Spring 2006, CMU, Arch #48-205

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## Lecture No.2: ARCHITECTURE & CRAFT

Fri. Jan. 27, 2006

Craft: from the German Kraft = power; or possibly from German Kunst = Art. In English it implies skill, intellectual power. Art is craft + idea Craft applies to aesthetics and quality, NOT industry, cost or efficiency Trades & Guilds are professions organized by craft



- Architecture, Architect, Architecton: changing definitions over time: Master carpenter, craftsman, scientist, artist
  Art, Artifact, Artifice: from Ars = skill, application of skill in matters of taste.
  Building = from medieval Dutch Buan = "of earth"; from German Bauen. cf Baukunst Engineering = to contrive, plan or invent (in a crafty, deceptive sort of way). Military
- **Design, Designer,** *Disegno* = purpose or plan related to function OR model, plot, picture, portrait. That which can be communicated by drawings or words, a mental plan, intellect, qualitative, imposing order
- **Workmanship** is application of technique to making with the exercise of care, judgement, dexterity. Workmanship can improve or thwart design, it is the approximation of an ideal. Cannot be expressed in words or drawings.

 Workmanship of Certainty = pure automation, increase speed, lower cost, avoid variation
 Workmanship of Risk = Craftsmanship, quality is at risk, difficult. Historically prevalent but dying out. Diversity & Freedom = the need to create work processes that allow freedom, yet insure quality

- **Craftsmanship** = the better sort of workmanship. Quality is at risk. Workmanship using any kind of apparatus or technique, in which the quality is not predetermined, but craftsmanship depends on the judgement, dexterity and the care of maker.
- Quality: Arete = Greek excellence (cf. Pirsig) Aura = effervecence of original, of handmade, of genius (cf. W. Benjamin) Authenticity = vs. imitation, copying. Originality
- **Technique** = knowledge of how to make things, knowledge that informs workmanship **Technology**, *techne* = scientific study of technique. Heidegger on technology

Issue related to Craft:

- Hand Made vs. Machine Made: 1) Eothechnic; 2) Paleotechnic; 3) Neotechnic; 4?) Infotechnic. Can machines be used in creating craft?
- Handicraft vs. Mass Production: Industrialization. The first machines imitated handicraft
- **Ornament vs. Abstraction**: Ornament as the expression of craft. Ornament as man's instinct to "play" Is abstraction the desire to erase craft?

Local vs. Universal: Local, individual aspect of craft, traditions, habits. Not anonymous.

Readings:

David Pye, <u>Nature and Art of Workmanship</u> (1968) -----. <u>The Nature and Aesthetics of Design</u> (1978) Kenneth Frampton, <u>Studies in Tectonic Culture</u> (1995) Robert M. Pirsig, <u>Zen and the Art of Motorcycle Maintenance</u> (1974) Donald Judd, <u>Architektur</u> (1989) Julie Iovine, "Building a Bad Reputation: Sloppy American Craftsmanship," <u>NY Times</u> Aug. 8, 2004. Architect Louis Kahn on Craftsmanship, and the Nature of Brick:

## AN ARCHITECT SPEAKS HIS MIND

## On Craftsmanship



A craftsman never wants to cover his work. In a good drawer the dovetailing is not hidden, the joint is the beginning of ornament. The joint is where ornament begins. The less the craftsman enters into something, the more there is a modification of the craft. I have reached a time where I realize I have my own way of expressing myself, an approach, an attitude toward building that is so tied up with the integrity of the building that I could not disguise a joint, nor could I disguise the material itself. So I couldn't apply anything to it. I could use decoration in a sense that things that are put there are themselves something—a sculpture or a painting. But you know, I go into houses where what I do is not—and I love the houses. There's a unity that I don't try for because it isn't in my nature. I insist the way the walls are made be completely evident. And it's exactly what a craftsman looks for.

Design demands that one understand the order. When you are dealing, or designing in brick, you must ask brick what it wants, or what it can do. And if you ask brick what it wants, it will say, "Well, I like an arch." And then you say "But, uh, arches are difficult to make. They cost more money. I think you can use concrete across your opening equally as well." But the brick says, "Oh, I know, I know you're right, but you know, if you ask me what I like, I like an arch." And one says, "Well now, why be so stubborn, you know?" And the arch says, "May I just make one little remark? Do you realize that you are talking about a being, and a being in brick is an arch?" That's knowing the order. It's knowing it's nature. It's knowing what it can do. Respect that tremendously. If you're dealing with brick, don't use it as just a secondary choice, or because it's cheaper. No, you have got to put it into absolute glory, and that is the only position that it deserves. If you're dealing with concrete, you must know the order of nature, you must know the nature of concrete, what concrete really strives to be. Concrete really wants to be granite but can't quite manage. Reinforcing rods are the play of a marvellous secret worker that makes this so-called molten stone appear wonderfully capable-a product of the mind. Steel wants to tell you that it can be an insect in strength and the stone bridge that it is built like an elephant; but you know the beauty of both, harmony due to the extension of the material to its fullest capability. If you just cover a wall with stone, you feel that you've done something inferior, though that can be said for the very best of us. To get things right in your mind and then to act in the purest manner can isolate you very much. However, it is terribly important to make the move downward; it's made cautiously and in full knowledge that you're doing it.