INTEGRATED PLANNING USING A PROJECT SPECIFIC PATTERN LANGUAGE APPROACH

A Pattern Language
Towns · Buildings · Construction

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The book *A Pattern Language*, was written by Christopher Alexander and five colleagues at the Center for Environmental Structure, published in 1977.

The concepts and processes outlined in the book have found applications in diverse fields such as computer programming, human computer interaction, education and design.

VISTA FIELD
A Pattern Language Workshop
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What is a pattern language?

It is a written document, composed of Patterns,
which together create a word picture of the
project.

What is a pattern?

i   A written description of a problem or opportunity which occurs in the environment.

ii An analysis of the essential field of relationships necessary to solve the problem.

iii A solution statement, worded to solve the field of relationships without providing a specific design

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i Problem statement

Faculty Student Mix *—Faculty & Admin.*
Learning and research can best flourish when informal contacts occur naturally and spontaneously between faculty and students, one on one and in small groups.

ii Field of social-spatial relationships

Encouraging informal contact between the faculty and the students is one of the goals of the COBE program, because it is recognized that informal meetings can improve the education and knowledge base of both the faculty and the student.
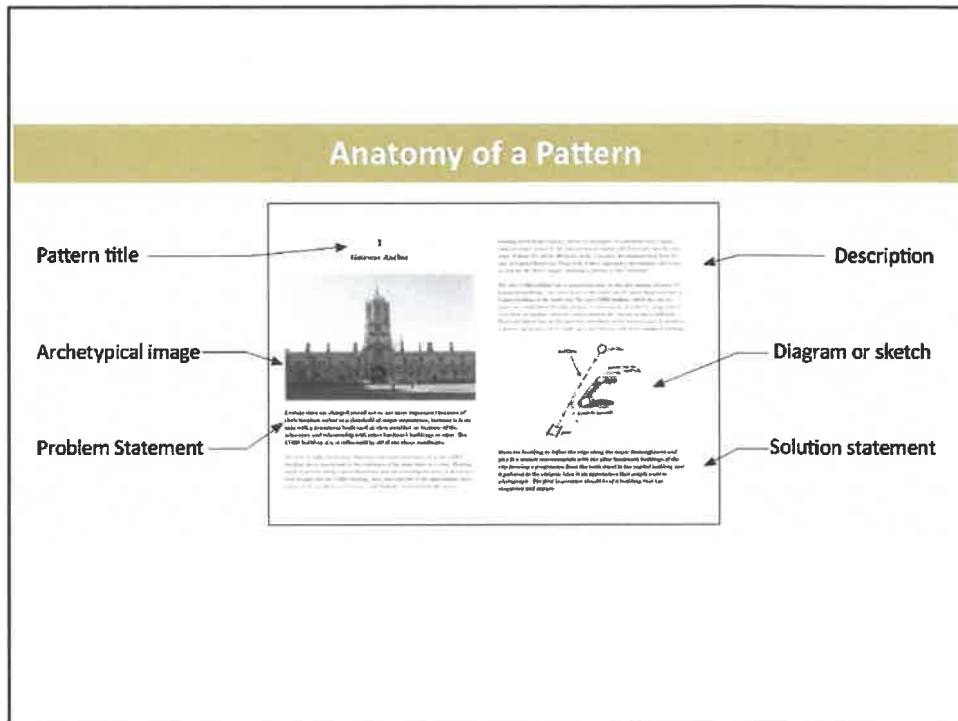
In an academic setting students are often in search of faculty and feel free to grab them whenever they see them, knocking on their doors and tracking them down after class.

It is important that students learn to respect faculty time commitments and learn to make appointments. That said, it is important that faculty have a place where they can go to advertise that they are available for consultation and to be able to stop in on a student working group and speak with them. These meetings need to be under the control of and at the discretion of the faculty member.

iii Solution statement

Therefore, provide multipurpose spaces such as break out rooms and conference rooms where faculty and students can interact and work together. Place these rooms near faculty offices but in a way that permits faculty some privacy to do their own work and have control over the situation.

Anatomy of a Pattern

Pattern title

Archetypical image

Problem Statement

Description

Diagram or sketch

Solution statement

Project Pattern Language

- Makes the qualitative goals and visions of the project actionable to the design team.

- Builds and documents consensus of the problems and solutions

- Provides a basis for evaluating the schematic design.

Trust the Process. A language
emerges from the users.
Eishen School

"Gary Black introduced the concept of Pattern Language to the Building Team at the Boise State University College of Business and Economics. I think that I can speak for our entire team in saying that this process forced us to do a deep think about what we really wanted for our building across many dimensions that up to that point we had not thought about. As we have moved into the detailed design, we continue to refer to the patterns and the 'solutions' they imply."

Patrick Shannon, Dean, College of Business and Economics, Boise State University

"The strategic mission and desired environment of the college was exquisitely captured in our patterns -- much more so than in the program document,"

Cheryl Larabee, Associate Vice President, Boise State University, College of Business

Participant comments

"One of the advantages of the pattern language approach is the initial focus on problems and how those problems are interrelated -- which was extremely beneficial to our committee because it was made up of a wide variety of stakeholders that saw the project from very different perspectives."

Jason McDonald, Associate Professor of Marketing, Boise State University

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Site Patterns

1. A Long Thin Site
   a. The Vista field site built in an abandoned airport is a long thin site essentially running along the runway. This lends itself to a spatial organization along a pedestrian street with fingers ensuring into the site at approximately right angles.
2. Sense of Arrival
3. Regional Destination
4. Promenade
5. Industrial Ribbon
6. Access to Water
7. Public Spaces
8. Variety of Parking

Spirit of the Project

9. Activities for Multi Generations
10. Activities for young professionals
11. Public Market
12. Sense of Seasonality
13. Back Alleys
14. Color and Sensory Stimulation
15. Retail Anchors
16. Night Life
17. Public Art
18. Pedestrian Realms

19. Shopping Street
20. Bike Paths and Racks
21. Public Square
22. High Places
23. Main Gateways
24. Local Bars
25. Seasonal Outdoor Skating Rink
26. Street Café

Building patterns

27. Positive Outdoor Space
28. Sequence of Outdoor Sitting Places
29. Courtyards Which Live
30. Hierarchy of Open Space
31. Living Above Retail
32. Roof Top Terraces
33. Building Complex
34. Shielded Parking
35. Pedestrian Street
36. Building Thoroughfare
37. Family of Entrances
38. Small parking lots
39. Narrow store fronts
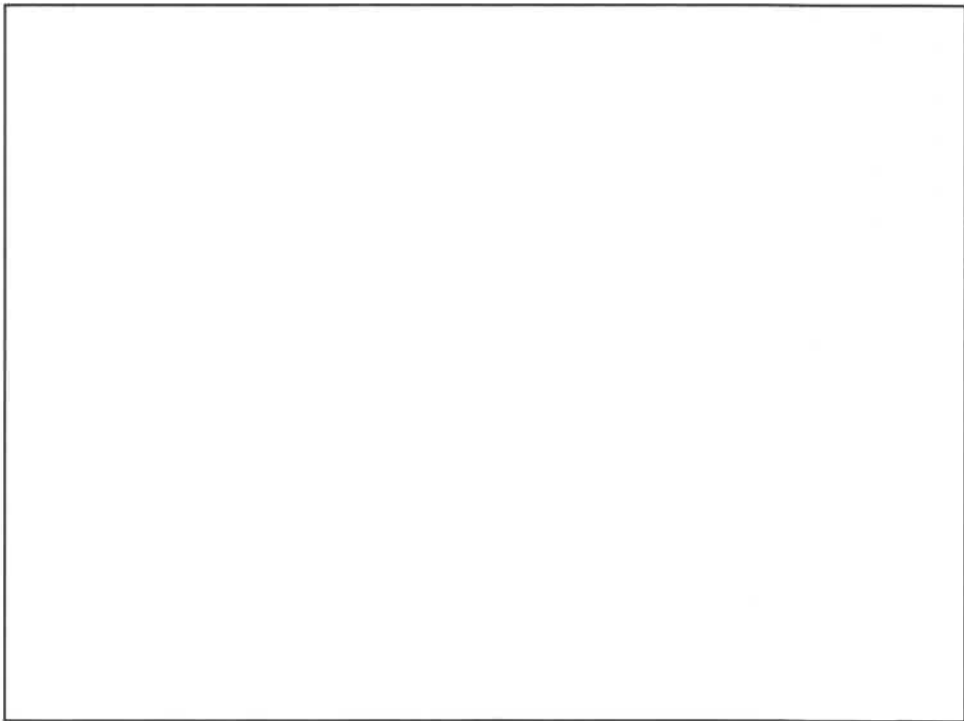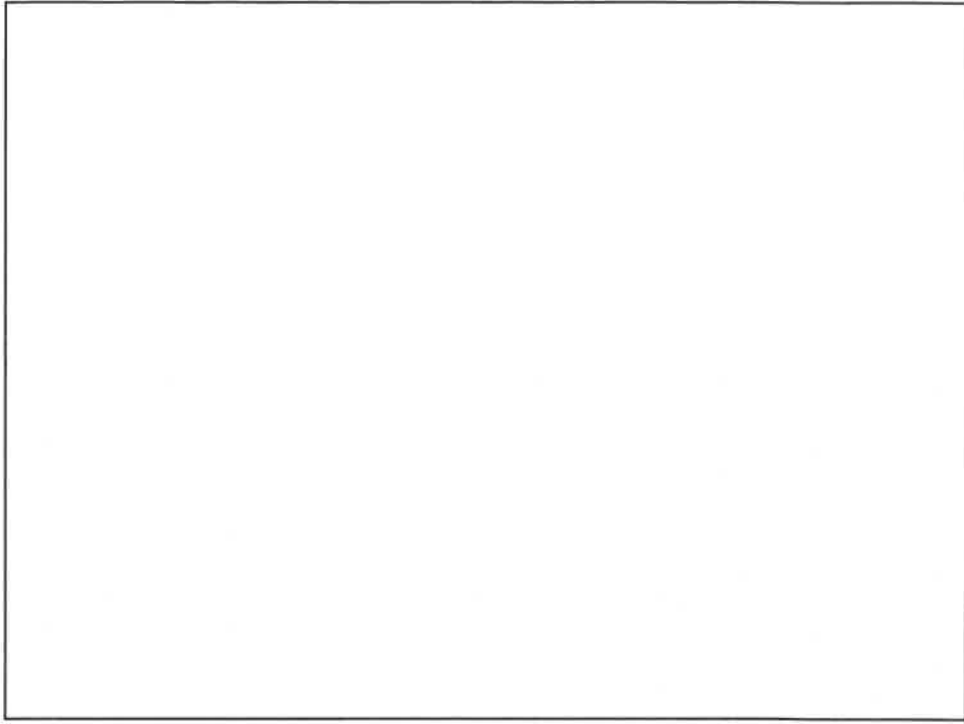
Programming

Provides a quantitative basis for the project.
Defines the problem in terms of:

- Space allocation
- Adjacencies
- Total gross area of building
- Identifies project goals and visions

Where does "A pattern Language" fit in the design process?

Programming — Project Pattern Language — Schematic Design

BSU COBE Project Pattern Language :: Student Spaces

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A Place to Call 'Home'

A home environment provides many amenities. A business school and a professional environment cannot replace a home, but it can provide amenities that make an inhabitant feel at ease and comfortable spending many long hours in the environment.

When we think of home we think of a comfortable place where we can control our environment. We can make a cup of coffee, or tea, we can lie on a sofa and read, we can adjust the light levels to suit our mood, and we can sit by a window and work or look outside to a view. In a commuter school it is necessary to provide some home-like amenities so that students will want to stay for long hours and in a business school it is desirable to have the students present, working individually or in groups and socializing with their colleagues. Not all home amenities can be provided, and in fact need to be balanced with the professionalism of a business school. Some amenities can exceed those at home.

BSU COBE Project Pattern Language :: Student Spaces

When we had completed the Eishin School several years ago, one of the "problems" expressed by the director, Mr. Hisai, was that they couldn't get the students to leave. The last bus left at midnight for a 45 minute ride into Tokyo, and many students would stay at the school until the last bus. Some would even miss this bus and stay at the school all night. The reason for this, according to Mr. Hisai, was that "the school provided more amenities than the student's home."

Provide some of the essential home amenities and provide some amenities that one cannot get at home. Give students some control over their environment by allowing them to move chairs and tables, adjust their light and give them access to free hot water so they can make a cup of tea or instant coffee. Give them other amenities which they possibly cannot get at home. These should include: a variety of working/study environments including those for group work, for private work, for working in public and for comfortable outdoor study. Provide a place by the fire or near indoor water, provide a variety of comfortable furniture which will include that for relaxing in public.

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Working Café

Everybody loves to sit in a café with a cup of coffee and have a discussion or work on a difficult problem. A working café allows people to be focused on work and yet in touch with life. A change of place and pace can stimulate thinking about a problem from a fresh perspective.

The COBE program includes space for an info commons and food court seating area. The quality of these public spaces can be enhanced by study of successful street cafes. In *A Pattern Language (APL)* the authors observe three ingredients in the making of a successful café. First, there is an established local clientele, anchored in its' community. Second, there is an outdoor terrace open to a 'street' or high traffic area and there are several other spaces; "with games, fire, soft chairs, newspapers...This allows a variety of people to start using it, according to slightly different social styles." Lastly the café serves simple food and drink which is adaptive to the times of day to encourage use in the morning for coffee and a croissant, lunch, early evening snack etc.

Include in the Info Commons a working café with a variety of seating areas and styles and include an outdoor terrace, near a busy path, where people can sit with a coffee or a drink and work while watching the world go by. Provide resource nooks nearby. The trading room and financial classrooms need to be nearby or have clear visual contact with these spaces.

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Precedent and Progeny

To create a viable connection with the campus, the new building is at once a progeny of the best buildings that came before it and a precedent for those that will follow.

The essential question is this. Should a new campus building conform to the materials and forms of the historical buildings, as is the case at the University of Colorado, Boulder? Should a new building design be a free-for-all and anything goes, as is the case at the University of California, Berkeley? Or should there be some kind of middle ground between these two extremes? BSU has chosen the latter with the caveat that the new COBE building needs to be a clear offspring of the earlier brick and sandstone university gothic buildings, respecting the history of the campus, while simultaneously responding to the 21st century era that it will be constructed in. Balancing these two criteria is tricky and difficult, as one committee member noted that "nobody identifies the newer buildings with the heart of Boise". Part of the job is to distill the essential features of the historical works to incorporate a "sense of history", as one member of the New Building Committee put it. Yet the building must be authentic and reflect the forces working to generate it, to avoid feeling forced, fake, or "old". To address this we propose the following criteria expressed as *do* and *don't do*.

1. Mass the building as a complex with nested levels of scales, NOT as a giant monolith.

2. Make window openings with a vertical axis NOT square or with a horizontal axis, nor vertical slits. Organize the windows in a generally vertical arrangement.

3. Modern materials such as exposed concrete are encouraged for exterior facades but detail it (with board forming for example), modulate it (so that it doesn't read as a flat plane) tint it with a warm color like that of the local limestone, and finish it so that it feels "soft." Do NOT use large expanses of smooth, flat, machine looking standard bluish grey concrete.

4. Use brick and stone for fields and for detail where it makes sense. Use the contrast of brick and sandstone to make the building details more vivid. Build on published campus design standards. Do NOT try to make a veneer of brick look like a load bearing brick wall.

5. Set windows and doors back from the exterior wall plane and provide detail around them so that they don't read like cut-out holes with glass on the surface.

6. Organize some of the public spaces with double floor heights and provide a large ratio of glazing to floor area to bring in larger amounts of natural light to avoid any notion that the building "feels old."

7. Above all, recognize that the building's useful life is to be measured in centuries – it will still be here long after those of us who worked on it are gone.

Identify core principles that are going to be followed as a progeny. Break with the more superficial principles that are going to be violated to set the precedent.

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Campus Connection

A building's influence does not stop at the site boundary. In some cases the experience of the building can even begin before it comes into view. When one steps on the path to begin the journey to or from the building, cues are given and one's expectations are established.

The New COBE building is located on a site at the far western edge of the campus. One cannot see the building from the center of campus. Part of the approach is adjacent to a garage, adjacent to a parking lot and crosses two intersections.
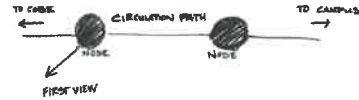
One of the defining characteristics of a profound experience of place unfolds during the process of arrival. The journey provides transition time and space to move mentally from the everyday to the extraordinary. It provides subtle cues to the character of the destination. In the best examples, the process of arrival encourages awareness and heightens expectations with smaller articulated nodes on the path of travel. Building Committee members mentioned the idea of these spaces becoming stations in a 'Giants Walk' or an 'Entrepreneurial Path' like the Oregon Trail or other interpretive trails highlighting giants of the Boise business community.

Upon "arriving" at the great Tofukuji temple in Japan a visitor first passes through a small gate and then traverses a bridge which passes over a body of water with views to distant gardens. This zone acts as a kind of forecourt to the main gate, a magnificent five story structure whose only purpose is to mark the main entry point. Upon passing through the main gate the arrival process continues with an extensive arcade that spans the Sengyokukan Ravine. The arcade is elevated so that for much of its length a pedestrian is walking in the tops of the trees. Visitors flock to the temple in the fall just to walk through the deep red foliage. By the time a visitor has crossed the ravine and entered the first garden they have been made aware they have entered a rare and precious environment – a place fashioned by human hands – quite unlike anything else previously experienced.

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Cluster of Tasting Rooms

To go wine tasting is at its heart to have a small taste of what is available from a winery and then change locations and environment.

At any one winery, the consumer samples the different wine varietals and talks with the wine maker or an educated server about the wine. After about a half hour they are ready to move locations and try another wine at another winery. It is through this process that a consumer educates themselves and begins to develop their ability to taste the subtleties of wine. Because wineries tend to be scattered throughout the wine country it takes significant time to drive from location to location and wine tasting can become a whole day event, which happens infrequently, usually when relatives come to visit or some other special occasion. An alternative to this model suggests a *cluster* of wine tasting rooms located within walking distance from each other. The ambiance would be unique at each tasting room, the servers/winemakers would be different and of course the wine would be

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different. However, it would be possible to taste more varieties within a shorter time period. It would also create a kind of synergy between the various wineries, the street, and the wine tasters in which a group moves from winery to winery. We have had a similar experience in Barcelona Spain where a traditional evening out consists of moving from place to place sampling each establishments specialty drink, wine or tapas. Inevitably you end up seeing the same groups in different places and this stimulates conversation to compare the experiences and makes one feel part of a community.

In our experience and research, we have identified three types of tasting rooms which would be appropriate for the Willows winery village.
  (i) City "satellite" versions for wineries located outside the city limits, giving them an opportunity to offer their wine in town. A tasting room from an established, recognized winery, with its own customer base.
  (ii) The tasting rooms associated with an on-site wine production facility. The incubators or the custom crush facility should have tasting rooms which have the traditional smells and sights of a working winery, resulting in a very different wine tasting experience.
  (iii) A third model is a separate business which takes on the marketing, sales and logistics of a number of small local producers. An example is Vintner's Collective in Napa. "Vintner's Collective is... a multi-winery tasting room that is home to twenty of the most experienced and talented winemakers in the Valley. The man behind Vintner's Collective is Garret Murphy, who dreamed of creating a place where wine lovers could taste the wines of some of the best winemakers in Napa Valley, and where smaller wineries without their own tasting room could showcase their wines and introduce them to consumers"

Therefore, the Willows should provide a series of individual tasting rooms that are separated by some distance so you have to walk to each space and the environment will change in each location. The tasting rooms should represent the wine being produced on site at the Willows in addition to high lighting small producers and congregating rural wineries. The spectrum will create variety and depth to the experience.

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History and Education

By highlighting the history of an area we show respect for those who came before us, recognize the current group of users by educating them about the past and underscore the specialness of the place.

The Chrysler airflow built in the 1930's does not appear unusual or significant. However, it was destined to become the progeny of all subsequent cars manufactured in America and elsewhere.

Prior to the airflow, cars were noisy and bumpy at freeway speeds, and dangerously unstable, even though the roadways were relatively smooth. The lead design engineer of the airflow, Carl Breer set out to change all that. He began by taking thousands of feet of film footage showing different people walking. From the film, he plotted the forward and up and down movement of their heads and drew a normalized curve that has been termed "the human gait." He went on to design the cars' suspension to match this gait at free-way speeds. One of the reasons children sleep so easily in a car ride is because of this suspension. Through a series of wind

tunnel tests the car's body was shaped to reduce drag and noise making the car's interior quiet even though the wind was moving past the vehicle at 80 mph.

With this history, one begins to understand the car differently and appreciates it in new ways. It no longer appears as just another car from the 30's. Such is the influence of history and education. It has the power to transform our understanding and appreciation of a place, an event, or an object.

To increase awareness and appreciation of the Willows identify important historical information that should be highlighted, then use various methods (placards, art work ...) to describe or be a metaphor for aspects of the history of the place. Incorporate names, such as "The Willows" in reference to a trailer park that was dismantled and in recognition to the people that gave up their homes in order to provide the land. Use signs to designate plant life and tell a story about the animal life that one may see if they are quiet and observant.

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Café in the Garden

People love to sit in a light filled café with easy access to the outdoors and sip a cup of coffee. The garden café provides a unique setting a place where people can sit lazily, legitimately, be on view, watch the snow falling outside or people coming and going.

We know that people enjoy mixing in public, in parks, squares, along promenades and avenues, in street cafes. The preconditions seem to be: the setting gives you the right to be there, by custom; there are a few things to do that are part of the scene, almost ritual: reading the newspaper, strolling, nursing a coffee or a beer; and people feel safe enough to relax, nod at each other, perhaps even meet. A good café

with an outdoor terrace meets these conditions. But it has in addition, special qualities of its own: a person may sit there for hours -- in public! Strolling, a person must keep up a pace; loitering is only for a few minutes. You can sit still in a private, peaceful experience. And sitting at home on one's porch is again different: it is far more protected; and there is not the mix of people coming and going. But on the café terrace, you can sit still, relax, and be very public.

It is this experience that the café supports. In European cities and towns, there is a street café in every and the existence of such places provides social glue for the community. They become like clubs – people tend to return to their favorite, the faces become familiar. It helps enormously to increase the identity of a building complex. It is one of the few settings where a newcomer to the community can start learning the ropes and meeting the people who have been there many years.

The ingredients of a successful café seem to be:

1. There is an established local clientele. That is, by name, location, and staff, the café is very much anchored in the place in which it is situated.
2. In addition to the terrace with a view toward the street or open to a courtyard, the café contains several other spaces: with games, fire, soft chairs, newspapers... This allows a variety of people to start using it, according to slightly different social styles.
3. The café serves simple food and drinks – some alcoholic drinks, but it is not a bar. It is a place where you are as likely to go in the morning, to start the day, as in the evening, for a nightcap.

When these conditions are present and the café takes hold, it offers something unique to the lives of the people who use it: it offers a setting for private and intimate discussions, as well as more open gatherings, a place for chance meetings... Therefore:

Plan a cafe in the complex. Make it an intimate place, but open to a busy path or a place active with people, where people can sit with coffee or a drink and watch the world go by. Provide easy vehicle access. Give it east facing windows to catch the morning sun and open it to a garden or courtyard to bring the outdoors in.

5

Welcome Walk

When the main access to a building is from a parking lot, it is important to provide spatial transitions allowing visitors to ease through a gradient from the exterior environment to the interior, making the building feel more welcoming and hospitable.

The experience of entering a building influences the way you feel inside the building. If the transition is too abrupt there is no feeling of arrival and the inside of the building fails to be an inner sanctum.

The following argument may help to explain it. While people are on the street, they adopt a style of street behavior. When they come into a building, they naturally want to get rid of this street behavior and settle down into the more intimate spirit

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appropriate to the indoors. But it seems likely that they cannot do this unless there is a transition from one to the other which helps them lose the street behavior. The transition must in effect destroy the momentum of the tension and distance which are appropriate to street behavior before people can relax and feel comfortable inside the building.

One of the most beautiful solutions to this problem is the "hello walk" at the University of Idaho, which not only provides transition space, but has become a university tradition. People seek it out, put on their friendliest face and say hi to the people they pass.

What matters most is that the transition exists, as an actual physical place, between the outside and the inside, and that the view, and sounds, and light, and surface which you walk on change as you pass through this place. It is the physical changes and above the change of view which creates the psychological transition in your mind.

Four examples of entrance transitions.

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Casual Elegance

As the public face of the university the alumni center must convey quality without alienating visitors.

There are actually two problems that have to be addressed. On the one hand the Alumni and friends building wants to be constructed of materials that speak of quality, but on the other hand it can't be made of materials that give a sense of opulence or fiscal wastefulness which could turn off some of the visitors.

Most modern buildings are constructed with an easy to assemble and relatively inexpensive structure which is then covered over with veneers to provide the surfaces, the detailing and the finishes. If the building is budget minded cheaper veneers are specified and if it strives to be more "elegant" more expensive veneers are specified. In both cases the structural costs are about the same and the "quality"

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is also about the same. Neither speaks of casual elegance, because both are ultimately fakes -- rhinestones in gold plated iron.

To get at the heart of casual elegance the building can't be a fake. It has to be authentic. That means that it is made from the materials that you experience as the finish. If the ceiling of the great hall is made from wood trusses or beams then those members would form the *structure*. Heavy timbers finished, honed and detailed to be exposed and become part of the elegance and character of the architecture will not be pretty in the typical sense. They will crack and check but they will be the real deal – authentic – and that expression of their inner nature is what constitutes casual elegance. The checking and cracking of heavy timbers is inseparable from their beauty. In areas where a higher level of finish is sought such as the Presidential Suite, the *same concept* applies. Instead of applying an expensive veneer over a cheap structure, more expensive base materials should be used. Examples are stone instead of concrete, vertical grain timbers, oil rubbed bronze, leather, etc.

Therefore, construct the building from authentic materials; brick, stone, concrete, wood or steel. Expose the structure and finish it by staining, planning, painting, honing, polishing but make sure that the nature of the material shines through. Select materials appropriate for the particular function and select materials that are durable. Offset the use of expensive materials with less expensive ones and when expensive materials are used use them in limited quantities as highlights. Above all eschew the current construction practices of building an easy to erect structure which is then hidden and clad in a variety of veneers.