CHAPTER 7

Principles of Visual Composition

Our analysis of the aesthetic characteristics of plants has given us a basic visual vocabulary. When this is put to work in a planting design it will convey a visual message of one kind or another. So, composition could be regarded as the visual grammar of planting design.

Five Principles of Visual Composition

Painting, photography, sculpture and other visual art forms can all be analysed by composition and some principles are common to them all. In planting, the most important are the principles of harmony and contrast, balance, emphasis, sequence and scale. An understanding of these will allow us to analyse the visual grammar of any plant association and help us with both design method and creative inspiration.

Harmony and Contrast

Harmony is a quality of relatedness. It is found between similar plant forms, similar textures, similar characters of line and closely related colours. The closer the relationship between the aesthetic qualities of associated plants, the greater the harmony. As it becomes increasingly close it approaches identity, but, in identity, harmony would be lost because it depends for its aesthetic impact on the simultaneous perception of both similarities and differences. The pleasure of harmony rests not only in the similarities between things but in the balance between identification and differentiation. The experience of identity and of difference is of primal importance in the human psyche. We understand everything we perceive in terms of similarity or difference to the familiar – to make sense of the world we pick out a pattern of similarities as different from its background, or conversely, a pattern of differences arising from the undifferentiated. So harmony and contrast go together, they are not mere polarities and neither can exist without the other.

Contrast is found between different plant forms, different qualities and directions of line, texture and colour. Contrast does not necessarily imply conflict – it may be an attractive, happy contrast coming from a complementary, mutually supportive relationship between widely different characteristics. Conflict is only perceived when the contrast creates strain, when it is not contained within order and aesthetic purpose. Indeed, without a binding, unifying aesthetic purpose contrast is likely to create at least confusion.

CONTRAST IN FORM,
HARMONY IN TEXTURE.

CONTRAST IN TEXTURE,
HARMONY IN FORM.

CONTRAST IN LINE,
HARMONY IN TEXTURE.

Figure 7.1 Contrast and harmony.

In planting composition, we aim to achieve the right balance of harmony and contrast. Contrast between two species will be more visible and have a greater effect if there is also a measure of harmony. This arrangement works well when a contrast in one characteristic such as leaf texture is combined with harmony in another, such as leaf colour. Similarly, harmony in flower colour appears more satisfying if it is used to link varied and contrasting form and texture.

Too much contrast is illegible, because there are too few related elements and we cannot perceive a pattern in the whole. A combination of plants with strong

Plate 108 Visual harmony can be found among natural forms as diverse as trees and clouds (Avon, UK).

Plate 110 The close relationship of colours and textures shown by the ferns in this forest at Te Urewera, New Zealand, emphasize the contrasting form of the large-leaved tree ferns.

Plate 112 On the Victorian Italinate terrace at Tatton Park, Cheshire, UK, the strictly symmetrical layout of grass and floral bedding denotes absolute control of form and articulates the central axis of symmetry.

Plate 109 Harmony of leaf form and colour supports the strong contrast in texture between *Bergenia* and *Saxifraga* (Hidcote Manor, Gloucestershire, UK).

Plate 111 The visual qualities of plants can be delightful when related by harmony and contrast to hard landscape materials (see colour section). In this example the rectilinear geometry of the hedge and brick edgings contrast with organic forms of the plants while the texture and visual 'softness' of the pebble groundcover provides a link between 'hard' and 'soft' materials (Hounslow Civic Centre, London).

contrast in all its aesthetic characteristics would appear chaotic and we would find it difficult to appreciate the qualities of individual plants and the composition as a whole. Indeed, the restlessness of such a composition would cause constant distraction. This is why restraint is one of the qualities in enduring and refreshing design.

Balance

Balance comes from the relationship between vegetation masses. It depends on their magnitude, their position and their visual energy.

The possibility of visual balance implies two things, that the parts of a composition have visual force or energy, and that there is a fulcrum or axis about which that force acts. This fulcrum or axis is brought into being, and given importance, by the way in which plant masses and other elements are placed around it. Because of its vital role of attracting and ordering surrounding elements, the axis may become the focus of the space or composition.

The simplest expression of balance is bilateral symmetry where the arrangement of planting on one side of an axis is repeated in its mirror image on the opposite side. There are often one or two axes of symmetry within a composition, but there can be any number (a circle possesses an infinite number of axes of symmetry).

Symmetry has long been associated with strict formality in design. Its abstract, ordered patterns are an expression of rational thought and the control of form is a demonstration of the power of human technology to shape the materials of the landscape. Symmetrical form is remarkable because it contrasts with the natural, organic forms that develop when no conscious plan is imposed. Yet, pure symmetry can be seen to emerge from natural forms. It is an intellectual refinement of the underlying patterns of the microscopic world and of the elements of the more relaxed symmetry found in living things.

Balance can also be achieved without symmetry. In this case, visual stability arises not from replication but by the balancing of the energy of different qualities about the axis or fulcrum. Prominent form may balance coarse texture and assertive line may balance intense colour. In addition, a small quantity of one prominent characteristic may balance a greater quantity of the same characteristic that is less strongly expressed. For example, a single plant with striking, sword-like leaves would balance a group of three or five smaller plants with ascending linear leaves of similar shape but finer texture. The energy of balanced elements may be the potential energy that results from the positioning of the plant masses. This potential energy is a product of both the mass itself and of its relative height or prominence and allows a smaller plant mass in a dominant location to balance a larger mass in a subordinate position.

When planting is balanced about an axis or centre, either by symmetry or by equality of energy, a state of visual stability is achieved. It may include dynamic elements and exciting contrasts, but its parts are held together in a unified whole. These mass or energy equalities and stable, non-symmetrical arrangements are sometimes said to have occult balance.

Emphasis and Accent

Important things and places can be emphasized by associating them with planting of high visual energy. This is often called accent planting and it can be used to draw attention to elements like entrances, steps, seating or water. Sometimes the planting itself provides the focus of a space and accent planting

SYMMETRICAL BALANCE

ASYMMETRIC BALANCE

PROMINENT FORM BALANCES COARSE TEXTURE

SINGLE STRONG FORM BALANCES SEVERAL WEAKER FORMS.

PROMINENT POSITION - BALANCES - GREATER MASS

Figure 7.2 Balances.

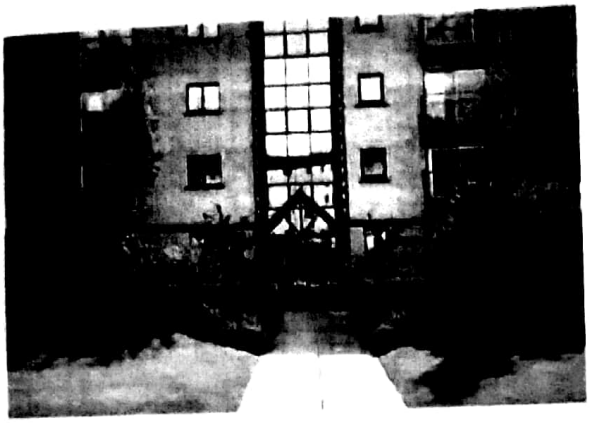


Plate 113 Symmetry is observed in the ground modelling and the repetition of trees and shrubs either side of the path. By emphasizing the axis of symmetry generated by the building the planting helps focus on the entrance to these apartments at Kingston Dock, Glasgow.

Plate 114 The drama of a single *Agave* brings a point of emphasis to the remarkable stonework of viaduct and steps at Parc Guel, Barcelona, Spain.

Plate 115 The steady rhythm of the yew bastions reflects the buttressing of the church at Ashridge, Hertfordshire, UK.

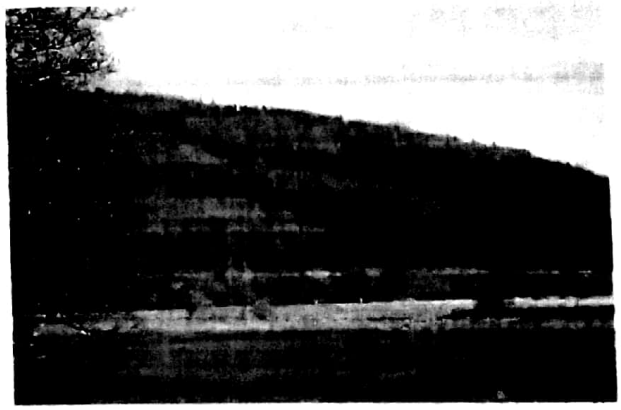


Plate 116 The forestry planting on the distant hillside includes drifts of different species that are in scale with the patterns of the vegetation and landform in the surrounding landscape (Snowdonia, Wales).

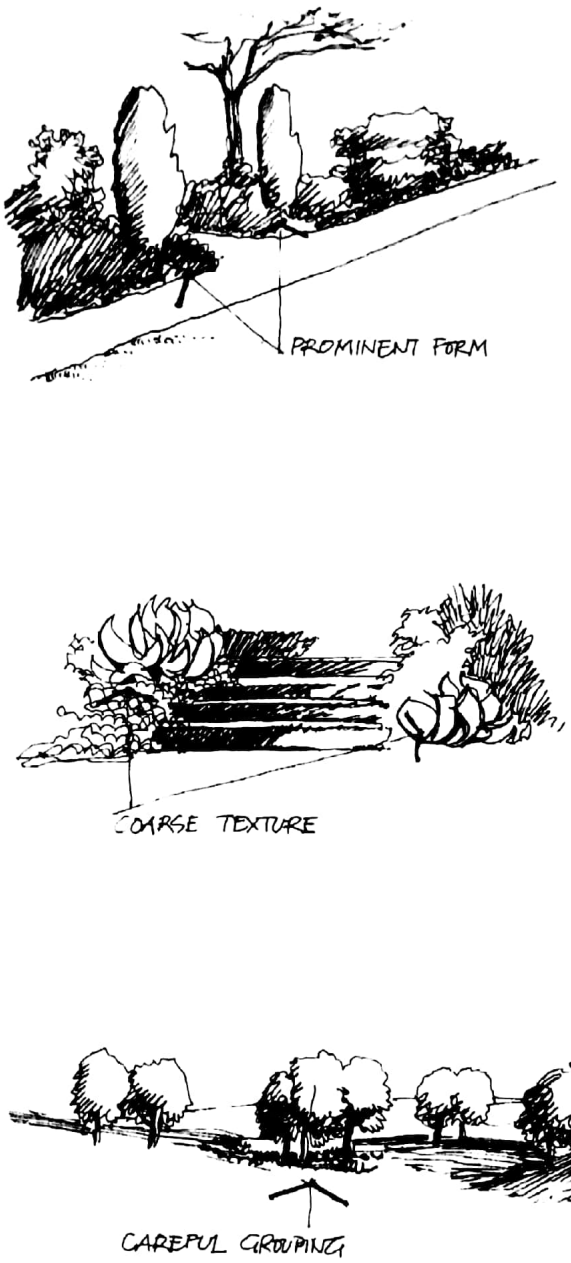


Figure 7.3 Emphasis can be given by prominent form, coarse texture or careful grouping.

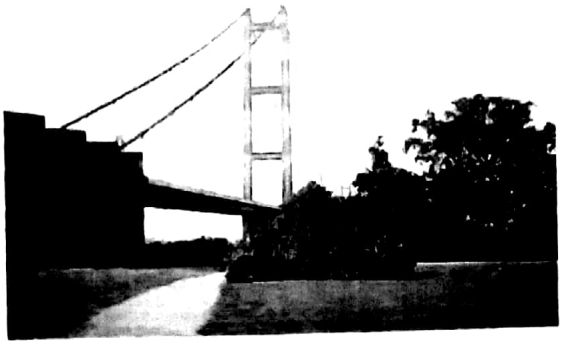


Plate 117 The largest structures in the landscape, such as the Humber Bridge, near Hull, UK, require plantations and tree clumps of generous size to maintain good generic scale relationships.

is essential for the creation of a visual rhythm and the division of the full extent into comprehensible sections.

Emphasis and accent planting can be effective by virtue of its intrinsic striking qualities or by careful arrangement and grouping which brings the eye to rest at the chosen location. It is closely related to contrast because any strong contrast or sudden change of appearance will attract attention. So a single plant of form contrasting with its setting will create and accent.

Sequence

Sequence is the way that the appearance of a planting composition changes or unfolds before the observer. Sequence may be visible from one observation point, as in a build-up of colours, textures or forms within a single vista, or it may be experienced as a progression of scenes that unfold as we move through the landscape.

Sequence is essential to the dynamic qualities of composition. It is an expression of change. It relates the parts to the whole, not only within a static picture, but also over time. Sequence in visual composition can be likened to rhythm in music or meter in verse; it provides a temporal structure to the composition. Just as with musical rhythms or poetic meter, planting sequence may be ordered simply and with regular accent or it may be more complex, including overlapping patterns of repetition. It may be deliberately chaotic or arbitrary, giving expression to forces of disorder.

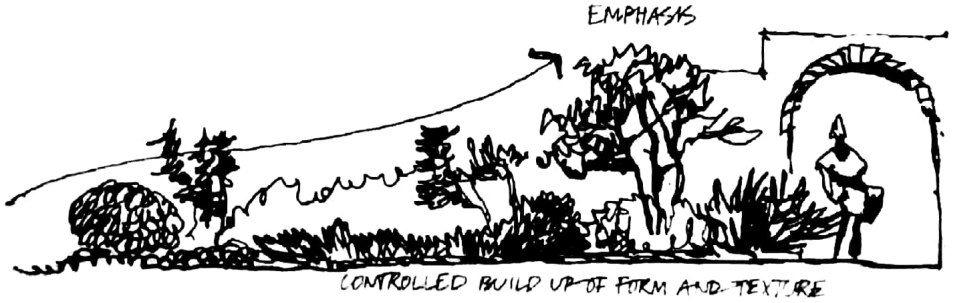


Figure 7.4 Sequence.

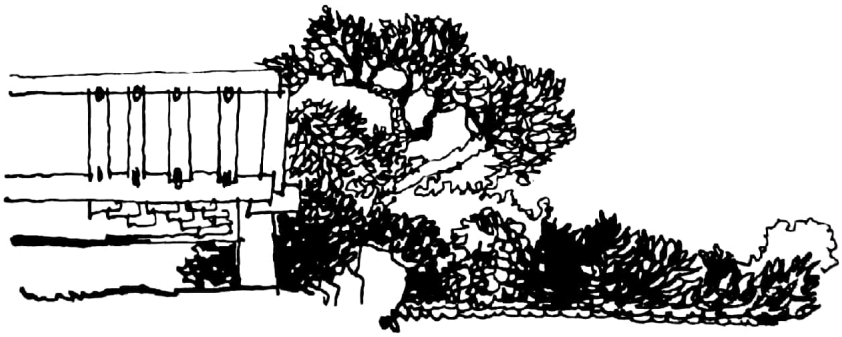
Scale

Scale can be understood most simply as relative size. Ching (1996) defines scale as either 'generic', that is, '... relative to other forms in its context' or 'human', that is, '... relative to the dimensions and proportions of the human body'. In landscape design generic scale refers to the size relationships between the various parts of a whole space and within a plant association. The relative sizes of single plants and of plant groupings determine the generic scale of the composition. These are the aspects of scale that tend to be seen as separate from the observer. Human scale, on the other hand, refers to the relationship between the size of composition and the observer. Because we are designing for people we must take account of the human-scale relationships of landscape and allow for the effects of different patterns of engagement.

The amount of detail that we can perceive depends on the viewing distance. As distance increases so we see less detail but a greater area and although the

AT THE SCALE OF A BUILDING COMPLEX THE MASSING OF TREES DOMINATES

AT THE SCALE OF A SINGLE BUILDING INDIVIDUAL TREES AND THE MASSING OF SHRUBS DOMINATE



AT AN INTIMATE HUMAN SCALE INDIVIDUAL SHRUBS AND SMALL GROUPS OF HERBACEOUS PLANTS DOMINATE

Figure 7.5 Perception of plant groupings depends on viewing distance.

content of our view changes the amount of information that we can assimilate stays about the same. Close to, the finer characteristics of foliage and flowers and the textures and forms of smaller plants hold our attention. At a distance of about 25 metres these details will be barely visible but the form of larger individual plants and groupings of colours and textures will dominate the composition. If we move back to 100 metres, only the trees will be appreciated as individuals, and smaller plants as part of the combined mass of woodland, shrubbery or meadow. The different scales inherent in a plant association cannot all be perceived at once. Our attention tends to focus on one scale of patterns at a time and so, in design, we must understand the different scales that predominate from different viewing positions or regions.

Viewing scale is reliant not only on distance but also on movement. The rate of travel through a landscape determines how much is visible within a given time and the amount of information that can be absorbed from an area. Because of this, the planting scale should reflect the observer's speed of travel. Planting to be seen repeatedly from a fixed vantage point and studied at leisure will do justice to a smaller scale and greater diversity than planting that will receive only brief glances from passing vehicles.

Unfortunately, it is common to see planting design that is either too complex or too simple for its setting. In the first situation, the designer may be well motivated but is misguided in trying to provide too much richness and diversity within a restricted area. He or she might be trying to compensate for poverty of planting elsewhere, or to relieve the dullness of the surroundings, but diversity is wasted if it cannot be appreciated from the normal distance and in the normal period. Further, the generic scale relationships of planting to space and to architecture and hard landscape are sometimes ignored in the desire to plant for planting's sake. Too much diversity in planting wastes much of the care and thought that has been put into other aspects of composition.

At the other extreme, we find large expanses of shrub monocultures in pedestrian areas. These can appear monotonous, even depressing, because they offer too little diversity to satisfy close inspection or maintain any interest while we walk alongside. They have only two scales of interest: the minute detail of leaf, flower or fruit and, at the generic scale, the contribution that they make to the site development as a whole. This mistake is common when the designer is over concerned with the greater concept at the expense of the materials and details of design.

These are fundamental failures and they can overshadow other attractive qualities the planting may have. When working on the drawing board, we need good imagination to anticipate the effects of scale relationships.

Movement and Viewing Angles

The designer must also take into account the angles at which planting will be seen. These are affected by movement through the landscape and while we are in motion our range of focused attention is more restricted than when static. The greater our speed of travel, the narrower this range will be. For example, the attention of pedestrians walking purposefully will be confined within a horizontal spread of about ninety degrees. For a motorist on a fast road this angle will be further reduced to about 45 degrees because of the need to keep close attention on a small, but rapidly changing, visual area. These angles refer to the general spread of focused attention allowing for head as well as eye movements. It is not the same as the commonly quoted 60 degrees 'cone of vision' (e.g. Dreyfuss, 1967) that is determined by the

Plate 118 Planting in a garden, whether public or private, should be of sufficiently small scale to invite prolonged observation and enjoyment (Stoke, UK).

Plate 119 When vehicles are passing at moderate speeds more variation in shape and smaller groups of species can be appreciated (Swindon, UK).

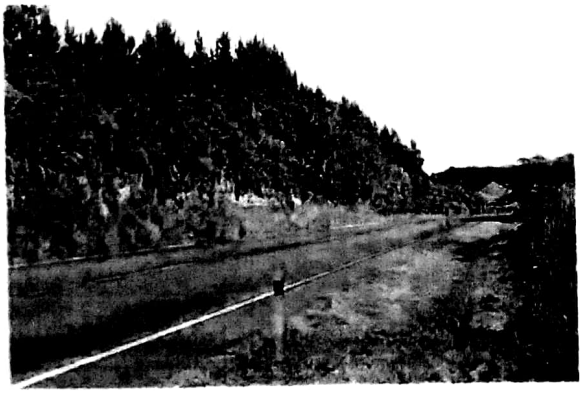


Plate 120 Only tree and shrub groups of sufficient scale will be perceived from fast moving vehicles on a fast road. Note the contrasts between the forestry plantation in the background, the edge of regenerating native bush, and the varied herbaceous flora at the road side (Bay of Plenty, New Zealand).

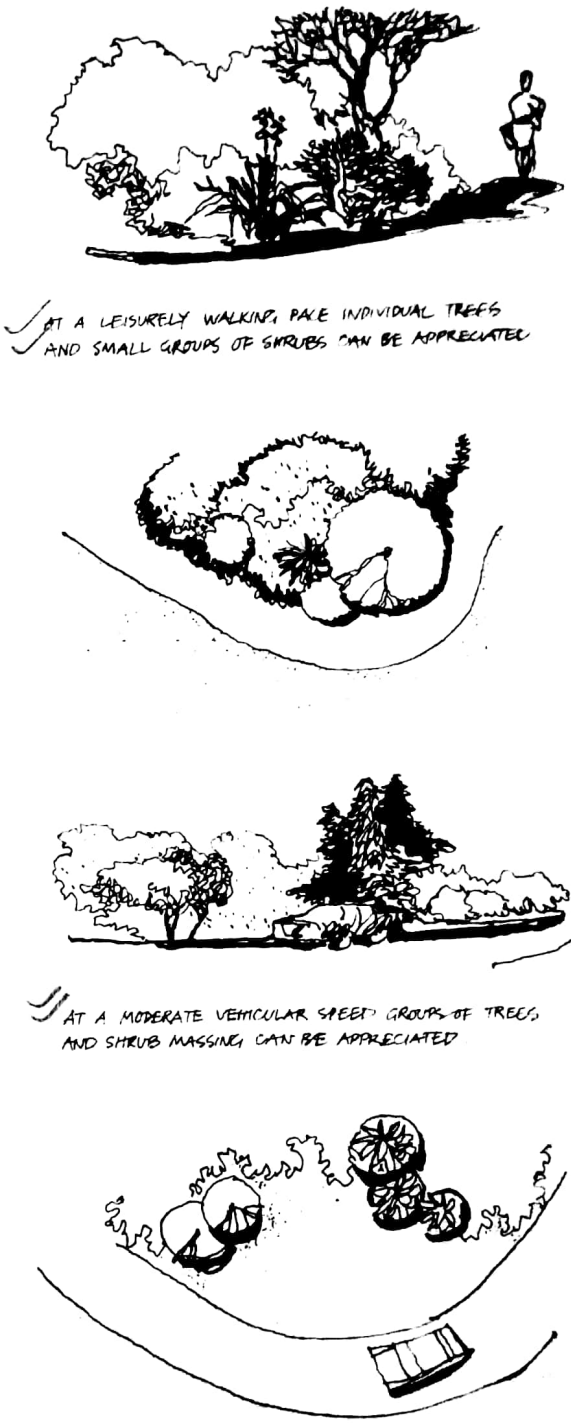


Figure 7.6 The scale of plant groupings should reflect the speed of movement of the observer.

Plate 121 This planting of sedges, *Astelia chathamica* and *Libertia*, together with paving and pebbles, is of a scale that invites movement and reinforces the drama of the distant landscape. An intricate foreground would have been out of place here (Hamilton, New Zealand).

Plate 122 This restrained planting at Dartington Hall, Devon, UK, shows mutual enhancement of complementary hues, combined with harmony of texture and form. Note the colour harmony of the purple flowers, grey foliage and the stone in wall and path (see colour section).

optimum angle of eye rotation of 30 degrees either side of the horizontal axis of the head.

We most often see planting by the side of a path or road from an acute angle, and so its apparent dimensions will be foreshortened. Just as road markings are painted on the road surface in an elongated shape to give the appearance of normal proportions, so plant arrangements should be stretched along the axis of movement to achieve the scale that is desired.

Unity and Diversity in Planting Design

Unity and diversity are sometimes treated as principles of design. However, they are better understood as an objective underpinning the principles discussed above. They are fundamental to all design and all expression. The desire for unity needs little explanation. Wholeness, completeness, are an essential motivation for the human psyche and the perception of unity in the outer world is intrinsically satisfying. Principles of composition can be seen as a guide towards unity and variety in design. Unity can arise from a pervasive harmony of aesthetic characteristics; from an overall balance of composition that binds the various parts into a whole; from the emphasis of linking elements in the composition; from an ordered sequence of spaces and planting; and from a choice of planting scale that links the scales of its landscape setting to that of its human participants.

Diversity is easier to provide than unity. The range of plant species and cultivars available includes all the variety we are ever likely to need and more. Even a single plant can show great variation as it develops and changes through the seasons. It is achieving unity that is the designer's greater challenge.

Planting Ideas

Over and above the binding function of composition, unity can be achieved by the presence and clarity of a planting idea or theme. This can be of great value

to the designer because once chosen, it gives both inspiration and a conceptual framework for the development of detailed design. Further, it can help reduce the array of possible plant species to a manageable palette.

A theme may be historic, that is, based on the interpretation of the past character and events of a site, or the incorporation of historic references in contemporary design; a theme can be inspired by how people use the landscape, or it may simply reflect a central design concept or idea that informs all aspects of the landscape architecture of the site, including the planting. It is always important that the planting design contributes to the overall design concept and objectives, and this is achieved by the spatial design and by the themes employed in detailed planting composition. Planting themes are many and diverse but can usefully be divided into those based on the aesthetic characteristics, on taxonomic relationships or ecology.

Plate 123 This sunken garden at Thames Barrier Park in London, UK, is a good example of planting that reflects a central design concept. The dockland history of the area is expressed in the form of the garden and in the wave-like shapes of the yew hedges. The planting is contained in long strips between the hedges and narrow paths. This is an innovative development of the traditional mixed border with hedge backing.

Plate 124 The icon of the New World city grid has been applied, with a sense of humour, to the planting in this San Francisco, USA, plaza to represent the pervasive idea of the city as geometry.

Plate 125 The inspiration for this planting is made explicit. A stream of blue, white and purple pansies (*Viola* hybrids) tumbles down an artificial hillside at the Stoke National Garden Festival, UK. The moorland grasses and rushes not only reinforce the suggestion of an upland stream but their subdued browns and greens provide a complement to the brighter colours of the pansies.

COLOUR Many beautiful garden and landscape plantings have been created by restricting colours of flowers, fruits, stems and foliage to a limited, related range. For example, colour theme borders, especially of white flowers and grey and silvery foliage, were very popular in the Arts and Crafts, 'English country garden' of the early twentieth century. These are well preserved or recreated at, among many others, Newby Hall in North Yorkshire, Hidcote Bartrim Manor in Gloucestershire, Sissinghurst Castle in Kent and Hestercombe House in Somerset. The control of colours in these borders creates a pervasive mood stimulated by the character of hues. In addition, many subtleties of tone, tint and intensity can be appreciated that might be lost in a more diverse colour scheme. Walking in the white garden at Hidcote allows us to appreciate the diversity of colour that exists simply among whites, creams, greys and silvers. The contrast with the red borders of the same garden is dramatic. Here we find a sultry, sub-tropical extravagance. The intense, rich reds of hardy and tender flowers melt into the bronzes and purples of foliage and the whole effect is strangely unfamiliar in the subdued, English light.

Other single colour themes have been used to great effect, yellows bring vitality in the shade of buildings and many yellow flower and foliage plants prefer the low light of such locations. Most blue flowered and silver or grey foliaged plants, on the other hand, need full sun and warm conditions to grow well and develop their most effective foliage colours. This is because the grey or silver leaf colour that arises from a woolly or tomentose leaf surface is usually an adaptation to moisture stress or intense sunlight in the plant's natural habitat.

On the subject of single colour themes, painter and planting designer Gertrude Jekyll was cautious:

> It is a curious thing that people will sometimes spoil some garden project for the sake of a word. For instance, a blue garden, for the beauty's sake, may be hungering for a group of white lilies, or for something of palest lemon-yellow, but it is not allowed to have it because it is called the blue garden, and there must be no flowers but blue flowers. I can see no sense in this; it seems to me like fetters foolishly self-imposed. Surely the business of the blue garden is to be beautiful as well as blue. My own idea is that it should be beautiful first, and then just as blue as may be consistent with its best possible beauty. Moreover any experienced colourist knows that the blues will be more telling – more purely blue – by the juxtaposition of rightly placed complementary colour. (Jekyll, 1908)

Well-balanced, dual colour themes can also unify a planting scheme. The contrast and mutual enhancement of complementary colours is displayed most powerfully when each hue is restricted to a narrow range. Yellows and purples offer a striking complement of hue, and also a contrast of value, because yellows are lighter and fresher than purples of a similar intensity. Blue and orange is often less successful, perhaps because the contrast in value is less, and both colours can appear rather heavy in the presence of their complement. It is hard to say why this is so. It is a matter of perception and experience. Colour themes can be based on value and intensity rather than only on hue. For example, a planting of pastel flower colours and grey or silver foliage is given a sense of unity by the grey or white that unites the various hues. Pale pinks and pale purple blues can make a particularly effective pastel colour scheme.

Some colour combinations have had a bad press. Pink and orange are traditionally thought to clash, but this is due to lighting conditions and cultural preferences. In tropical countries such as India, these two colours are commonly combined in fabric and other design, so why not in planting?

An important reason for the success of the more restricted colour themes is that a degree of variety and contrast will inevitably be provided by the colours of plant foliage. This contrast is strongest for a red colour theme in which the flower hues will be complementary to the foliage greens, but in other colour themes there will still be enough to enliven the composition as a whole. It is particularly helpful to include a proportion of dark green foliage to anchor the pale and pastel colours.

TEXTURE, LINE AND FORM Texture may provide the aesthetic theme for composition but care is needed with the balance of harmony and contrast. An association consisting largely of bold textured plants can be overbearing unless relief is provided by other elements. Bold texture can provide an exciting theme in a space large enough to avoid feeling claustrophobic, and provided that contrast in line, form and colour is also included. 'Sub-tropical' and foliage gardens have been created in this way to give an atmosphere of luxuriant rainforest vegetation but using temperate species.

Use of bold textures is also traditional in association with modern buildings. This is sometimes called 'architectural planting', perhaps because the species used have a bold form and consistent habit that echoes the boldness of form in modern architecture. A theme of fine plant textures would, on the other hand, risk appearing weak and empty unless the lack of stimulation provided by the plant texture was compensated for by strong form, pattern or colour. The use of fine textures is common in formal historic landscapes, especially in parterres, hedging, pleaching or topiary.

SEASONAL THEMES When it comes to seasonal change, we can identify contrasting approaches. The first could be called the 'architectural approach'. In this, the aesthetic objective is abstract and formal: it aims to maintain carefully planned visual qualities in a state of constancy, almost as if the planting were made of building materials. It usually relies on evergreen foliage species, in order to keep the same texture and form throughout the year and tends to avoid plants

Plate 126 Use of bold foliaged species can create a jungle-like character in temperate regions by echoing the large-leafed characteristic of tropical rain forest (Newby Hall, Yorkshire, UK).

Plate 127 The spring garden is a common seasonal theme. This woodland walk at Dartington Hall, in Devon, UK, designed to be at its peak in spring with carpets of naturalized woodland flowers and shrubs such as *Camellia* and *Magnolia*.

that look messy or uninteresting at a particular season. The classic example is the groundcover and accent planting common in corporate landscapes.

Another is the 'horticultural approach', which tries to achieve diversity and highlights through as much of the year as possible. This approach emphasizes seasonal change and deals with the 'down time' of a particular species by planting another that will occupy the aesthetic gap. A good example of this approach is found in the home garden where people plant for year-round colour. A horticultural approach is growing in some areas of professional landscape design, and designers such as Piet Oudolf (1999) and James van Sweden (Oehme and Van Sweden, 1990) are using herbaceous plants to great effect in large-scale public and corporate projects with much attention to their ephemeral qualities and seasonal contrasts. Some new urban parks, such as Thames Barrier Park in East London, are reinterpreting traditional methods of horticultural display, both to extend the period of horticultural interest and to express the contemporary design themes of the whole development.

A third approach is to concentrate horticultural resources in one season, and thereby create an intense, transient, but memorable seasonal 'event'. In plantings like this, most of the plants to be used would be selected to be at their peak in the chosen months. This seasonal approach was much used in large private gardens especially those of the Arts and Crafts movement (such as Knightshayes Court, Dartington Hall, Hidcote Manor), but it can be adapted to public and corporate landscapes today, provided that the intensity of use is low enough to allow some areas to be below their best for part of the year. The periods that are most successful for seasonal displays are early spring (for bulbs and early flowering shrubs), late spring/early summer (for tree and shrub flower), high summer (for herbaceous perennials and tender plants), autumn (for fruits and foliage and, in some climates, a second flush of flower) and winter (for coloured stems and winter flowering plants). Each has its own distinctive charm.

SCENT, SOUND AND TOUCH Non-visual aesthetic qualities may also provide a theme for planting. Emphasis on scent, sound and touch is normal in planting for people with visual disabilities, but any of these could also provide a unifying theme in less specialized plantings.

The fragrance of flowers and aromatic foliage is a source of delight and planting that is carefully planned to provide an attractive blending and continuity of scents throughout the year would have great distinction and character. Blending of scent is no easier than combining colours, and a garden of scents would require as much skill and sensitivity as one based on a colour theme.

Sound and touch are less obvious characteristics of plants. Sound is dependent on the wind or rain to sway branches, rustle leaves, or clatter stems. The physical feel of plants requires our participation and so is less often appreciated. However, either, if used boldly, could provide an exciting and unusual theme for planting that would be appreciated by the more imaginative observer. Plants can heighten our sense of the weather and broaden our sensory experience with the sound of rain on foliage. Indeed different plants produce remarkably different sounds in the rain. The large leaves of species such as *Fatsia japonica* and *Phlomis russeliana* amplify the impact of raindrops; hard leaved plants like *Epimedium perralderanum* and *Hedera* echo with a clattering sound and smaller, softer leaved shrubs like *Symphoricarpos* 'Hancock' and *Caryopteris* produce a swishing noise. If you want to experience this, stand with your eyes closed in heavy rain near to plants with different leaf sizes and textures and see if you can identify the different sounds they make. If you prefer not to get wet, try watering your garden with your eyes closed.

TAXONOMIC THEMES In many botanic gardens and horticultural collections, plants are arranged by genus, family and order. Taxonomic themes also provide inspiration for purely ornamental purposes; the prime example is the rose garden, but other genera and groups of related genera are sometimes displayed in their own separate garden, beds or spread throughout an area. Woodland gardens featuring magnolias or rhododendrons/azaleas are common, as are collections of camellias. Other examples include *Iris, Aloe, Protea, Cistus* and *Fuchsia*. The close taxonomic relationship between the species gives a unity and sense of identity to the planting. Collections of plants of a single family are also brought together, usually by enthusiasts. Examples include orchid collections, bromeliads, *Asteraceae* (daisy family) borders, *Proteaceae* collections and heather gardens. Grass gardens, succulent gardens, conifer gardens and fern collections bring together a wider range of plants, though they are still related, and these can be very effective in creating a strong, distinctive planting character.

Taxonomic relationships can provide a theme to help both inspire and unify a planting design. They are most appropriate when the environmental conditions are particularly well suited to a genus or family that includes a range of species all adapted to a habit found on the site. A *Cistus* (rock rose) garden would only be really successful on a hot, dry, sunny bank, and an iris collection would be best if both dry and wet ground were present to allow a full range of dry-land and aquatic species to be grown.

One significant risk with extensive planting of closely related species, however, is that of pests and diseases. Not only is a large proportion of the species likely to be vulnerable to the same infestations, but its spread will be more rapid than if the host species were more widely distributed among resistant plants. Fireblight on *Rosaceae* and hypericum rust are diseases that demand caution in the planting of those plant groups.

HABITAT THEMES Natural habit is a common organizing principle in planting design. Rock and scree gardens, alpine gardens, dry river beds, wall plantings, wildflower meadows, woodland gardens, bush gardens, water and marginal plantings are all ways of displaying a variety of species that are perceived to

Plate 128 Rose gardens are traditional examples of planting on a taxonomic theme. This one at Newby Hall, Yorkshire, UK, features shrub and species roses.

Plate 129 An artificial boulder scree with acid soil provides a habitat for planting design at the Glasgow Garden Festival, Scotland. Heathers (*Calluna vulgaris*), heaths (*Erica* sp.) and birch (*Betula* sp.) not only grow well but also look at home in this kind of terrain.

Plate 130 This classic example of a planted drystone retaining wall is at the restored Jekyll and Lutyens garden at Hestercombe in Somerset, UK.

Plate 131 The wildflower meadow is a common habitat theme. This example is near Whakatane, New Zealand and most of the flowers as well as grasses are introduced species but are none the less attractive in this rural setting.

Plate 132 The development of a hotel and conference centre in an old quarry at Hagen, Germany, provides the opportunity for naturalistic planting which reinforces the sense of place (see colour section).

Plate 133 A waterside theme may be adopted even when the soil is not in contact with a water body by planting species such as *Alchemilla mollis* and *Salix matsudana* 'Tortuosa' which we associate with water but which do not require permanently moist soil (Lincoln County Hospital, Lincoln, UK).

Plate 134 The woodland habitat is well suited to ornamental planting and, in many large gardens and parks, provides a theme for collections of shade and shelter loving plants such as smooth Japanese maple (*Acer palmatum*) (Bodnant, Wales).

belong together. This is because a shared adaptation to similar environmental conditions often results in similar morphological characteristics, or because we associate these plants together from our knowledge of wild and semi-natural landscapes.

The limitations on species imposed by a particular habitat, especially if it is a difficult one for plant growth, allows the designer to introduce contrast and variety in aesthetic qualities without losing the sense of natural affinity between the plants. That affinity and the character of a distinctive habitat will help to create a strong sense of place and a natural logic to the choice and arrangement of plants.

No single habitat, however distinctive, is completely isolated from others. Forest grades into scrub or meadow or sub-alpine communities; open water adjoins emergent marginal plants or swamp, and so on. Likewise when we create artificial habitats for planting or establishing particular communities we can build a sequence of related conditions, an ecotone, and encompass more diversity within our planting theme. We might even go so far as to represent a whole landscape in microcosm from rocky peaks and tumbling streams to still lakes and tranquil pastures.

A planting idea related to that of the habitat-as-theme, is the 'plant signature' (Robinson, N., 1993). This is the use of a carefully chosen grouping of plants that refers to, or signifies, a distinctive plant association or community. The signature grouping is one that is commonly found in that plant community and so can be used to refer to it or identify it. This gives us the chance to do two things: to bring the ornamental qualities of a natural community into planting design (without the need to create and manage new habitat) and, secondly, to refer to a particular place. Note that it is the signature of the plant community and not the signature of the designer!

Plate 135 This grouping at the University of Canterbury, New Zealand, consisting of gossamer grass (*Anemanthele lessoniana*) and tawhai or beech (*Nothofagus* sp.) forms a plant signature referring to the typical forest edge/glade communities of the dryer Canterbury mountain forests.

Inspiration

The principles of composition consist of an ordering of visual phenomena. These effects can be perceived by anybody, regardless of culture and personal experience. The ability to distinguish harmony and contrast, to experience sequence and to respond to scale are fundamental to human interaction with the environment.

This understanding of the visual environment does not, by itself, lead us to manipulate that environment; to create and recreate the cultural landscape around us. To design requires stimulus and inspiration. The stimulus may be a functional necessity such as the need for food or shelter; or it may be a more sophisticated aesthetic need. What gives rise to an aesthetic need? What inspires the people to manipulate the elements of composition with aesthetic purpose?

The inspiration for design arises from three major sources. First, the ethos of a particular time and place is an inescapable influence that underpins the work of individuals. Such cultural influences may be unconscious, as is the case with much popular design, but trained designers should have studied and developed an understanding of the philosophy of design both in their own and also in other cultures and periods. This kind of cultural inspiration marks all the great movements and styles of landscape design. The English Landscape movement of the eighteenth century was inspired by a new appreciation of nature and influenced by the paintings of artists such as the Italians, Rosa, Poussin and Claude Lorrain. These portrayed a harmony between human activity and natural forces and a benign, pastoral landscape populated with architectural symbols of European humanist culture. The Gardenesque, in the mid-nineteenth century was inspired by the array of exotic species being introduced at that time and also influenced by the Victorian penchant for orderliness. Modernism was inspired by the machine age. The landscapes that resulted, reflected the conditions and the mood of their time.

Individuals have been crucial in propagating new ideas about design, which we now identify with their contemporary culture. But, designers such as Lancelot Brown (1715–83), John Claudius Loudon (1783–1843), Thomas Church (1902–78) and Martha Schwartz (b.1950) were not only vehicles for the birth of embryonic ideas but they also brought their own personal experience and inspiration to design. Their own individuality is stamped on their work.

The value of the individual is enshrined in western humanism, and the expression of personal freedom and values became a particularly powerful motivation in design in the late twentieth century. It has perhaps become an end in itself and, whether we believe this to be enriching or superficial, we can consider individualism to be a distinctive inspiration of the age. The mark of individuality, although it may be quite conspicuous, is more superficial than the underlying cultural generators of style. Although the designer's personal initiative and ideas may lead to a design with a strong identity, there is a risk that it becomes too contrived, too mannered, to carry real conviction. This can happen if designers try to impose their own will on the site and the result can appear 'over-designed'.

This brings us to the third source of inspiration – the site itself. The *genius loci* or 'spirit of the place' is recognized as something that should be deeply considered in design. The term was first coined by the writer and gardener Alexander Pope in 1731 while advising on the layout of landscape gardens, most of which would be located in a rural setting. However, the spirit of the place can be just as strong in urban landscapes or small private gardens. If we seek to express this essential nature of the site then the resulting design may be quite