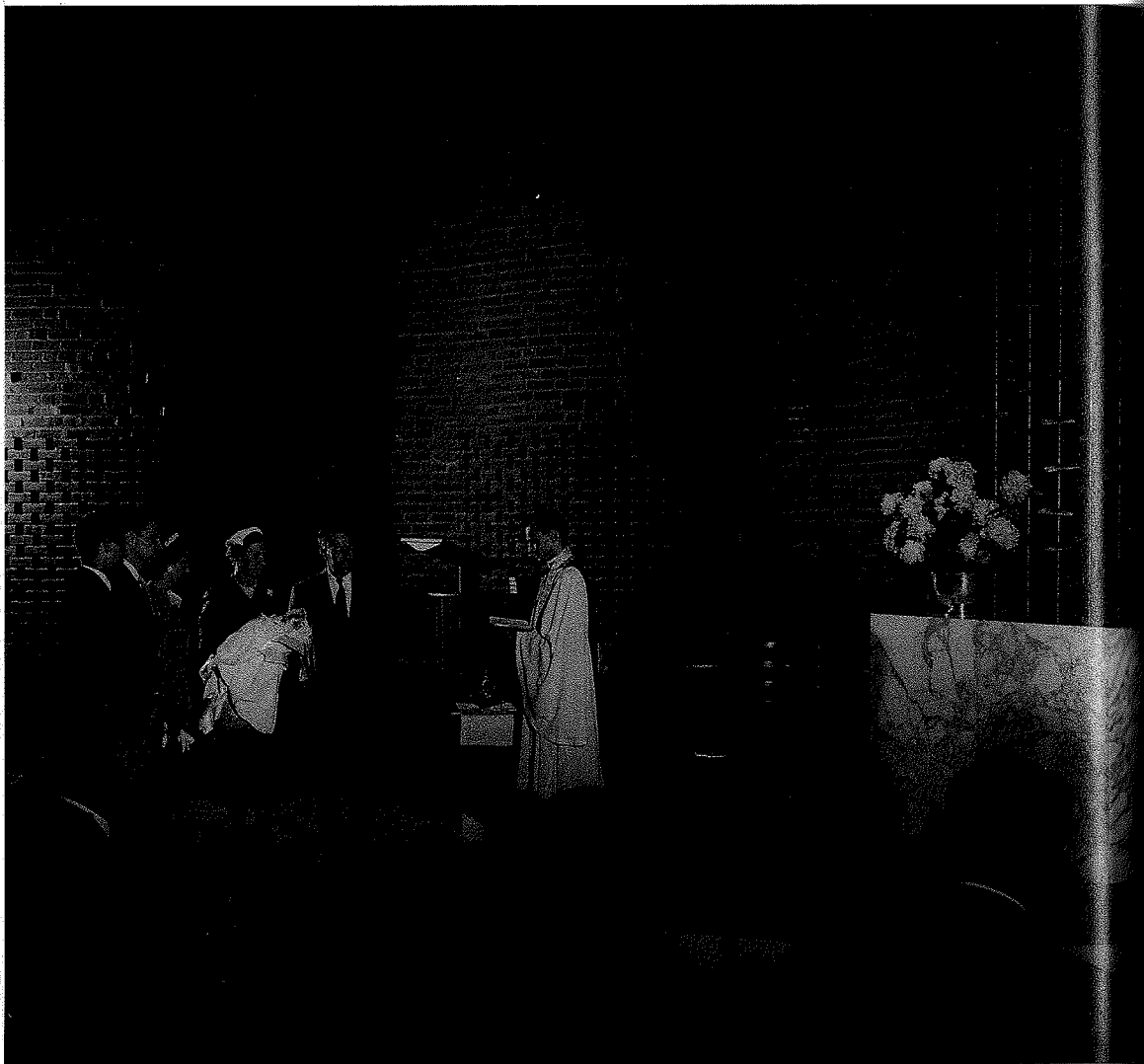
have out-traditionalized modernized today's modernists the auditorium. More

transparent, thin-shell concrete under. But, as interpreted in was hardly satisfactory. In works by Giedion and by J. M. led to the "unhappy" experience church architecture to the in a compromise that was "half less than the full capitulation

mission at suitability was ed in late ard wrote of the endorsing form, ed shortly Burchard, resident

The bell tower and spire, designed by Theodore J. Roszak, being installed atop the MIT Chapel, January 1956.





The first christening in the MIT Chapel, June 1955.

Modern religion
chapel will not
an artificial enc
significant. In th
a generation to
be as great as th
will emerge from
its place in his t
the dome carrie
water around th

However, these tw
they merely the im
accurate to say th
work of Eitel Saarin

Take the question
out of the reflected
irregularity is mat
the undulating wall
gentle movement
above the altar. Cl
off of the metal fil
marble altar. By vi
enters mysteriou
exterior arches and
through a visible
Bertoia screen. In
solids in light is no
as it was at Ronch
as the product of

Ellen, 18 December 1955
MIT Archives AC004, Box
Folder B

Modern religion is a problem that architects must cope with in a modern way. This chapel will not serve the purposes of religion or spiritual elevation; it will only provide an artificial escape.... To my mind, the mistakes of great architects are always significant. In the worst interpretation, Saarinen's M.I.T. group pictures the crisis of a generation too immodest to follow Wright or Le Corbusier, and too tormented to be as great as they are. But I am on the side of the positive interpretation: Saarinen will emerge from the present impasse, and his pseudomystical experiment will take its place in his biography as a chapter of insecurity and search, well symbolized by the dome carried on three points and by the vague, moving lights reflected from the water around the chapel.⁵⁸

However, these two buildings were hardly exceptions in Saarinen's body of work. Nor were they merely the insecure products of a "generation" in crisis. Instead, it would be more accurate to say that they were typical of research within the firm which dated back to the work of Eiel Saarinen, beginning in the 1930s.

Take the question of lighting. The chapel's undulating brick interior surface moves in and out of the reflected light thrown up by the water passing beneath the arches, whose irregularity is matched by that of the interior undulations. The effect is a double pulsation: the undulating walls rhythmically blocking and revealing the indirect uplighting, and the gentle movement of the water itself. A counterpoint to this is given by the single skylight above the altar. Circular and focused, its light passes through a horizontal baffle and reflects off of the metal filigree screen designed by Harry Bertioia that is located behind the solid marble altar. By virtue of an artifice of the constantly changing wall section, light therefore enters mysteriously from below through the gap between two sets of curves: the vertical exterior arches and the horizontal interior undulations. Rising, it enters straightforwardly through a visible hole in the roof, only to pick up a mysterious flicker as it bounces off the Bertioia screen. In this theater of illumination, then, the Corbusian (and neo-Platonic) play of solids in light is not merely softened by the glow of an ambiguously meditative spirituality, as it was at Ronchamp (completed that same year). Light is made to appear in and of itself, as the product of a dynamic relationship between forms and materials. And the burden of

Killian, 18 December 1953, MIT Archives AC004, Box 131, Folder 6.

57 "Saarinen Challenges the Rectangle," 126.

58 Bruno Zevi, in Zevi, Richards, and Giedion, "Three Critics Discuss M.I.T.'s New Buildings," 157, 174.



mystification passes from the
reasonableness, tolerance, and

Saarinen was well-equipped to
and acoustical virtuosity of the
heightens by contrast the effe
Prior to the war the Saarinen firm
had completed two notable au
Music Center at Tanglewood, Mass.
a Lutheran minister, had also o
Church of Christ in Columbus, Ohio
(1950), both in collaboration with
the "sublime" lighting effects
the General Motors styling dom
cloudy sky to bestow the latest
only the most visible instance
Church of Christ (1940) and its
wash a blank wall behind the altar
MIT, water is used to frame the
is achieved with a circular moa
Church (a device that was used

The refinement of these techn
engagement with the problem
comments on the work of Mies
challenges for modern architec
and plays dramatically."⁵⁹ Some
Saarinen saw the need for inte
originality of the modernist lan
revivals typical of American co

Sculptor Harry Bertioia
installing altarpiece in the
MIT Chapel, n.d..

59 Undated
remarks by
on the work
van der Ro
Papers, Yale
and Archivi
17, 3-4.



mystification passes from the blinding glare of all-encompassing reason, to the apparent reasonableness, tolerance, and abstraction of the soft new spirituality.

Saarinen was well-equipped to stage this mystification. The equal and opposite structural and acoustical virtuosity of the auditorium, accomplished with much more evident artifice, heightens by contrast the effect of effortless, ambient theatricality within the chapel itself. Prior to the war the Saarinen firm, which had been founded by his father, Eliel Saarinen, had completed two notable auditoria: the Kleinhans Music Hall in Buffalo and the Berkshire Music Center at Tanglewood, both of 1938. Eliel Saarinen, who was himself the son of a Lutheran minister, had also designed two notable religious buildings: the Tabernacle Church of Christ in Columbus, Indiana (1940) and Christ Lutheran Church in Minneapolis (1950), both in collaboration with his son. When such precedents are taken into account, the "sublime" lighting effects that the Saarinen firm was simultaneously developing inside the General Motors styling dome, which were intended produce the artificial equivalent of a cloudy sky to bestow the latest automobiles with an otherworldly aura, are recognizable as only the most visible instance of a technical production of spirituality. Both the Tabernacle Church of Christ (1940) and its sequel, Christ Lutheran Church in Minneapolis (1950), wash a blank wall behind the altar with soft natural light. At the Tabernacle Church, as at MIT, water is used to frame the building and to set the brick volume in sharp relief; this is achieved with a circular moat at MIT and a flat, sheer reflecting pond at the Tabernacle Church (a device that was used to comparable effect at General Motors and elsewhere).

The refinement of these techniques only scratches the surface of Saarinen's own engagement with the problem of evoking of religious feeling, which (in unpublished comments on the work of Mies van der Rohe) he judged to be among the most important challenges for modern architecture "where the problem is to bring light in so it moves and plays dramatically."⁵⁹ Something similar can be said about campus planning, in which Saarinen saw the need for integration, and for the reconciliation of the singularity and originality of the modernist languages, in which his work was fluent, with the historical revivals typical of American collegiate architecture.⁶⁰ In a number of instances before and

Sculptor Harry Bertoina installing altarpiece in the MIT Chapel, n.d..

⁵⁹ Undated transcript of remarks by Eero Saarinen on the work of Ludwig Mies van der Rohe, Eero Saarinen Papers, Yale Manuscripts and Archives, Box 28, Folder 17, 3-4.

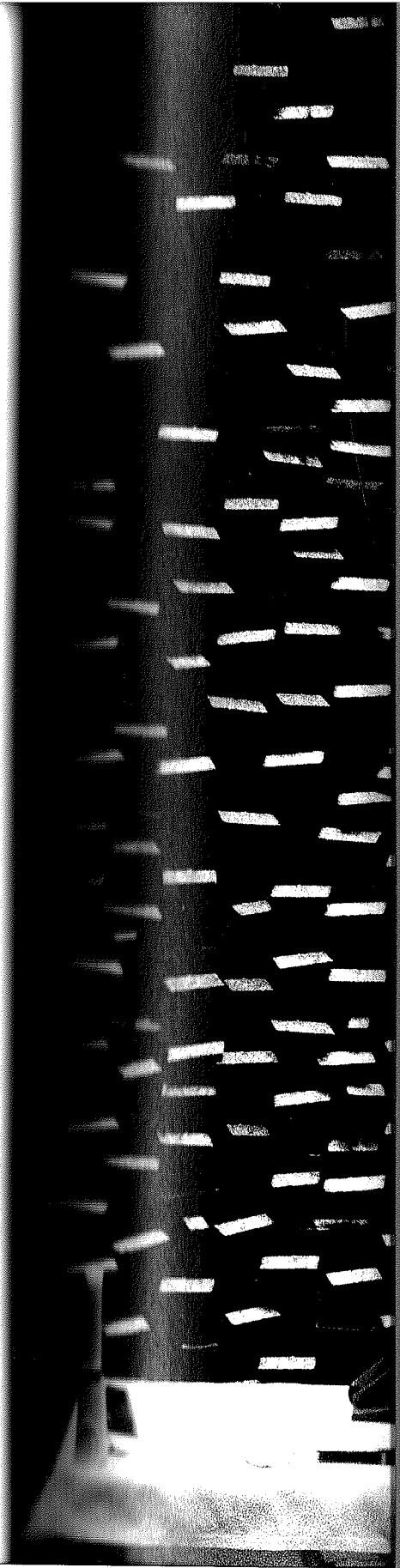
⁶⁰ Eero Saarinen, "Campus Planning: The Unique World of the University," *Architectural Record* 128, n.5 (November 1960): 123-130. For a summary of Saarinen's campus planning work and thinking, see Alan J. Plattus, "Campus Plans: Context and Community," in Eeva-Liisa Pelkonen and Donald Albrecht, eds., *Eero Saarinen: Shaping the Future* (New Haven, Yale University Press, 2006), 308-321.

after the MIT commission, Saarinen would be given the opportunity to address these two problems simultaneously by designing chapels as part of a larger campus planning exercise: at Brandeis University (1949), Drake University (c. 1950), at Concordia Senior College (1957), and at Stephens College (1954). In each of these, aspects of the MIT "language" were either prototyped or refined—the undulating brick wall at Brandeis, the Protestant "village" (northern European, in this case) at Concordia, and the indirect illumination at Stephens. But at MIT, this research and the discourse to which it belonged acquired a specific cast as it intersected with the reorganization of the humanities, and with the sublimation of technoscience into a humanism no less instrumental in its functionalization of "spiritual" balance (as distinct from outright critique), as a binding agent holding the military-industrial-academic complex together.

Also at MIT, a problem that was typically formulated in architectural discourse as being one of simple opposition—abstract versus symbolic, modern versus traditional—acquired a good deal more complexity when it encountered the secular/religious conflict written into MIT's institutional realignments. The "new monumentality" had sought to resolve the opposition of non-symbolic (modern) to symbolic (traditional) by displacing symbolism in the secular, civic realm to a higher, more abstract level. But this type of resolution quickly became undone on the ground at MIT. Despite the strenuous efforts on the part of their architect to distinguish the chapel from the auditorium in all possible ways—spatially, formally, materially, and in terms of scale—there was no keeping these two elements and their meanings apart. But neither was one simply reducible to the other. Instead, they contaminated one another in a sort of incomplete dialectic. It would be inaccurate, however, to describe this dialectic as a microcosmic instance of a macrocosmic "dialectic of Enlightenment" dominated by instrumental reason.⁶¹ In the soft light of the chapel, everything seems perfectly reasonable, perfectly in balance with the utilitarian environment from which the little round cylinder withdraws, its mystical theatricality finding a counterweight in the techno-theater of the auditorium. The threat this time comes from the inside rather than from the outside as the university rediscovers its human "soul." In doing so, it exchanges the "myth" of reason for the reasonable production of myth, in a theological humanism that is no longer in need of its dialectical, secular counterpart.

⁶¹ Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments*, trans. Edmund Jephcott (Stanford: Stanford University Press, 2002).

Interior of MIT Chapel
with Harry Bertoin's
altarpiece, n.d.. Photo:
J.Ph. Charbonnier.



portunity to address these two
rger campus planning exercise:
oncordia Senior College
ects of the MIT "language"
at Brandeis, the Protestant
e indirect illumination at
ch it belonged acquired a
umanities, and with the
mental in its functionalization
inding agent holding the

ural discourse as being one
traditional—acquired a good
conflict written into MIT's
t to resolve the opposition of
mbolism in the secular, civic
quickly became undone on
eir architect to distinguish
ormally, materially, and in
eir meanings apart. But
aminated one another in
o describe this dialectic
enment" dominated by
seems perfectly reasonable,
he little round cylinder
e techno-theater of the
n from the outside as the
s the "myth" of reason for
at is no longer in need of its

Interior of MIT Chapel
with Harry Bertioia's
altarpiece, n.d.. Photo:
J.Ph. Charbonnier.

