The dialogue between practice and place is supported by how a practice chooses to study a place. In analyzing aspects of setting, designers choose representations that argue for particular qualities in a place.

These representations enable practice by informing designers about certain aspects of a place, but they constrain practice through what they leave unseen.

An important attribute of any place is its quality as a continuous structure of spaces and forms that are experienced, read and inhabited. This structure is commonly referred to as a fabric. Representations that argue for the qualities of places as fabrics include built-unbuilt, hierarchic and experiential approaches. This article illustrates and assesses how these three approaches inform design decisions, using detached houses in San Francisco as case study. It then argues for the significance of experiential approaches, particularly for suburban design. Although these approaches can employ a wide range of depictions (plans, sections, isometrics, models, etc), this article uses plan views to discuss the differences and significance of representations for dwelling.

Built-Unbuilt Representation
The most commonly invoked representation of a fabric is that of built – unbuilt space, also referred to as "figure – ground." Typically built space is rendered as the "figure" and unbuilt space is left as the background, which is then read as "ground."

In figure 1, part of San Francisco's fabric is represented as a built – unbuilt plan. From this plan, patterns and shapes emerge that are useful for both description and design. In the textures, both the overall structure of the place and the particulars can be read — boundaries and districts as well as the continuity and singularity of buildings and open spaces. Built – unbuilt representation characterizes the reciprocity between built and unbuilt space as shaped.
While the strength of the representation is in the clarity of the information, certain spatial relations are eliminated. Edge zones and connections between inside and outside are not described. In the San Francisco example, the built-unbuilt plan eliminates important information about the raised plinth and transition elements, such as stairs and entry porches, that accommodate the elevation change. The footprint of each dwelling reveals a highly articulated mass, but strategies for admitting light and air to interior spaces are not revealed.

In design, the outline of spaces is configured until appropriate shapes are found for the built and the unbuilt. Too often, however, the edge between the outlined areas is translated into a wall or facade, and the volume of the built area subdivided for activities.

Hierarchic Representation

An essential quality of any environment is that of being inside — in a room, in a building, in the street, in the block, in the city. One way of describing this quality is by associating each scale of the environment with a different method of representation. For instance, the city scale is drawn as a street plan; the district or block is rendered another way, often as a built-unbuilt plan; and buildings are described with plans showing interior partitions. This has the effect of nesting, or telescoping, in which one zooms in and out for different scales of information.

Hierarchic approaches best represent the qualities of dwelling when exemplifying, that is, when the depiction of one place serves as an example for a larger area. This is useful in districts comprised of a distinct building typology such as San Francisco. In *Built for Change*, Anne Vernez Moudon describes three scales of the fabric: the city scale is represented by the streets and other transportation networks, the district scale using built-unbuilt plans, and the house scale through a description of house types and their physical and positional variations.

The argument in the representation needs to be reconsidered when designing. Hierarchic representation argues for reciprocal relations between levels, but does not inherently organize design decisions within each level. The spatial relation of a room to a building, or a building to the street, is defined, but the relation of one building to another can be overlooked.

For example, a designer would use a built-unbuilt plan to consider a building's relation to the context and design the building itself as another drawing. The interaction of the building's activities within the setting is held within the intelligence of the designer, or ignored, even if only momentarily. The separation between building and setting when designing tends to reinforce discrete and independent relationships between the buildings of a place.

Experiential Representation

A third approach describes the experience of being within a fabric, rendering the fabric as one would dwell and move inside it. Experiential representation differs from hierarchic representation in that the continuity of the experience is described by representing the fabric at one scale (figure 3). This kind of description of places is referred to as "diase" by Haberlen, remy by Cannigia and "dwelling group" by Cannino.

In experiential representation, both the general character as well as particular conditions can be discerned. In particular, patterns can be read in relation to daily inhabitation from which formal typologies, themes and systems emerge.

While relationships between buildings and their settings are immediately seen in experiential representations, relationships to larger scales of the environment are limited by the base drawing size. As such, experiential representation is complementary to hierarchic representation — one emphasizes relations within a level, the other between levels.
Informing Dwelling

In the study of cities as fabrics, the suburbs have been overlooked. Perhaps this is because the act of building a community from an aggregation of individual houses appears to be such a simple problem. Yet, it should be argued that good suburban dwelling is no less complex in its demands for weaving collective and individual ways of living; it could even be considered as more complex if the outdoor landscape were well integrated.

Suburban design and development has been dominated by hierarchic approaches to representation. The design of the community is prepared as a master plan that structures a shared infrastructure, lays out transportation networks, and parcels land into smaller lots for individual ownership. Houses are placed lot by lot in relationship to a street. In some new developments, the future homeowner selects a lot as well as a house from a group of model homes provided by a developer or from an array of catalogues. In more speculative situations, an array of prefabricated model homes are built for a target market. Both approaches are hierarchic with the community level represented by street plans and plot plans; the neighborhood represented by built—unbuilt plans, including footprints, land-use or roof plans; and buildings by model home plans.

While house-to-street patterns are established, house-to-house relations are ambiguous. Homes tend to be designed without reference to each other. In fact,
model homes have come to be defined as houses without a particular context. Spatial relations between homes are intentionally eliminated or ignored. When model homes are designed, activities are inwardly focused and self-referential to compensate for the unknown conditions of a future site.

When houses are built on a site, they are placed as nurses, spaced to avoid interfering with each other's activities. The resulting space between buildings is unusable and wasted; transition spaces and collective patterns of living are rare, resulting in a loss of shared ways of dwelling in a place. Suburban dwelling becomes a commodity whose importance as an investment dominates its contribution or connection to a place.

Much of the criticism of suburbs is really directed at this characteristic of the suburban fabric. There are many wonderful examples of single detached building fabrics whose experiential (house-to-house) relations as well as hierarchical (house-to-street) relations are articulated; portions of the historic fabric of Charleston, S.C., Horiost West in Santa Monica by Irving Gill, and San Francisco, to name just a few.

These examples support an argument that it is not single detached living that is the inherent problem, but its volumetric conception and development. If hierarchical representation unidimensionally supports a volumetric structure, how can adding experiential representation aid in addressing patterns of waste, isolation and commodification?

Using experiential representations in suburban design addresses the potential discontinuity between discrete buildings. By taking conventional design attributes and applying them across a fabric, it is possible to use representation to explore the contribution of the part to the whole. In this way, the experiential complexity of a fabric can be layered, classifying design systemically rather than house-by-house.

Again, using San Francisco as an example, the dimensioning (figure 3) and the assembling (figure 4) of this fabric illustrates the continuity of the setting. The volume of the house controls neither the structure of the dimensions nor the assemblage. Instead, the dimensions and the construction of the environment move from inside to out, from house to house.

Through an overlay study of numerous single detached dwelling fabrics, I have concluded that the suburban settings with distinct breaks in the fabric at the outer boundary of the house are those that suffer most from waste of interstitial space and isolation. These correspond to the boundaries in built—unbuilt representation and in the levels of hierarchical representation. By using experiential representation for the design of detached dwellings, these problems can be more readily seen and are more likely to be addressed. Suburban dwelling design requires a spatial structuring in which some activities happen to be contained within detached houses.

For practices to contribute to the making of place, adding experiential representations further informs a dialogue about the qualities of dwelling in a place. It allows designers to see beyond the hierarchy of places to the ways in which they are structured as collective and individual environments.

Notes
3. Current housing production allocates much effort to defining the program for the design of model homes. Through the identification of markable ways of living, model homes are designed to fulfill the programmatic requirements of a likely lifestyle. Differences in ways of living are seen as variations and are accommodated by adding "options." When a household's way of living changes, residents relocate to another house that better suits the new way of living — moving from a starter home to a family home to a retirement home. Since each house sits independent and isolated from its setting, ways of living in a place are more readily disposed.
5. In "House Form and Choice," the fabrics of San Francisco and Clayton, a contemporary California suburb, are compared using experiential overlays.