The Builder's Art

His father talked with the master. They agreed on the terms of his labor, the moral cast of his instruction. Now he walked, his little hand in his father's big hand, through the dusty streets of dawn to the edge of town, where he was left. An apprentice on his first day, he stood among the tall men: hair on their arms, bristly whiskers, stained teeth, bright eyes. Piled lumber filled the shadows, trim ranks of planes lined the walls, heavy benches bore mighty machinery. Burly men bent and shifted elegantly in the dim, cramped space, and he stood, straight and silent, attentive.

by Henry Glassie



The master is good with his

ike the novitiate in a religious order who cleans the latrines and ladles the brothers their soup, he will find his place at the bottom of a hierarchy, rigid for efficiency, learning when to sweep and scoop the sweepings into the stove, when to run for the hot, sweet tea, red as rabbit's blood, that keeps the men working. Their words are hard and sparse. His response is quick. He jumps, learning to hustle and wait, expecting no thanks, squeezing into the cracks in their routine.

He comes first, waiting in the chilled dark for the master with the key. He leaves last, sweeping up the sawdust and curls of wood that will warm the shop tomorrow, then standing by the master's side, in the dark again, when the key is turned. His role is to be disciplined and busy, sweeping, fetching, sweeping, with no complaint, piling lumber that seems neatly piled already. In service, he learns about wood, the range of grain and density, from pine and poplar to walnut and oak and hornbeam. He learns the names of the tools he is bidden to bring, mastering a technical vocabulary that would satisfy an academic scientist. Working around the work, he watches, enfolding the gestures that he will emulate; the first time he is permitted to drive a plane or crank a brace and bit, his body holds the posture, his hands flow through the air in familiar patterns. The words he needs in the ascent to competence are few.

His learning is social. He sits quietly in the mansmell and smoke, listening closely while the men at tea talk about life, about gaudy sin and steadfast virtue. The old rules of the trade, compressed into proverbs, are his rules now. He submits, abandoning youth, becoming one in a team unified by mature purpose. That blent purpose directs him to know the materials. Wood teaches him. Then tools teach him, beautiful sharp tools. As he learns wood and tools, a technological tradition is built into the growth of his body. Thickening fingers curl to the hammer's handle. The plane becomes a new hand, jointed at the end of his arm, and it darts and glides, smoothing the faces of planks. A disciple, he kisses the hand of the master who teaches him the nimble tricks of joinery and counsels him on life, who will help him select the proper girl for his wife. He belongs to an atelier, its tradition is his, and he is ready for initiation into the deeper mysteries of the art.

With a place on the team, loving the feel of wood, skilled with tools, a journeyman now, he is taught the rules of proportion. Using a slick stick, scored rhythmically, he becomes capable of measurements that bring order to architectural creations, relating the width of a beam to its length, the length of a beam to the dimensions of a room that will sit at ease within the balanced unity of a house. He moves confidently between chaos and order, transforming natural substances into useful materials, then assembling materials into useful buildings. At his



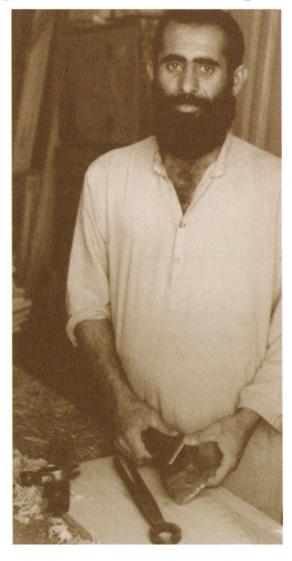
hands and good with his mind,

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master's side, and then alone, he designs and builds, directing the men who peg the lines and raise the walls, while he squints and studies, testing by touch and look, and perfecting with excellent instruments the finish that signals work done well.

They begin to call him master, an honorific term of address that cannot be claimed, seized. It must be granted by society in recognition of skill and wisdom. The master is good with his hands and good with his mind, an accomplished practitioner and designer. And as a master, he oversees and judges the work of others, he manages the business on which the livelihoods of all depend, and he is obliged to teach, receiving wild boys and taming them to craft and life.

Holding in my mind real workshops from Turkey and Pakistan, I sketch the system of the atelier, a system that has combined production and education to create the bulk of the world's art, from basketry to goldsmithing, from painting to architecture. Most architects have been builders, trained amid work, working in teams, acting in harmony with received ideas of social order — at once stratified and cooperative — and employing a shared tradition of technical procedure and workmanlike taste, of usable form and meaningful ornament. The atelier, of course, must be credited with most of the world's buildings, the houses and barns and temples called vernacular, but it has yielded as well many among the canonical monuments of architectural history.



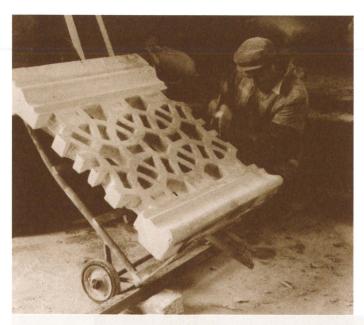
Safeduddin, master carpenter, Peshawar, Pakistan, 1997. Photo by Henry Glassie

Chartres Cathedral would be on anyone's short list of Europe's greatest buildings. When architectural historian John James examined the old building with affection and precision, he found no architect, no aloof consciousness in command. Instead, James discovered Chartres to be the creation of a series of master masons, whose habits of hand and mind abide in the fabric. Chartres is the collaborative consequence of different ateliers, each distinct in its procedures, all unified by a culture of theology, technology, and architectural idea.

The names of the masters of Chartres are lost. But give the architect a name, a personal presence in the record, and the ground of experience, the pattern of learning and practice, remains firm. Consider Sinan. He was born, at the end of the 15th century, in a village in central Anatolia. Trained in a workshop, Sinan was collected into Ottoman service, and marching with the Turks in conquest, he rose from artisan to engineer, planning bridges and roads, and encountering the masterpieces of Mediterranean architecture as the empire expanded through war. Named the court architect in the middle of his long life, Sinan began designing the innovative imperial mosques that make him, by my lights, history's greatest architect. Those same bold buildings position him heroically in the minds of modern Turkish working men.

Breaking for tea in the vaulted, shadowy shop, today's artisans recall Sinan's origins when they tell of the day he came to inspect the work being done on the massive mosque he designed for his sultan, Suleyman the Magnificient, in Istanbul. Sinan was 50, maybe older, when he climbed the high scaffold, picked up a mallet and chisel, and began carving to show a workman how it ought to be done. He hammered, the stone yielded gracefully to his touch, and he continued, remembering. Limber muscles discovered the old grooves. Stonedust powdered his beard and brocaded kaftan. For many sweet hours, he lost himself into the work he had mastered in youth.

Modern artisans celebrate Sinan's imagination, the talent for design he developed as a craftsman, when they tell how Suleyman, anxious about the progress of his mosque, came to Sinan's home and found him lying in bed, smoking. Outraged, the sultan asked how his architect, his slave, could be stretched in repose with the building yet unbuilt. The worker, Sinan replied, is always



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at work. At rest, letting his mind range free, Sinan had solved the problem of the dome that would cap the vast expanse of his sultan's mosque.

Finally, modern workers affirm their values in the story of Suleyman and Sinan standing at the gate of Suleymaniye, the bright, white new mosque. Sinan hands his sultan the key to the tall front door, inviting him to be the first to enter. Suleyman takes the key, pauses, ponders, and returns it to his architect, telling him to open the door and enter, for there will be more sultans in history, but never another Sinan.

Rural artisan, military engineer, imperial court architect, Sinan began in an atelier, sweeping, watching, learning materials and tools. Then, advancing by stages, he became the incarnate fulfillment of the old system of creation.

When that system faltered with industrialization, and architects sought separation from builders, licensing themselves and selecting artists, not artisans, for their models, when the era we call modern broke into clarity, conscientious critics, with John Ruskin in the lead, mounted an argument against division in labor. Looking back upon medieval wonders like Chartres, stunned by

their superiority to the buildings of the modern age, the critics of the 19th century faulted the system of capitalistic labor that segmented work by category, isolating the designing mind from the laboring hands.

Division in labor was not the problem. Complex technologies are always divided, apportioned by task, ranked by skill. Ignorance was the problem. When the architect has not risen through the trade and has no grip on tools and materials, when designers and builders do not share understanding, when the architect's knowledge of the workers and their work is weak, then the architect rises and the worker sinks. Become a piece of equipment, a necessary embarrassment, the worker is, perhaps, assigned the impossible, or, more likely, trapped in deadening unsatisfaction. The system of creation is marked by alienation, broken by ignorance. The cultural center does not hold. Plans elaborate. Buildings fall apart.

How — it is our question — do the building trades fare when the system of the atelier seems shattered, and the architect, with Michelangelo on his mind, aspires to the status of the artist? How is it for the artisan in our world? The romantic critic answers with an accusation of enslavement, righteously decrying the inhumanity of a

system in which the worker, skilled and bright, sells himself for wages and drifts in quiet desperation. The apologist for capitalism counters that a bureaucratic organization of labor is necessary if the architect is to be free and the flow of cash is to increase. Neither argument captures the contemporary reality. Let me suggest four of the patterns to be found now, at the beginning of the new millennium.

One pattern in our days is the ancient pattern of the atelier. It is robust, thriving and dominant in many parts of the world, despite the neocolonial thrust of globalization. Tommy Moore, the mason in a farming community in Ireland, sits at tea, his dinner done. His neighbor, Paddy McBrien, walks into his kitchen, sits down, receives hot, creamy tea, and says he wants a new house. Not a house like his present one, but one in the new fashion,

master, who stands back and locates the windows and doors by eye. The house goes up, and there it stands: the conjunct result of Tommy's skills and Paddy's desires, the meshed expression – as Chartres was 850 years earlier - of a culture shared among the patron, the builder, and a team at work.

Tommy, the architect, lives in the place, kneels for communion with the patron on Sundays, sweats in the sun beside his laborers. At the same time, elsewhere, an architect sits in a cool office to draw a set of beautiful.





like Eamon Corrigan's. Fine, says Tommy, old builder of houses. They have no need for plans; words are few. They know what houses look like and how they operate. Tommy suggests an additional door to ease internal motion. Paddy agrees and sets to work, felling and dressing timber, molding a mountain of concrete blocks.

One morning in a drizzle, Tommy comes, and the two of them stand in the grass, at the midmost point where the fire will burn, and, imagining the house around them, they stake it out. Then when the skies clear, Tommy brings his team of surly, hung-over young men, and Paddy joins them, following the direction of the

detailed plans. They pass to a builder in a hard hat who strives to realize the architect's dream by managing a gathering of workers for whom it is a matter of wages, and of pride.

In upstate New York, Dorrance Weir, a friend with whom I played in a square dance band, took me on a tour of his creations. A union carpenter, he built the plywood forms for casting concrete. In any architectural history, he would be obliterated, reduced to a force at the architect's whim. But the soaring viaducts into which he was absorbed anonymously, were, for Dorrance, grand accomplishments. They prompted narration. He told me

Photo by Henry Glassie



No matter how complex the plan or machine, there is no building without skilled workers. No skilled worker without a tradition of creative procedure. On the old site, it was the man who could frame a mortise and tenon so tight that the beam sung like a tuned string. On the new site, it is the man who can skin a dozer blade right to the line. The deft hand and sharp eye, the fused union of mind and muscles, of tradition and predicament, remain basic to every architectural project.

how he and his colleagues overcame the difficulties of imperfect plans and ignorant bosses, using the skills they had developed as seasoned professionals to build beautiful and useful things that stood massively, opulently upon the land.

The big construction sites you pass, muddy and rutted, noisy with engines, swinging with cranes, afford no public recognition for the men at labor in hooded sweatshirts. But working, now as always, in teams, they learn and teach and cooperate, teasing the apprentices and acknowledging the skills of the gifted. They stop for a beer, then go home at night with more than wages. They

take some pleasure in the camaraderie, gain pride in a hard job done well.

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Handcraft being essential to every building, a third

Timber framers from around the world came together to build and raise a traditional timber frame structure in Penetanguishine, Ontario.

Photo by Will Beemer, courtesy the Timber Framers Guild



pattern in our time emerges when the architect, recognizing the worker's skill, decides to make it a decorative presence in the final product, designing his building, not to absorb, but to display the virtuosic performance of traditional artistry. One exquisite example is the new Arab Associations Building in Kuwait. Egyptian woodwork, Syrian stonework, and Moroccan tilework provide the conspicuous ornament of a towering, ultramodern edifice.

Dedicated to balancing the record, to revealing modern life in all its complexity, folklorists in the United States have documented ateliers in which artisans continue to employ elder technologies in the creation of architectural ornament. John Vlach befriended Philip Simmons, an African-American smith whose hammered, wrought-iron masterpieces

adorn his city of Charleston, South Carolina. In film and print, Marjorie Hunt has limned a lovely collective portrait of the Italian-American masters who carved the pale stone of the spiring pile of the National Cathedral in Washington, D.C.

As the late James Marston Fitch, architect and educator, long argued, historic preservation requires the preservation of knowledge and skill as well as buildings. Whether restored into a museum or adapted for reuse in contemporary life, the derelict house or factory must be renewed with the suave touch of the hand. The artisan on whom the preservation architect depends might have

been raised and trained in the old system of the atelier,

like the masters of Washington
National Cathedral. More likely he is a
man like Chris Sturbaum who had to
figure it out for himself. Chris learned
from the old carpenters, not directly
by demonstration and verbal admonition, but indirectly. He discovered the
tricks of the trade by dismantling old
houses, by analyzing the things before
him, as John James analyzed the

stones of Chartres, as city kids analyzed scratchy wax recordings, learning how to bring the folk music of the past into new vitality. Through trial and error, teaching himself from the samples in his hands, Chris revived expired techniques, developing a new tradition with his



At work in his studio, master carver Vincent Palumbo carves a statue of Saint Peter for Washington National Cathedral. Photo by Marjorie Hunt

Restoration carpenter and historic preservation specialist Chris Sturbaum of Golden Hands Construction, Bloomington, Indiana. Photo by Henry Glassic



brother Ben and their witty team of workers — Golden Hands, they call themselves.

Modest wooden houses, brought into new life by Golden Hands, bless the little city of Bloomington, Indiana, providing color and comfort, making the place habitable, human, worth defending. And the carpenter Chris Sturbaum has expanded his responsibilities, becoming a spokesman for his cause, contending eloquently that historic preservation is a way to neighborliness, a means for stabilizing the community in sanity, quality, and remembrance. We stand together, Chris and I, serving on a mayoral commission, working for affordable housing with our friends in Bloomington Restorations, Incorporated, testifying before municipal boards, consistently resisting the greedy reach of developers who lack all sense of the place, its people and their needs.

We will know no final victory, for greed has no limit. Mobile homes will roll into the wooded hills, the suburbs will spread with the pestilence of tacky mansions, cities will be eviscerated on behalf of bland glass towers. But there is some consolation in knowing that, in many locations, old masters still teach the young and direct the construction of buildings fit to the place, that workers still find pride in their diminished positions on sites of rackety construction, that some architects have recognized that passages of handcraft can enhance the elegance of their new projects, and that post-hippie carpenters can rediscover the virtues of tradition, making old houses new in a world distracted by technopop extravagance and slouching toward the bottom line.

The hand of master blacksmith Philip Simmons of Charleston, South Carolina. Photo by Mannie Garcia ⊚ 1996, reprinted with permission from the Philip Simmons Foundation, Inc.

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Henry Glassie is College Professor of Folklore and Chairman of Near Eastern Languages and Cultures at Indiana University. His major books include Pattern in the Material Folk Culture of the Eastern United States, Folk Housing in Middle Virginia, Passing the Time in Ballymenone, Irish Folktales, The Spirit of Folk Art, Turkish Traditional Art Today, Art and Life in Bangladadesh, and Material Culture.