

BEHAVIOUR IN INTERIOR SPACES

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Human behaviour is evident at many different levels. The physical manifestation of the human behaviour is the **conspicuous action** through body-limb movements and the **discreet expressions** of body related gestures. Body-limb movements and gestures are voluntary (intentional) and involuntary (natural reflexes). **Voluntary expressions** are intelligent or 'calculated' responses. **Involuntary reflexes** result from the mental processes as well as body's functional systems (such as metabolism, equilibrium maintenance, body temperature and fluid controls, etc.).

'Human behaviour is also conveyed through art, and spoken or written language. The fear, pain, love, affection, joy, wonderment, admiration, hatred, etc., are intense emotions that are expressed through art or language. Perhaps physiological tools (body-limb movements and other body language expressions) are too *slow, inadequate for the purpose, useless for the need, or unavailable* (due to physical impediments, age, sex limitations, etc.). Expression on media is much longer lasting, and so unlikely to be misinterpreted.'

Basic human behaviour originates from the **genetic make-up** and it is further conditioned by the **experiences** (the knowledge base). **Appropriate behaviour** allows a being to survive and proliferate, whereas **Inappropriate behaviour** causes pain, difficulties and makes a being extinct. During normal times a person or society with inappropriate behaviour has slower evolution, and in acute or hostile environmental conditions a break down occurs. All beings learn through experiences. The accumulated knowledge base may perish with the being but the achievements survive as heritage or folklore. Experiences enrich one with productive efficiency, and such accomplishments pass-on to other generations.

Three chief operants of human behaviour: Human behaviour is in response to three chief operants: 1. **Own body**, 2. **Environment** and 3. **Nature of Relationship with other beings**.

1. **Responses of the body** relate to the **cognitive capacities** that determine *what one perceives*, '**reach**' **abilities** of the limbs decide *what one can change* in the immediate world, and the **social interactions** regulate *what one shares*.

Cognitive capacities: Aristotle had listed five senses: sight, hearing, smell, taste, and touch. This concept remained well-accepted for centuries, but there are many other categories of sensory receptors. For example human skin alone can perceive, hot, cold, pressure, and pain. The modern categorization includes a kinesthetic sense (sense organs in muscles, tendons, and joints) and a sense of balance or equilibrium (vestibular organs of the inner ear stimulated by gravity and acceleration). In addition, there are receptors within the circulatory system that are sensitive to carbon dioxide gas in the blood or to changes in blood pressure, and there are receptors in

the digestive tract that appear to mediate such experiences as hunger and thirst. Not all receptors make one conscious about their functions. The cardiovascular receptors regulate the blood pressure or heart rate without the person being aware of it.

Reach abilities: Human beings have two classes of 'reach'. The **capacity of the body limbs** to reach out (through various manipulations and movements) represents the **physical reach**, and our **sensorial capacities** that allow us to reach to the far off objects marks our **cognitive reach** (like seeing, smelling, listening etc. from certain distances). Both the *reach abilities* vary in their effectivity depending on factors like *desire, need, compulsion, aversion, instinct, motivation, gratification*, etc. Reach capacities can be '*sharpened*' to a certain extent by learning (training, exposure, etc.). Olympic records show what a human body can achieve.

The **physical reach** is function of *distance and mobility*. It is the capacity to move a limb of the body in a wide range of purposeful movements at the required speed and in coordination with other movements. It dynamically helps one to activate as well as deactivate (relaxation) the limbs. Physical reach is a very important tool of manifesting the human behaviour. Human beings also extend their physical reach by devising tools, gadgets, equipments, etc. A spear is a distanced knife or pin. People have very widely variable capacity to move their limbs depending on the experience, habit, body size, age, sex, situational demands, accruing advantage or pain, etc. It also varies with the direction of movement and the opposing friction, mass, and springiness.

In medical field a doctor is able to increase the vision through a microscope, 'finetune' the control over surgical procedures by various types '*scopes*', reach inaccessible areas through shaped tools, check out various conditions through '*multi-channel monitors*', carry out simultaneous action through '*automats*', examine and treat patients at remote locations through tele-medicine and surgical robots.

The **cognitive reach** is inherently limited for a being. Some animals have capacity to see at night, some recognise colours compared to others that only see in grey tones, dogs can hear sonar sounds normally inaudible to human ears. The perception capacities can be enhanced or dulled by certain implements, or recorded and transformed into a 'readable' - perceptible mode. Astronomical objects that cannot be seen by visually by the naked eye are observed through telescopes. Where telescopes are ineffective, one listens the space through a radio telescope. Heart's beats are translated into graph for reading in a cardiogram. Remote sensing, satellite mapping, chromatography, sonography, radiography, etc. are tools that change how much and what we can observe.

The **sensual perceptivity** represents the capacity to perceive through various senses. These capacities can become very acute or get dulled in specific conditions. A human being can listen to sounds within the range

of 20Hz to 20000 Hz, below and over these range one may not *hear* the sound, but experience it as an energy causing chemical and other changes. Such sounds are *read*. The sensorial capacities can be enhanced by use of certain devices or recast in some other recognisable form. We do not *see* deep into the celestial space but rather *listen* to the noise emanating out it. A radio telescope listens to the space, rather than see it. The capacity to perceive sensory stimulations vary from person to person, the physiological condition, age, habit, experience, psychological state, etc.

The **reach of an expression and communication** is vastly different from the nominal or physical reach. The reach of expression and communication are always circumstantial as conditioned by the means of expressions, recording, playing out, transmission modalities, the media, etc. The expression is subjective interpretation of absorbed or learnt knowledge. Expressions manifest as re-enactment of the event and also formatted onto medium. The direct transactions like expressions and re-enactments and indirect transmissions as formatted over a medium have different reach capacities. Such means are, '*one-way channels*' -allowing one to be unaffected by the reactions, '*two-way channels*' -with live interaction that permits intimate sharing, and '*delayed response systems*' that let one to be prepared.

2. **Environmental responses** of the body produce specific behaviour. One of the most important and common response mechanisms relates to acclimatization. The body and its various systems adopt the environment. The adaptation could be instantaneous (such as the perspiring, sweating, high breathing, blinking of eyes, change of body posture, shuddering, etc.) or much slower involving evolutionary process lasting for several generations. Environment is the most important factor that continuously varies and affects everything. There are many indirect and delayed effects of environment.

A human being distinguishes *specific pockets* of environment to conduct own self. Such pockets have location related (orientation, position) value and also time relevance. Where such pockets are not easily, available new ones are intentionally formed through barricading or realized through time management of events. Environmental responses define our **living** (life style, foods, clothing, etc.) **built forms** (forests, farms, open lands, structures, plants, equipments, etc.) and **activity cycles** (choices, schedules of rest and work, food intake, entertainment, daily and seasonal chores).

A being tries to be efficient and conserves energy. First preference is to accommodate changes through the metabolism and by selectively switching the sensorial functions. Failing these, one changes the posture to assist the body and to use the environment. The next option is to move to different location. But during these processes one can format the space (and there by the environment) and reschedule the activity.

3. Nature of relationship with other beings The social interaction provides a vast arena for human behaviour. It provides a learning and testing ground for the knowledge base. Social interactions ordinarily relate to expression and communication, but now increasing evidence show how the presence of other beings, their odours (enzymes), body heat, etc. also affect the human behaviour.

'Proxemics: Edward Hall, an US anthropologist has theorized how people use both time and space as well as body positions and other factors for purposes of communication. The *nonverbal communications* consist of such culturally determined interactions as the physical distance or closeness maintained between individuals, the body heat they give off, odours they perceive in social situations, angles of vision they maintain while talking, the pace of their behaviour, and the sense of time appropriate for communicating under differing conditions.'

Human behaviour is conditioned by the presence and also awareness of other human beings. Group mechanisms like intra personal communication, empathy, degree of familiarity, etc. also affects the behaviour of an inhabitant. For the same space+environment, members of a group may show common, as well highly individualistic response depending on many factors (age, sex, experience, physiological make-up, psychological state *-last two together affecting our cognition and response mechanism*).

Human behaviour also has many areas of ambivalence. The uncertainties arise because it is not easy to understand how the mental processes work. Other uncertainties arise because certain space-time conditions do not manifest in an obvious manner. When one or the other (time or space) is absent, delayed, preceded, a new experience arises. These are **pseudo or make-believe** situations where the real qualities of the space and time are *shrunk, enlarged, skewed, delayed or hastened*. Such **Preentious reach** can be experienced in reflections of mirrors (doubling of the depth and displacement of left-right), bifocal vision (perspectives, optical anomalies -long straight lines seem curved), echoes, in transmitted audio messages and images, condensed graphics, metaphoric and symbolical representations, holographic images, virtual reality conditions, etc. These conditions are now *explored in creating new behaviour patterns*, For these time and space conditions are isolated and separately manipulated by techniques like: the bio-cycles (working of bio systems) are altered by hypnosis, administration of special chemicals (drugs, medicines), and by changing the group dynamics (social engineering).

2

Inhabitation

Inhabitation is a prime human behaviour that is necessary to survive and proliferate. Inhabitation is a *life style set into a spatial realm*. The life style and the realm continuously modify each other, resulting into a unique approach, the inhabitation. Inhabitation is instinctive as well as learned behaviour.

The inhabitable realm is a unique spatial organization with an implicit but personal environment. The spatial form and the environment are evident simultaneously, as the substantial realization of a functional usage. The usage is further aided by functional facilities (tools, equipments etc.). The usage is also supported by preset strategies (traditions, customs, rules) of dealing with the built spaces, the environment and functional facilities. *The Built form, the Environment, Functional facilities, and Strategies*, all together instill certain sensual experiences. Such sensual gratification leads to better form, superior conditioning of the environment and enriched functional facilities.

Inhabitation is initiated on the basis of a potential perceived at a locus. One then begins to improvise the locus by adding upon the advantages and by eliminating all disabling features. It is an integrated approach of many interdependent elements, whose individual or distinct identification is difficult. The process of inhabitation begins as **realization and occupation** of a realm. All beings have a **primary tactic** (often instinctive) of *owning and occupying a spatial entity*, which on sensual gratification (including comfort) becomes a **greater strategy** (often intellectual) of inhabitation. *The legacy of past experiences increases the capacity to occupy and inhabit a space entity*. The reliance on intuition and the past experiences assures a 'failsafe' response.

By following customs and tradition one can create a habitat that is *'time tested'*. Self built buildings are maintainable by their creators because local materials and technologies are used. Fail safe assurance also arrives from the fact that failures are continuously corrected, and the accumulation of failures never occurs, leading to sudden termination of the entity.

Primary **space occupation** is **cursorial and minimal**, using only the personal assets such as resetting of the bio activities. It is easier (being efficient) to adjust own self rather than cause any change in the environment. However, the capacity to bio-adjust is temporary and limited in effectivity. Such a space occupation (personal - bio adjustment) is **experimental, so notional and transient**. It only offers realization that the space is worthy of survival because it has some potential of size, shape, environmental qualities and sensual characteristics. There is also recognition that this realm can be: *improvised in form, the environmental qualities reset, and the sensual characteristics enriched for satisfaction and greater efficiency*.

A person or a group perceive such potential accidentally or after an intensive search, and so consider it an asset worth *'hanging-on to'* it. The desire to own requires that the realm remain consistent. However, the environment and the user or the user-group dynamics (interrelationship) vary continually. The original efficiencies (first realizations) may not remain valid in the changing circumstances. Yet the possession ensures some permanency in the realm. The constancy is achieved by **domestication of the realm**. *The user converts the realm, and in turn exposes own-self to forces of change*. The space adaptation is thus an elaborate cycle, where the user and the space change each other. The change in one aspect poses new possibilities elsewhere. The **explorative occupation** of a space turns into a **domesticated domain**, and the process persists as **inhabitation**.

Space inhabitation is a matter of subsistence, so it is more **considerate, realistic and longer lasting**. Inhabitation involves devising and deploying devices such as handy tools, relocatable equipments, fixed plants, and involvement in active as well as passive systems. The devices are placed, attached or integrated into the built forms. The devices help formulate and *'enrich a space entity'*, temper the environment, and endow task efficiencies by adjusting the human **'reach' capacities** (see *previous chapter*). The involvement in various system allows a being to make use of other manifestations of inhabitation.

Inhabitation is continuous process. The changes, though, are often so subtle that the user may not be aware of it, yet over a period of time the minor changes accumulate into substantial modifications (like Charles Darwin theory of Evolution).

Inhabitation is a continuous process of improvising the means and methods for living. It involves, forming a space (a built form) with environmental responses, rendering it with required sensual attributes, provisioning for the functional needs of living. The living includes personal acts like grooming, eating, resting, etc., living with others (including family life), communication, earning a livelihood, and other diversionary activities like revelry, grief, etc. These activities are personal, family based, group-based and universal (of humans and of other biological beings).

Some of the *processes of change* for inhabitation are either instinctive or so imperative that such responses are taken for granted. Such responses also get condensed as metaphoric expressions, or pass-on into the folklore or heritage (beliefs, customs, traditions, taboos).

A spatial entity is habited by a lone user as well as groups of (participating, interactive, related or unrelated) persons. A user reacts to the **'real presence'** of others and also to the **'incorporeal imminence'** (presence in spirit) of others.

In a holy space like a temple, one is affected by the presumed presence of God. Memorials are designed for causing the reverence. Burial grounds and crematoria cause an eerie feeling. Odours, lingering sounds, distant visibility, touch, etc. reinforces the presence of others at *realistic level*, as much as images, metaphors, signs and other associated items do so at the *abstract level*.

The behaviour is of **Individual's**¹ (*not affecting a group*), or is **Individualised**² (*not affected by a group*), The behaviour of groups involves couples or twosomes, families, communes, cooperatives and communities. The groups also seem to get formed with affinities such as sex, age profile, interests, physiological and psychological functionality, etc. The behaviours of such entities are **Group based**³ (*to project unity or belonging yet remaining substantially individualised*), or are **Grouped**⁴, (*everyone acting in unison overcoming the individual differences*).

The **Devices and Strategies of habitation** are evident at Four distinct levels: 1 The User adopts own-self biologically, 2 the Environment is conditioned, 3 the Realm is dimensioned and structured, 4 the Enrichments and Facilities are deployed.

A user nominally may not distinguish such categories, because beyond the usual easily recognisable *single cause-singe effect* conditions, there could exist many in-specifiable situations with *single cause-multiple effects* or *multiple causes-singular effect*. Inhabitation is thus a fairly complex process, where simultaneously many strategies are at work, some at *psychological and at physiological level*, and others function at very *realistic or physical level* and even at *abstract level*.

The behaviour in a habited domain could be **local and immediate**: like going to a shaded area, changing a body posture, breathing deep before a strenuous action, to **extensively spread and persistent**: like migrating to another space, putting on a light, installing a sound proofing system.

Behaviour in a habitat is naturally meaningful to all its occupants -the inhabitants. Self help formation of a habitat is a seamless process for its occupants. It is as natural as the process of survival, expression, living together, sharing, etc. Inhabitation is very rarely considered to be a new venture but rather a '*continuing process of bettering*'. However, such processes of bettering are slow and less efficient. So in a habitat efficiencies are better provided by **habitat forming professionals** like Builders, Architects, Interior Designers, etc. who not only form the spatial entities, but also devise means of '*extending the reach capacities*' and '*enriching facilities*'. These habitat forming professionals, in cooperation with other social sciences experts also evoke strategies (life styles) for using the habitat.

3

Domains

Possession and Occupation of a spatial entity are the first acts of habitation. It allows a person or a group of persons to establish a **role locus** (a stage or setting). The locus has three essential qualities: a value due to its **location**, some appropriate **physical features**, and a **potential for alteration**.

The locus is: a **marking** -a 'place' in the universe, a **spread** -a 'territory' for occupation, and a **space** -an entity for inhabitation ('enactment'). A person establishes a locus by *delineating a territory* and also recognises it as a *zone of effectuality*. The territorial marking is a deliberate creation, whereas the zone of effectuality could be both, conscious as well as subconscious action.

We mark a space as fit for occupation, but cannot explain why (and very often How) we selected it.

A **domain** is a **role locus** for the individual. It has an individual as its focus. The role locus has many facets. It is a *space for inhabitation*, a *zone of an individuality* and also an entity existing in its formal and *allegorical or abstracted form*.

Domains have a focus, centric or acentric. A domain could be linear, planner (2D - with a circular spread) or blockish (3D -with cubical, spheroidal). In computer science a Domain is a group of networked computers that share a common communications address. Domain is also a particular environment or walk of life, sphere, area, orbit, field, arena. A domain is the set of values of the independent variable for which a function is defined. A domain as a spread is defined by the Lord or owner at one end, and by the strength of the governance at other end, both are rarely consistent, gaining strength or shading weakness continuously, a domain is a very ambivalent term.

- As an **inhabitable space**, a domain is defined by bounding barriers. So it is a dimensioned territorial entity, a physical reality. It is finite in scale and permanent. A *physical domain* is scaled in reference to its occupant. It also reflects the cognitive capacities and 'reach capacities' of the occupant.

- As a **zone of an individuality**, a domain is distinguished with intuition, beliefs, etc. of the creator. Such a domain is metaphysical, a nonphysical spread or effect evident in the high density at the point of origin which thins out into infinity. *Metaphysical domains* may not have territorial markings of their own, but sometimes are 'incumbent with the physical territorial markings'. Otherwise, metaphysical effects can transcend a physical domain.

- In **abstracted form** a domain is a representation. Such a domain is metaphoric and arises from the few essential elements that allow us to perceive the substantial space entity. Such a space entity could be part of our experiences or are intuitive part of the psyche. A *metaphoric domain* is operative till it is consciously accepted as a representative form for its economics (efficiency), and also so far as it is beneficial in spite of its myth remaining unresolved. A metaphoric domain prevails

amongst certain class of people, who tacitly agree or have been socially or politically conditioned to accept such symbols to represent certain expressions, actions, etc. So metaphoric domains are impressions that are representative, immaterial, allegorical, pseudo, make-believe, or of 'virtual reality'.

DOMAIN: from Latin *Dominicum* or *Dominium* and old French *Demaine* or *Demine*, all meaning *belonging to a lord*. Here the domain is centred or focussed and its spread is tied to a lord. A domain is a sphere of activity, identity, concern, distinctiveness, exclusivity, knowledge, rulership, effectivity, communication, belonging, control, ownership, rights and conformity. It is territory over which rule or control is exercised.

Domains come into being through the coinciding effects of many factors, such as the **nature of territorial markings** (spatial quality, scale, shapes, materials, connections or networking, the environmental controls, etc.), its **ambit** (spread, area, volume), the **individual** (psyche, physiology), the **owner and manner of ownership** (individual or group) (governance / management), and the **cultural pose** (beliefs, experiences, inspirations, inhibitions, traditions, etc.).

A domain thus cannot be exclusively prescribed by its physical characteristics, through person/s who own (govern) it, or for pragmatic personal flavours it represents. However, some domains are seen to be 1. physically more defined, 2. metaphysically more effective, or 3. to be metaphorical that is notional or indicative.

Domains have two obvious characteristics: **people** who create it, and manage it to perpetuate the control over it, and a **system of controlling barriers**. The individual marks the ownership by occupation, signs, barriers that constitute an environment, and by including amenities to facilitate tasks. The domain 'constituting' individual could be a real or a metaphysical entity. The ownership is physical (of possession and use), contrived (made-up, an effect or conceptual) or metaphoric. And the barriers are also equally varied ranging from the real, virtual, antithetic, notional, make-believe, transparent, translucent, opaque, active, passive, benign, harmful, etc.

Physical Domains: The physical barriers mark the territory of a domain, scaled for the inhabitants needs and of certain environment. The territorial markings of the physical domains define a **manageable space**. A space that is: *within the limits of human cognition, inside the ambit of nominal physiological capacities, and the extendible reach capacities* (through devices). A physical domain becomes a very strongly defined behavioural setting, if it is supported by metaphysical elements (beliefs such as privacy, isolation, reverence, fear, autocracy, etc.) and if these (metaphysical elements) are metaphorically further implied.

Metaphysical domains: A metaphysical domain is rarely a singular entity, it is an accumulation of many influences in varying intensities. The influences arise from the psychological and physiological conditions of the individual, co-inhabitants and visitors. The influences pass from one generation to another, so seem to be either

instinctive or a legacy. Metaphysical domains are stronger at the source -the believer or perpetrators of a belief and become diffused or less relevant with distance and time, i.e. have a receding zone of effectuality. The domains manifest mainly as a personal realm, but are more eminently seen in group behaviour, signifying approval of many. A metaphysical domain projects an entity that is reliable, secure, predictable, proven, acceptable to many, and less likely to pose a threat to survival.

The spread of a metaphysical domain seems to be contained by the barriers -the physical markings of a domain. In this sense the physical and the metaphysical domain converge. Thus for a metaphysical domain, areas distanced in time and space from the locale of origination can be re-strengthened, by controlling the dynamism (variability) of the environment in peripheral zones, by suitable space characteristics such as size, shape scale, the quality of barriers, illumination, sound reverberation, axis, orientation, etc. The weak or receding areas of a metaphysical domain can also be strengthened by use of metaphors. The weak areas are intentionally populated by 'hard-core' believers, so that their confirmative behaviour is emulated by lesser believers. Political meets have back seat 'boys' (rabble) whose over enthusiastic behaviour arouses the mood.

Metaphoric domains: The elements that form a domain become so obvious that their slight indication or their sparing presence initiate a set of effects. Such a metaphoric entity, an indicative or symbolic presence, is economical and efficient, as it occupies very little physical estate. Graphics, symbols, signage, languages, codes, gestures (body language), forms, proportions, colours, expressions, etc. are some of the allegorical presences.

Metaphoric domains are relevant to only a particular class of occupants. Others are unaware of it or intentionally ignore it. The symbolic representations often replace the reality so completely that one often forgets what the reality is, was, or could be. This happens when metaphors are tired under several layers of conversions.

Some *spatial features and environmental conditions* often occur in concert, and so presence of one, metaphorically triggers the other. Historical monuments, places of reverence (temples, ashrams), and memorials have such eminence. Nightclubs, amusement parks, exhibitions, public buildings like airports, also have abstracted elements.

Domains also derive their functional capacity by coexistence and dependence. Domains are tacitly interconnected, forming a network. Domains invariably occur in consonance with other domains, *in contagious, overlapping or merged* forms. Domains also occur as an **antithesis**, a contrasting element, as a real or notional (virtual reality) entity. Heaven contrasts with the real world, and also has an antithesis as hell.

A domain is an area controlled by a ruler or government. A domain as encountered from outside or inside but at a very close distance may not reveal its centrality or sphericity. Individuals together through an explicit or tacit understanding establish a domain. Individual or group based domains are generally spatial, though could be

real or ethereal. A domain could be temporal that is occurring only occasionally when necessary conditions arrive.

Hargie & Dickson (2004, p. 69) identify 4 such territories:

1. Primary territory: this refers to an area that is associated with someone who has exclusive use of it. For example, a house that others cannot enter without the owner's permission.

2. Secondary territory: unlike the previous type, there is no "right" to occupancy, but people may still feel some degree of ownership of a particular space. For example, someone may sit in the same seat on a train every day and feel aggrieved if someone else sits there.

3. Public territory: this refers to an area that is available to all, but only for a set period, such as a parking space or a seat in a library. Although people have only a limited claim over that space, they often exceed that claim. For example, it was found that people take longer to leave a parking space when someone is waiting to take that space.

4. Interaction territory: this is space created by others when they are interacting. For example, when a group is talking to each other on a footpath, others will walk around the group rather than disturb it.

4 Domains and Spaces

Domains have three basic constituents: *the Environment, the Formatted Space and the Individual/s*. Various aspects of the environment permeate differently into a space depending on the spatial characteristics, such as the size, shape, sequencing, quality of barriers, etc. The changes in environment affect the interior space as much as its inhabitants. An individual perceives the environment and the characteristics of the space, collectively, as a singular happening. This perception is further coloured by beliefs, metaphors, and group behaviour dynamics.

Domains have different types of territorial markings, and some of these format spatial entities. Some domains yet may not have any spatial territory and could be a conceptual or an effect. An inhabitable domain is a spatial territory. At a very basic level it may have a single space form, but complex inhabitable domains consist of convergent territories. These territories are defined with markings of *physical, metaphysical, metaphorical* nature.

A domain is nominally a centric entity but could also be non-centric one. A **centric domain** has two distinctive zones: a **core area** where the chief activity is sited, and **peripheral areas** where some sub sections of the activity shift, few of the participants diverge, or the spatial qualities show a small variation. A **non-centric space domain** is formed by a directional attachment to a **strong periphery or the surroundings**. A non-centric space may not have any apparent core presence, i.e. has a **void nucleus**.

A house or colony against a fort wall or along a river coast is a linear domain, subsisting on the strong peripheral advantage and so apparently may not have core presence. Several office chambers along a corridor lack the cohesive work culture. A road side coffee house is an example of such non-centric domains.

In physical domains, elements like barriers create a dual space entity, the core and periphery. Both occur concurrently. However, a core need not be the focus, and the peripheries are not always wrapping or fully encircling regions. Physical domains are centric as well as non-centric. In a centric domain, core and the periphery identities gain strength when core and the geometric focus match.

Metaphysically defined domains relate to both, the persons and the emergent spatial character. Both are transient, persons could shift and the spatial character alters with the environmental changes. Metaphysical domains have a spread either going beyond the physical barriers or curtailed by it. The physical space and the metaphysical spread need not match in their extent or scale. A metaphysical domain can be seen as an effective realm of a belief or concern and the personal sphere of influence. The former emerges over longer period of time sometimes spanning several generations, where as the later is formed with the originator remaining relevant, (during the presence, and sometimes more emphatically during the absence), but still only for a short while.

Metaphorically defined domains are ethereal entities, and have neither the physical dimension nor the spread of effect. These entities are nodes, affective on their locations.

Domains' physical characteristics are perceived through the sensory system voluntarily or involuntarily. Domains' metaphysical nature may remain obscure forever or get confirmed intellectually and intuitively. Domains' metaphoric features require confirmation by a person or a group. (The capacity to confirm, and the scale of confirmation by the society, are two diverse quantities, so are incomparable.)

The markings of the domains are characterized by the ambit of sensual perceptivity, communicable distancing, consistency of the spatial characteristics (coherent space and environmental conditions creating a unique space segment) and acceptability or confirmation by a section of the society.

Core zones:

A core area is an archetypical occupation of a space domain. In an unknown space the first occupant tries to position own self at the apparent focus or creates one by facing (orienting) or by being with *some feature*¹, in a specific environmental situation, or on a location that allows either reach or control (visual, physical, notional, etc.). Other occupants, in addition also *recognise the presence of an individual occupant or a group*¹, and place themselves distantly or join in.

In very large spaces adjacent walls, hedges, mid columns, flower pots, water fountains, lamp posts, flooring, ceiling, and such other patterns and objects provide the anchorage for space occupation. Spatial configurations like a stage, podiums, projection screens, speakers, singers, vivid objects, also hold interest by providing involvement.

In parties, hosts make a conscious effort to break such formations by removing or adding key or active persons, or repositioning and rescheduling the activities. In clubs and places of entertainment the environment (lighting, furniture, equipment) and programmes are reset to shift the focus off certain space segments. Group gatherings are designed to occupy different space segments (hall, terrace, lounge, library, garden lawn, etc.), variegated environmental conditions (bright vs diffused illumination, change of music, etc.) and diversions (toast by the host, magic shows, musical renderings, dancing, etc.).

Core zones are formed due to the barrier's marking the peripheral section. But a core zone without the physical barriers is formed by the **reach extent** (dimensional and cognition reach of the occupant) within a space entity. Such core zones are not dependent on the barriers, so can sustain themselves even while being away from it (the barriers). The reach extent also scales the space domain.

Core zones gain strength by the **shape (form) of space**. *Concentric, conical, angular, convergent space forms* have a focussed region which functions like a core zone. Core zones are central by nature, i.e. are stronger at the centre. Core zones may not be focussed in very large space domains. Such non focussed core zones often border extensive barriers or other large spaces. The dominant enclosure on

one or few sides provides *the inviolable shield, an identity of belonging, or a sense of orientation*.

A core zone may not exist clearly where strong peripheral areas are formed by very vivid surroundings.

Outsiders (of other domain) perceive the essence of a domain to be its metaphoric focus. So a core zone is the focus of a single person's activities or for the intimately connected groups of people like family, trading, praying or chat areas, etc. Core zones also form at places of environmental advantages, such as chowks, verandahs, courtyards, otlas, etc. Core zones form for the use of an amenity. Such amenities are static because of their architectural or structural features and their over-dependence on various systems of the building for input-output connections. Core zones also form wherever appropriate spatial sizes, configurations and characteristics are available.

For a core zone many elements converge, both in time and space. For these reasons the core zone shifts from location to location or becomes occasion specific (temporary). This process also leads to search for *demountable or relocatable amenities* such as handy or mobile tools, multipurpose equipments, plug in tools, wireless gadgets, miniaturized appliances and *modular and systems' engineering* approach in design.

Historically a core zone of the 'Home' was the 'hearth' (literally meaning a *focus*) was considered *safe, intimate and interactive for the family*. The hearth was created often without any abutting elements like a cave wall or a rock face. The ambit of the core zone was determined by the *climate, the scale of the space, number of participants and level of interaction, and the degree of personalization* required. There was only one such zone in the dwelling.

The home in charge -the mother was master of the core zone. Her role and presence had become so obvious that *'the hearth, the mother and home'* were synonymous. In tribal and aboriginal homes the core area is a female domain. The core zone was the natural centre of metaphysical spread *'the home'* as much as the mother was de facto guardian of culture.

Today, however the hearth is not an inevitable element for safety, security or comfort. It is the quality of barriers and other gadgets that provide this. Dwellings now have many sub domains each belonging to an individual, smaller group, or configured for a set of tasks. Very few activities of the family occur at the one place and are scheduled in the same time slot. But the family members do share a lifestyle developed through metaphysical markings like beliefs (customs, taboos, etc.) and the metaphoric means.

Multiple core zones emerge in domains where a very large number of people communicate among themselves. And within such a domain maintain some exclusive levels of intimacy and privacy, so must divide themselves into *'communicative groups'* of feasible sizes and numbers of participants. Two way (a person to person) communications and group meetings (many persons to many persons) require restricted space size in comparison to a discourse (one person to many persons). However, when all such formations overgrow in terms of extent or number of participants, **sub groups** get formed and **multiple core zones emerge**.

These distinctive sub groups separate out primarily due to needs like physical accommodation, intimacy and communication, so do not necessarily seek a marked territory or qualitative space segment to anchor themselves. But a frequent occurrence tends to be associated with a qualitative space segment. Often such territories are distinctively (metaphorically and metaphysically) marked (like benches for ruling and opposition parties in a parliament).

Multiple core zones also seem to emerge where several overlapping or closely spaced domains operate in consonance as one master system. Several core zones seem to gel together, as these share the same spatial segment simultaneously or are programmed in same time schedule. Common or continuing elements are spatial characteristics, environmental features, participants, amenities, facilities, tasks and activities.

Arab tents have dual core areas within the basic form of the tent, one occupied by the women and used for main cooking and the other half is used by men and for preparing coffee, etc. These two sections are divided by a mass of stored elements, such as mattresses, floor spreads, etc. The side flaps of the tent are stretched out to create peripheral zones of various widths. The stretched width and the angle of the flap are conditioned by the sun's position, wind direction, nature of tasks to be conducted and the need for privacy.

Metaphysical entities like 'home', 'family', 'group' etc. come into being in a space where *communication, exchanges and the intimacy* occur more efficiently than elsewhere. Such space units are also *home* to many other different beliefs and notions. Metaphysical zones centring on a belief or remembrance of an *event, person or entity* are sustainable so far as believers, followers exist, conduct activities to further the belief or notion or, till a counter effect comes to be accepted.

Peripheral zones

Peripheral zones emerge as an antithesis or concurrent space segment of the core zones. These flourish on the edge and derive their functionality from the barriers, so abut them. A core zone is dominated by group's main and common activity, whereas the peripheral zones are distinctive escape areas and so have limited or specific utility. A peripheral zone is often relevant only for a while, to an individual, for an activity and for an expanse.

Primitively the **extent of the peripheral zone** was determined by the concern for safety, warmth from the fire, the need for privacy, scale of the task-activity and distancing from elements (to reduce their intensity and reach). The barriers, where available formed the edge sections of the peripheral zone. These were also used for reclining, hanging personal items and for expression (artwork).

Peripheral zones are basically shaped by the quality of the core zone, but are more often affected by the nature of the periphery of other domains and happenings beyond. The edge areas allow a person to selectively taste the happenings of outside world even while remaining inside. Peripheral zones are flexible, i.e. can be stretched or contracted from their nominal spread.

Peripheral zones have two faces, so can be exploited by orienting a happening to either to the core area or away from it. For any other positioning one may require strong metaphysical reason.

Multiple core zones of space entity tend to gel together, but often get separated by strong peripheral areas. Cooking and dining once (and still do in many societies) belonged to a single core zone, but were separated as two concurrent core areas. These two core areas were further separated by a pantry area that was a peripheral zone to both. Entrance is buffered by a lobby, foyer, entrance hall, or vestibule from other sections of the house. Yards, verandahs, porches are used to separate out the building from the street.

Peripheral zones develop as an *acutely specific section* against the *less defined core zone*. Study nooks in bedrooms, coffee rooms with the dining area, hobby zones in kitchens, home offices with vestibules, retiring rooms in private offices, vaults in banks, store rooms with homes and offices, wardrobes, shower stalls, change rooms in boutiques, cashier's cabins, pilot or driver's cabins, reception counters, janitor area, services ducts, podiums in lecture halls, green rooms with a performance stage, ticket booths, telephone kiosks, are all examples of peripheral zones separated from the core zones.

Peripheral areas mark the end of one space entity and beginning of another one. Peripheral zones are **thresholds** to other space entities, and occur or are perceived to be an intermediate or buffer state. Thresholds are interactive areas, and alter (qualitatively) the elements transiting through it. Their activeness arises from their level of transparency and thickness (mass of the barrier) both of which control (rate, direction) the exchange. Thresholds also occur as an interstice on the overlapping barriers. Here simultaneously two effects are operative.

Size of a space

Size of a space is a prime physical mark. At **absolute level** we realize the relative difference in Length or Width of a space to be either a narrow or wide entity. The height bestows its own scale of narrowness or broadness to the space. Height accentuates or de-emphasizes the character of the space nominally contributed by the proportion between the Length and the Width.

At a **relative level** the size of a space is scaled to the body size of the occupants. Such a scaling of the space immediately confers certain **functionality** for the space. The **nature of cognition, communication and exchanges** are function of the space size. The **level of intimacy**, the **loss of objectivity** or subjective involvements that occur in a space is governed by its size (related to the body of the occupants).

Occupants relate the size of a space primarily to their body sizes, and to a smaller extent to the task and *storage capacity of the space*. A space unit is perceived to be small, adequate or large in terms of various tasks and in terms of responses it offers

(such as echoes, reverberation, illumination, glare, vision) Same space may be seen to be of a different size depending on the past experiences. A person who has stayed in a very large house finds an apartment to be very small. Most people find hospital wards to be very large.

A change in size of a space domain immediately marks a change in its absolute character, functionality, environment, and so the behaviour of its users. The space sizes and potential functionality are notions that are difficult to separate out. This is further complicated as the peculiar environment also seems to manifest out of such notions. For a lay person the spaces within the *known range* are predictable and so manageable. Occupation of domains with **unusual proportions** (combinations of lengths, widths, and height) **and sizes** require extra efforts of accommodation.

A patient, in a large ward of a public hospital experiences the very large space to be strange compared to domestic (home) spaces, because the space size proportions are different, surfaces are harder and less absorbent (causing reverberation to be different), background noises are less passive, illumination levels are brighter during day and night, furniture and furnishings are unusual, in addition to sickness and weakened mental faculties.

Sub core zones are created with both, graduated and substantive changes of sizes. The size (and thereby the proportions) changes within a space facilitates different activities. The sub-core zones formed by building elements are static, but when formed by transient elements like the environment or realized through perception, are changeable. The perception of space size and proportion depends not only their predictability but also on the occupants' age, experience, mood, etc. The nature of variations (static dynamic, sudden, or as surprise) of sizes, proportions and their occurrence (sequence) in a space cause very marked **shift in behaviour**.

Space **proportions, sizes, their placement and sequencing** are very important tools of space design. Designers intentionally avoid or include such contrasts, but surprises do occur. Such spatial manipulations and surprises are further exploited by the users.

- **Small spaces** are small absolutely and relatively. A space is considered small if one, two, or all of its dimensions (Length, Width, Height) are smaller in *comparison* to the occupant's body size. A space is considered small (narrow!) if one of its horizontal-spread dimension (either Length or Width) is *proportionately* smaller.

Small spaces are often considered '*intimidating*' because the core zone nearly embraces the entire space. Small spaces have small core zones and often have no or very small peripheral zones. Small spaces with no or little peripheral zones are too changeable due to their adjacency of the core zone to neighbouring domains. Small spaces evoke *overwhelming power of the barriers* (e.g. no echoes, good reflection off the barrier surfaces). But conversely overwhelming barriers but of finite sizes (where the ends of the barriers are within the limits of cognition) may not be affirmed or recognised.

Small spaces show good recognition and so aid the intra-personal communication and exchanges. Small spaces are very *intimate and acutely specific* for one or few activities. Small spaces are efficient being manageable, but may not be functionally adequate. Even a temporary expansion of an activity is not permissible. Such spaces occur as attached modules of larger domains or have bulged peripheral zones.

- **Large spaces** have large core zones and due to the distanced barriers and have an equally large peripheral zone. Extensive or diffused core zones (invariably part of large spaces) have poor recognition, communication and exchange capacity. In large spaces the distanced barriers are also less participatory in the quality of the core zone. A large space with fewer occupants may seem impersonal compared to small spaces that in some way infuse intimacy. Large spaces allow individualization, but group formation becomes uncertain. Large spaces confer power to the individual who can 'own' it. Large spaces are perceived to be '*imposing*' as these enlarge both, the core and the peripheral zones.

- **Narrow spaces** are functionally less adequate or have one of the floor (Width vs Length) dimension proportionately smaller. Stairs, passages, roads, corridors, etc. are considered narrow on either or both the counts. The functional adequacy could be physical, a carryover of the past experiences or a psychological condition. Spaces with linear (directional) characteristics due to graphical composition or movement (traffic) seem narrower. Ordered or repeated experiences on a narrow way enhances the sequencing, and so its narrowness. Taller spaces often seem narrower compared to a shallow (low height) spaces with the same floor spread. Narrow spaces have strong effect of the side barriers which must run without any break (gap) or termination for substantial length, extent and duration. Narrow spaces discipline the movement. Narrow spaces allow formation of small groups. Linear distancing between them provides privacy and some intimacy. Narrow spaces have multi-core spaces, and each formed due to the specific conditions available locally. Examples are doors, windows, benches, niches, public address systems, illumination, air movement systems and ventilation nodes (fans, air conditioners, heaters), stair entrances, junctions (cross corridors, floor cutouts), signboards, parapets, ash trays, etc.

- **Wide space** is an ambiguous term. All large sized spaces are considered wide spaces, and so have both dimensions of the floor functionally more than adequate. A corridor is long (so essentially narrow) element but could have generous width, making it a *wide corridor*. A space seems wider if it is less occupied and sparingly furnished (a vacant hall). Shallow spaces (low height) seem wider and larger. Wide spaces have distanced barriers and so mid space elements like mid columns, mid space furniture, floor cut outs, etc. gain importance. A space may seem wide if its barriers are see-through, allowing vision, movement, etc. across it. Wide spaces allow group formation. Individuals and groups have intimacy and privacy due to inter group distancing. Wide spaces if adequately dimensioned permit sub-core activities near their peripheries.

- **Tall and Deep spaces** relate to the height or depth of the space, often a matter of reference (point of view). Tall and deep spaces seemingly have a modest footprint or section. Tall and deep spaces have strong surrounding barriers, restricting its apparent size experience but not necessarily its functionality. Chowks, cut-outs, light wells, stair wells, under sides of domes, etc. are directional (vertically stretched) and static (non changing) spaces. These are considered ideal for non diversionary activities like study, meditation and prayer. Exhibitions, museums emulate this effect, by spot lighting the displayed items. Tall and deep spaces or vertical tunnels have very little background noise (nearly absorb all the reflected sound, allowing only the direct waves).

- **Forms of Spaces** affect the spatial qualities and human behaviour. The form of a space is relevant, if only, it has peculiar ergonomic, functional and sensual (visual-depth, audio-reverberation, touch proximity) size. The form and size, both emerge due to the barriers. For a very large cubical or circular space to be of any relevance the occupants must be placed near the barriers. The barriers here either sustain the activities or affect the occupants very strongly (as in narrow, tall, deep spaces). Balanced or perfectly shaped spaces like square, cubical, rectangular, triangular, circular, spherical, pyramid, etc. have a centre, and if it is also the focus of space occupation, one becomes acutely aware of the shape of the space. The shape is also revealed if it controls the movement, as for example: convex - concave curvatures, spaces with movement in clockwise and counter clockwise movement, circular - parabolic curvatures, planes falling or opening in - out, right-left turning spirals, convergent or divergent (opening - ends) forms. The nature of activities in a space helps highlight or de-emphasize a shape.

British parliament has opposite benches in long rectangular room, signifying one is either for the government (ruling party) or in opposition. Many other parliaments in multi party democracies have segmental circle forms, with speaker occupying the cut end. Equal participation seminars are held in square or circular rooms. One way affairs, like press conferences were once held at the smaller end of a rectangular room, but are now held with a wider end as backdrop to facilitate video shooting. Lectures, discourses are focussed to the speaker. Fashion shows use the long axis of a rectangular space to be with the spectators.

In Olympic's main stadium is a multi function entity, where events like opening - closing ceremonies get a highly defined shape - form, but smaller items of athletics get a de-emphasized (nonspecific) shape entity.

Monuments designed for posterity (historic buildings - memorials), government buildings, institutions associated with discipline (army training, hospitals, research laboratories) overwhelmingly have cubical shapes or regular circular forms. A square or a circle exist by them and seem to survive in all types of conditions and times. Inversely a free - irregular shape may not last unless it is properly oriented, and made to fit well in a setting. *Geometry of a form is transmittable across cultures.*

Overhead closed in forms like dome, pyramid, tents, etc. seem to provide greater cover and so protection compared regular cubical or flat roofs. Sloped roofs and floors not only indicate an orientation but enforce concentration (or dissipation). Slopes indicate a gradual change whereas stepped forms show a sequential

change. Slopes have been used to merge different domains and steps to demarcate the divisions.

Environment is conditioned at desired locations. Such efforts include shading devices, erection of barriers, reflectors and receptors, insulations, time delay mechanisms, etc. Spaces are endowed with dual or multiplicative elements. Such **multi-functional spaces** offer variations in sizes, shapes and other characteristics. Multi-functional spaces do not have a holistic flavour, so help develop multi core zones.

Cooking and dining, were activities occurring close to the hearth, but cooking preceded the dining. These allowed them to be separated. Similarly, family get together were substantial part of the dining schedule, but presence of guests disturbed the intimacy of the family. So cooking, dining and social gathering spaces separated from one another as sub-core zones. In **single room houses** such territories are metaphorically identified, flexible in size, and relocatable. In large buildings these are physically marked as rooms and have metaphysical associations.

5

Interior Spaces

All beings show a prime behaviour towards possessing a space. The behaviour has an **immediate function**, of *continuing the occupation* (a tactic of perseverance preservation) and an **ensuing intention** of *effecting the inhabitation* (a strategy of domesticating). There are many other categories of behaviour that in some indirect manner facilitate the inhabitation (such as expression, communication, etc.).

Behaviour occurs in an environment covering a very vast area, a small section of which is conditioned as the **Inhabitable Realm**. The inhabitable realm is a finite space defined through many operants like: **Physical elements (barriers)**, **Metaphysical elements** (beliefs borne out of instincts, concepts, experiences, etc.), and **Metaphoric expressions**. Inhabitable entities are also formatted by **Group behaviour mechanisms** (web of interconnections or inter personal relationships).

A space segment that allows a set of activities can be called a *habitable space*. Habitable spaces are controlled or 'domesticated'. The domestication could be a recognition of some inherent features or inclusion of such elements that facilitate task conduction. Habitable space as a designated spatial entity is a *finite zone for occupation and activity*, an '**internal**' space. The space is called '**internal**' when referenced to an '**external segment**' that is less-fit for occupation and possession due to the latter's *uncertain character and infinite size*. Habitable spaces (or internal spaces) are more efficiently defined when contrasted with the less-habitable realms (or external segments).

We perceive an interior space to be bounded or an enclosed entity. The bounding is evident as **physical elements** like: edges, banks, walls, roofs, awnings, curtains, partitions, ceilings, etc. The **metaphysical elements** like concepts, beliefs, taboos, etc. also have a spread that signifies within and without. The metaphorical elements are declarations that mark the qualitative change and are often used to compensate the territorial presence of **physical and metaphysical** nature.

The exterior and interior spaces are *nominally adjacent* to each other in **real space and time**. An 'indoor space' is valid by being adjunct to the 'outdoor world'. But it is not always necessary for the internal space and external segment to be concurrent in time and space. One can conceive the Interior or Exterior alone, without the other being in time and space proximity. The **virtual immediacy** of the two realms is achieved by carrying across the impressions of the other. The duality of the interior and the exterior is like an antithetic zone to the other.

One can also replace the **physical presence** (manifesting in time or space) of the Exterior or Interior realms through their **notional representations**. The Internal and External spaces, any of it can occur as a '**metaphoric concept**' to the other.

The heaven and the hell are two surrounds of the earth. Egyptians have dummy doors (drawn or carved) in their tombs. A Garbha Griha in a temple is an inner sanctum. The Japanese gate *Mori* is placed anywhere, in a vast open land or sea, to mark a divide. *Lakshman Rekha* was a notional boundary.

An internal space though substantially adjunct to the external segment, however, has deep within it a core area that could be realized as insulated and less affected by the external segment. The **metaphysical elements** like concepts, beliefs, taboos, etc. that reflect the essence of the inhabitation are stronger at the core. Whereas **metaphorical elements** like signs, symbols flourish towards the exterior segment.

Threshold Areas

Exterior and the Interior spaces are intimate because where an interior terminates the exterior is effective (however, the exterior being infinite, will not end, unless an interior occurs). Immediacy of the exterior and interior spaces does not occur as a clean sharp edge divide, but many intermediate or 'grey zones' occur, where both (the exterior and interior) are effective. **Adjacency area** or the **threshold zone** is the place to realize both (the exterior and interior).

The threshold zones contain the '**physical barriers**' that condition the shape and size of the space and the interior environment. The barriers have their many grades of qualities (thickness, mass volume, size, absorbency, transparency, etc.). An interior space could spread much beyond its physical barriers, and the exterior may penetrate the bounded interior area.

Physical markings (that may not have any symbolic meaning) like a tree, lamppost, milestone, statue, barricade, edge, etc. define a space entity by *locating, shaping (form) sequencing, contrasting and imparting functionality*. By embedding elements that help scaling (sizing), orientation (directionality), expression (declarations, signs) or associations markings are achieved.

Revered spaces, shrines, historical sites, haunted buildings, buildings without utilitarian functions or commercial purposes have a strong metaphysical genesis. Beliefs are **metaphysical elements** but help to create entities as effective as the real spatial ones. Beliefs borne out of instincts, concepts, experiences, etc. are rooted to the **core area** (the non threshold zone). In threshold areas these have thinner effect, so are impacted with beliefs flourishing in the neighbourhood. Inhabitants' beliefs also form as a reaction (antithetic) to the neighbours' conditions, and in such cases may not have any internal roots.

Threshold areas are interactive areas. Neighbours and visitors have their first communication encounter here, so become an ideal space for **metaphoric declarations**. Metaphors occupy very little or no estate, and are interpretable by only a class of people. Both of these properties are exploited in creating *acutely functional and very exclusive interior spaces*. '*The metaphors provide exclusivity to the space and economics of expression*'.

A change in floor or ceiling through a physical marking, can metaphorically declare a change in the purpose of a space. A floral design vs a geometric pattern in flooring or trellis conveys a different attitude. Vernacular interior spaces, heritage buildings and 'master piece' architectural creations (created by acknowledged masters) abound with metaphors.

Group behaviour mechanisms

'**Group behaviour mechanisms**' show up as a web of interconnections of interpersonal relationships. These webs may not have any spatial occupation within an interior space entity, yet show up in various forms and places. In a threshold area or the '**outer circle**' such webs are very active in contrast to the '**inner circle**' or core zone which is 'an area of tranquillity'. The core section has least environmental disturbances so affords **privacy** and also becomes an area of **intimate relationships and commitment**. The peripheral areas are more public, vibrant and noncommittal.

Bars, restaurants, coffee houses, convention halls and such other participatory spaces offer varied zones for interpersonal activities. Homes have many zones that are physically defined, metaphysically endowed or metaphorically declared. In public areas like prayer and cinema halls people occupy different places (the front, the aisle or middle or the back rows) for inclusion or seclusion in the activity.

*A physically defined space begins to be a **dwelling** when endowed with metaphysical elements and becomes a **home** for the family with metaphoric declarations.*

Space zones or segment such as toilets, kitchens, are physically defined (ergonomically sized, shaped and provisioned with facilities) to be acutely functional. Bedrooms, study areas, office cabins, etc. are very *personalized space segments*. These are *associated with a person or group*, and so have a strong **metaphysical character**. Such spaces are often *exclusive and irrational and have emotional flavour*. Such space segments are personal belonging but can be made to be static as well as shifting with the person. Many such space segments are adorned with metaphoric declarations. These declarations are interpretable by the individual alone, exclusive class of people, or public, and so are conditionally relevant. Such declarations overcome the shortcomings of other space qualities

Followers of a sect may revere whatever place their leader occupies as it is metaphoric representation and strengthens the metaphysical essence. Wherever the most senior family member (a grand father / mother) sits creates an aura of respect or reverence. Character of the office cabins, size and nature of chairs, dining table positions (protocol of seating in gathering) all have a metaphysical as well as metaphoric purpose. The body odours, scents (perfumes) also denote an occupation possession of the space.

An interior space is a very complex entity. The environmental barriers, such as walls, roofs, awnings, curtains, partitions, ceilings, etc. form a space that is more or less focal, precisely defined at the core. Yet the barriers do create segments that are more strongly defined close to their body -the periphery. The barriers, however, are

always prone to change from outside effects. There are two distinct places for group mechanisms -the focal and the peripheral sections.

Lecture halls, bed rooms, modern kitchens are single activity and so focussed units, but road side cafes are peripheral. An older style kitchen sourcing its services off a wall was more peripheral, whereas modern kitchens have island workstations. A drawing room like the dining area is focussed for an activity, but a family room is multi functional and so less focal. Fire was the focus of the primitive home, and TV has become the current focus of home gathering. A physical feed-based work station is peripheral, but a wireless notepad computer offers flexibility of being anywhere.

The beliefs as a metaphysical factor cast a space that is sharper at the point of the origin, and prone to diffusion elsewhere. But often for belief to survive and gain strength peripheries are necessary. Churches, temples, Ashrams have strongly defined territory through peripheral structures like gates, walls, gopurams, etc. The space styling, adornments, etc. physically and metaphorically help strengthen the metaphysics of the entity.

The group behaviour mechanisms exploit the space characteristics to infuse *emotional and social functionality*. Group behaviour depends on individuals as well as interactions amongst such individuals. An individual projects psychological and sociological responses. The group behaviour though erratic has a degree of commonality -the cause of formation of the group. The common approach of the group is an assurance that the peculiar behaviour is not an aberration but a probable happening.

Accommodation of Environmental changes:

An Interior space though bounded, finite and well-defined remains ever changing, with the environmental changes outside. The inhabitants have to develop a **dynamic approach** to sustain their occupation of the space and continue the inhabitation.

Fundamentally the minor changes are accommodated at **personal and passive level**, i.e. recasting of the lifestyle, body posturing, metabolic activity, rescheduling, etc. At **micro level** the changes are absorbed by activities like repositioning of the furniture and facilities, establishing improved amenities, etc. At **macro level** the changes are assimilated in terms of additions, alterations, renovations, etc. in the built form. At a **radical level** the changes may force recasting of the group-dynamics (treaties, friendship, divorce, etc.), or migration to new locations.

The accommodation of environmental changes delays and disturbs the inhabitation but always equips one with better skills and greater efficiencies. Self-help buildings follow an inherited regimen that is well set and fail-safe in the community. The community here ensures the consistency of the locality and social behaviour. This contrasts with inhabitation attempts by migrants who at one end have no *vernacular heritage* to rely on, and at the other extreme are trying to establish their 'footprint' into a new setting.

A professional interior designer forms an interior space, incorporating all the conceivable variables, so as to make it as widely relevant (and also static) as possible. Designers also endeavour to instill certain 'life style' into the inhabitants (often as a *design statement*). Such professionally designed interiors, however do not escape the effects of changing environment. In spite of the best of intentions and efforts very often the user fails to behave as perceived, or responds ambiguously to the interior space. *Interior space behaviour remains incredulous.*

In public housing a standard design is exploited differently by various families. The same modular offices, cabins or hotel rooms arouse different feelings. Personalization of interior space is a continuing activity of the user. Long used or familiar spaces, because of personalization seem very secure and comfortable. Whereas in new spaces, a user seeks familiarity of form, utilities, equipments, furniture, furnishings, environment, and presence of known participants or co-habitants.

An Interior space is designed by professional designer for a certain life style (behaviour standards). The primary intention is to create a setting that inculcates a specific response. *The user may or need not be aware of such intentions.* Interior spaces are also devised to *alienate users* from the expected set of things. Such diversions are designed to excite, to register the change (end of old and arrival of new), and also to destabilize the users.

Make-believe:

Interior spaces result as an **organization of spatial configurations** *for specific conditions of environment, beliefs and group behaviour dynamics.* However, for circumstantial reasons, it is not always feasible to achieve *a perfect set in required time, given space and for the available technology.* To overcome such deficiencies Interior spaces are endowed with **make-believe** inputs or effects. The 'make-believe' is an economical (time, extent, money, effort) substitute of the original or hypothetical entity. The 'make-believe' also offers an exciting tool for creation of new experiences. (More on *make-believe* in later chapters).

We strongly associate entities like materials, technologies, spatial scaling (size, proportion), or temporal skewing (enhancing or delaying the event) with specific experiences. However, for **make-believe**, such experiences are created by substituting the nominal entities with different materials and technologies, spatial scaling or time skewing. This is done to replicate the same effects economically (in terms of effort, duration, spread). For example, our nominal experience tells us that dark spaces are cooler and quieter, and conversely bright spaces are noisier and warmer, but such expectations are sought to be replaced in maze and adventure tunnels of children parks. Night clubs are darker but noisier and prayer areas are brighter and yet quieter.

6 Behaviour in Interior Spaces

Behaviour in Interior spaces is conditioned by Three major factors: The Absolute qualities of the space, the Environment formed within, and the Inhabitants.

Space: The space as a physical entity is a networked system of forms. Many different forms together constitute a **spatial entity**. These forms have singular as well as multilateral functional identities. **Shape** is an **absolute function** of the space, though has many different configurations. **Size** is a **relative** (to the human body) **function** of the space. Sub units of a spatial entity have many different types of **interrelationships**: such as *proportions, analogy, sequencing, proximity*, etc. And all these are **absolute functions**. Sub units of a spatial entity, coexist with their individual identities but are merged, contagious or noncontagious. Inhabitants of a space transit effortlessly through such sub units of a spatial entity.

Shape configurations are closed or open ended. Some show potential of growth through swelling and others are open to attachments. The shape expansion is linear, planner or volumetric, and directional or haphazard. A spatial shape reflects the constituent forces, so a shape could be mutable or consistent.

Size is fundamentally scaled to the human being, but it also represents capacities of retaining, spreading and distancing. These capacities also reflect the effort and duration required to possess, occupy, use and even dispose off (de-possess, de-occupy) an entity.

Environment: Environment characterizes a space. A spatial entity becomes relevant to the inhabitant for the domesticated environment it offers. The space has little significance without the environment. Since environment is ever evolving and so varies the space continually. As the space changes with time, so does the behaviour of its inhabitants. The same space could be depressing or inspirational at different times, because the environmental conditions are changed, and because the bio system of the inhabitant gets set to a different mode. The space has a **subjective significance** to its inhabitants.

Inhabitants: The human behaviour results from many **individual factors**, such as the cognition system, the metabolism, past experiences, etc. Our perception of things and happenings around us results from our cognitive capacities, physiological needs; are further moulded by the inherited (intuitive) and learnt (intellectual) faculties. The inhabitants behave in response to the presence of other beings as well as the nature of communication (expression and its perception).

A space is thus a **setting** where physical elements form an environment for the inhabitants to play a certain role. Though sometimes, our beliefs make us perceive an environmental happening even in absence of the space forming elements, and the inhabitant play their roles in such a metaphysical world. Similarly presentation of metaphoric or symbolic elements suffices to initiate a full scale happening. Stage-

performances (dance, drama, mime shows) use physical elements like stage props, lighting, sound-effects, masks, dresses to metaphorically create space entities.

Our responses to a **space-setting** can be categorised as: Physiological, Psychological and Sociological. The **Physiological** responses at a very basic level *relate to survival, health, well being and comfort*. (At other levels physiological responses include expressions, movements, reaches, etc.) The **Psychological** responses *include the body (perception capacities), intuitive (inherited) and intellectual (learnt) faculties*. The **Sociological** responses *involve 'group behaviour dynamics' and communication*. These responses together define the *spectrum of human behaviour*.

Physiological Responses to the environment develop as the immediate and historical effects of the climate. The physiological responses also include the spatial occupation representing the '*dimensional manifestation of the human-body*' and its 'task functionality'. Physiological consequences also depend on the supportive means available: for controlling the stability and mobility, for achieving comfort, for increasing the efficiency and productivity. The supportive means extend the basic sensorial functions like vision, hearing, touch, taste, etc. Physiological responses are also affected by age, sex, level of adaptation, familiarity, consistency, variability, limb capacity, body-limb coordination, etc.

Psychological Responses relate to perception, cognition, and the reaction mechanism. *Perception* is a process of becoming aware of the environment around, including other human beings, through the sensations of sight, hearing, smell, touch, and taste. *Cognition* is the mental processing by thinking about, remembering, or evaluating the sensory information. *Response mechanisms* are concurrently active, even as the perception and cognition are occurring. Response mechanisms may activate further mental processes, or at some stage reflect the physiological change. The physiological changes due to response mechanisms are both automatic or voluntary, or instinctive to intentional.

Sociological Responses of human behaviour relate to the social needs of the occupants and awareness of their implications. The space, environment and the occupants together foster a social-contact mechanism.

Human behaviour is apparent at three distinct levels: Behaviour of lone occupants of a space, Behaviour of individuals in a group and Group-based behaviour (collective behaviour).

- *Behaviour of a lone occupant* of a space primarily depends on personal factors like the pre existing psychological condition, physiological make up, nature of the space+environment setting, experience, sequencing, personality build-up, cultural background and the tasks being handled. Secondly the behaviour is the result of social responses as seen in habits,

routines, customs, taboos, etc. Behaviour of a lone occupant is in consideration of other present and absentee human beings.

- *Behaviour of individuals in a group* of is basically formed by the individual or personal factors like degree of social familiarity, commonality of purpose, similarity of age, sex, physical features, notions of intimacy and privacy, etc. It is also a role locus formed by the personal comfort (adaptation or acclimatization), familiarity of space and the environment make up, the duration of space occupation, the sequencing of experiences, the capacity, means and opportunities of expression, etc.

- *Group based behaviour* is generated from many complex factors. It is a cumulation of individualistic behaviours affective as mass hysteria, a set of divisional affinities or a loner's rebel. Group based behaviour at one level occur within the same space and environment setting, but at other level it can *simulate individuals or sub groups dwelling in isolated space and environment settings through various means of communication*. Group based behaviour in the same space and environment setting is affected to a substantial extent by the proximity and positioning of the participants, but *modern audio-video and other virtual reality modes can simulate intensely identical behaviour in individuals that are separated not only in space but also in time*. The space and environment settings are exploited by smart individuals to enhance their presentations (expression).

Interior space is a finite well-defined entity, but requires continuous interventions to keep it a '*personalized space*'. Some have called the process as '*enriching*' a built form. The process could be very slow for financial, desire (motivation) and such other reasons, or delayed due to circumstantial causes. The process is both opportunistic as well as intentional one. In the former case one takes the advantage of the situation as it arises, and for the later strategies are planned as aspirations accumulate and realizations manifest. The opportunistic changes are slow to sudden and minor to substantial. The occupants are often not aware how and when the changes are occurring, and become aware of it when on an accumulation pause a disastrous effect or when in retrospect one realizes the quantum of change that has occurred. The strategic or intentional changes occur under a spectrum of expectations.

Greater **personalization** of an interior space affords efficiency but also leads to intensive possession of the space. The intensive possession ultimately becomes so saturated that changes are detested and avoided. The habitable space becomes set with many metaphysical elements, and lots of metaphorical elements emerge in the living space. The **reluctance to change** is challenged by many factors such as: *environment, ever-changing age and relationships profiles of the occupants, need to repair or replace the space making elements, the desire to impress and win-over others with the sheer efficiencies of the inhabitable realm, compulsions to make a*

radical start off a failure or shock (death, sickness, an accident, a calamity, break up in relationship), etc. Technological developments present better ways of doing things. Environmental changes relating to climate, terrain and developments in the neighbourhood force unavoidable change. New friends, relationships, neighbours, etc. provide impetus for change. Developments in means of communications (telephony, intranet, travelling, etc.) have affected how people conduct their life.

Migration has been a very active agent for recasting of interior spaces. Migration for economic, political or tragical reasons forces one to adopt new terrain, environment and neighbourhood. A migrant may keep an unbiblical connection to the place of origin or one may not have any kinship. Migrant with no ethnic roots accepts new conditions easily but may not have the skill to tackle a new situation or crisis. Whereas one with some affinity will have ways and means (necessary skills and legacy to handle the unusual conditions) to transpose the old *values and styles*.

Behaviour in Interior space occurs in a very shifting situation due factors like personal attitudes, group behaviour mechanisms, metaphysical effects, interpretations of metaphoric elements, environmental changes (routine and unpredictable events); also in a fairly ordered setting where the *family* is consistent, reliable and predictable, the *built forms* are fairly long lasting, and the interior 'enrichments' such as the furniture, furnishings and amenities are functional and well chosen. The space occupants, now inhabitants project a cohesive and consistent style of living -a life style. The style is resilient so accommodates vast range of variations. Furniture, furnishings and amenities are the first to get changed, and these tend to be variable, relocatable or have multiple functionally. Such variable elements are also used to reformat the spatial qualities.

7 Privacy and Intimacy

People inherently discern their relationship with others in terms of distances or spaces between them. In other words certain distancing from others is required to conduct tasks.

Proxemics involve the ways in which people in various cultures utilize both time and space as well as body positions and other factors for purposes of communication. The physical distance or closeness maintained between individuals, the body heat they give off, odours they perceive in social situations, angles of vision they maintain while talking, the pace of their behaviour, and the sense of time appropriate for communicating under differing conditions all determine the degree of intimacy.

Edward T. Hall defines four distinct distances at which interpersonal transactions normally take place: Intimate, Personal, Social, and Public. Sociological determinants such as group dynamics and communication also affect personal interactions within an environment.

- 1 An individual has a very **intimate area** close to the body, within which it is possible to have physical touch, non verbal communication and emotional interactions. To gain such an intimate position one needs to be familiar with the other person or coerce. Even in the intimate space close to the body, the nature and level of intimacy is affected by the attitudes of the persons involved.
- 2 There is an area immediate to the body that marks the **zone of regulated and selective participation**. This is an area where one can reach out through projection (expression), channels of communication, physically (through body limbs) or stretch out with gadgets (walking stick, stethoscope, etc.). Here intimacy is regulated but not a private affair unless some real screening barriers are used to achieve the privacy. One can dwell in a culture or state formed of metaphysical elements (beliefs, customs, etc.), to achieve the same.
- 3 There is a zone of varying **proximity**. The proximity is governed by the *position and duration* of eye contact, pitch and language shout or call-in, olfactory sensation and body heat perception. The zone of proximity is affective in space distancing and time duration. The distance and duration are used alternatively to compensate the other.
- 4 Beyond the body related zones are **areas marked by reach of the expression and communication**. Such areas could be located within a domain or in other merged, linked or contagious domains. Here intimacy or privacy of personal nature is not available, yet one can announce it through metaphoric presentations.

- 5 The **spaces beyond the current domain** like the street, neighbourhood, and such public areas where 'privacy' is afforded by the familiarity of the surroundings. These areas have intimacy of the distance, within the visible range, in reach of shout or call, and the odour. These are part of the 'home' setting. Such public areas foster non-intimate group behaviour.
- 6 The **inter domain spaces** have personal relevance so far as there is a link active in time and space. This makes it a place for a sporadic encounter, the effects of which could persist as a remembrance or experience. Frequent occurrences belie a consistency or permanency. It functions like a networked zone (web) where something relevant is always available. So no matter where a person arrives, it begins to manifest familiarity or is pregnant with possibilities.

Individualization is an important force in determining the need for privacy and intimacy. Individualization is not just a matter of isolation or distancing from others, attitude of behaviour or a style of space occupation, but results from subtle factors like social conditions, expression, communicability, etc.

A person or group carves own space by different territorial markings. The territorial markings such as of physical, metaphysical, metaphorical nature present spaces of many different characteristics. *Territoriality is a means of achieving a desired level of privacy.* It involves creating and maintaining *an exclusive control over a space by an individual or group.* This control implies privileges and may involve aggressive actions in its defence. For the individual, territorial control provides security and identity, and is communicated through *personalization and definition of the space.* For the group, territorial control, is the cause of their being an entity, and is expressed through the common behaviour.

Hargie & Dickson identify 4 spatial territories:

1. Primary territory: this refers to an area associated with someone who has exclusive use of it. For example, a house that others cannot enter without the owner's permission.
2. Secondary territory: unlike the previous type, there is no *right* to occupancy, but people may still feel some degree of ownership (belonging) of a particular space. For example, someone may sit in the same seat on a train every day and feel aggrieved if someone else sits there.
3. Public territory: this refers to an area that is available to all, but only for a set period, such as a parking space or a seat in a library. Although people have only a limited claim over that space, they often want to exceed that claim, to show their interest in it. For example, it was found that people take longer to leave a parking space when someone is waiting to take that space.

4. Interaction territory: this is space created by others when they are interacting. For example, when a group is talking to each other on a footpath, others will walk around the group rather than disturb it.

Privacy is a process by which persons make themselves more or less accessible to others. A person or group could achieve insulation through physiological posturing, and mental isolation by controlling sensorial perception, communication, recognition, etc.

One requires many different types of privacy: Physical privacy › against someone making a close approach (touch or near approximation), Visual privacy › to limit others' view of oneself, Audio privacy › insulation against being overheard and interference from background noise, Olfactory privacy › limiting to reveal one's own physiological state or experiencing someone else's such a state (hormones-odours). Other privacy parameters include the body temperature, breathing rate, heart beats, pulse rate, vibrations of the body, sweating and perspiration.

Visual privacy addresses the ability to limit others' view of oneself. Inherent in human behaviour is the tendency to avoid situations in which one can be watched without being aware of who is watching. Visual privacy can be achieved through the use of furnishings, partitions or walls. In a private space or an office, people will often orient their desk in order to visually control the doorway and achieve a visually private space on one side of the desk. Similarly, people prefer to sit with a protected back, controlling the area they cannot see directly. In restaurants, the first seats to be filled are usually those along the walls. In outdoor spaces, people tend to sit against or beside objects such as trees and bushes rather than in the open.

Privacy is reflected in degrees of accessibility a person or group offers to others. The accessibility depends on the need for expression, communication, physiological requirements and sense of belonging for group behaviour mechanisms (common purposes, beliefs). Definition of an individual's interaction levels is one mechanism used in achieving a desired level of privacy.

Crowding occurs when personal space and territoriality mechanisms function ineffectively, resulting in an excess of undesired external social contact. Sociologically, people respond to crowding in different ways depending upon the situation. Sometimes humans tolerate crowding, though it may be unpleasant, because they know it is only temporary. In some situations crowding may be considered desirable, it may even be sought after if it is perceived as "part of the fun" or the expectation within a social setting. In either situation, however, psychological discomfort may be experienced if the crowding is perceived as too confining.

Intimacy is linked to Privacy. Intimacy is also a matter of physical distancing and isolation (insulation) from others. Intimacy is an attitude, mental conditioning or mental posture, one takes with another person or group of persons. One can be intimate to another person or group of persons without the apparent need for privacy. So intimacy is not always a function of physical proximity. One can feel close to a person who is long dead -an illusory presence or through notional links (clothes, odours, recorded sounds, etc.). Distancing could also be a matter of time, like remembrances.

Meaning of intimacy varies from relationship to relationship, and within a given relationship. Intimacy has more to do with rituals of connection. Intimacy is both the ability and the choice to be close, loving, and vulnerable. Intimacy requires identity development. You have to know yourself and your inner self in order to share yourself with another. Knowing yourself makes it possible to stand for yourself in an intimate relationship without taking over the other or losing yourself to the other. The ability to be separate or together is called self-differentiation.

Intimacy can have two main forms: emotional intimacy and physical intimacy. There could be other forms of empathy like cultural, intellectual, spiritual, social that are akin to intimacy in some conditions. Strategic relationship developed to take advantage of anyone could be very close but it is a make-believe intimacy.

Eye contact could be both intimate and non-intimate. A direct eye contact allows better nonverbal communication (empathy), but a direct eye contact also subdues the other person and thus is less-intimate. Persons meeting lonesomely (alone) are more intimate than their encounter in public presence or a gaze.

Virtual proximity such as a chat on telephone or mobile, web chatting, videoconferencing, are forms of being intimate. Intimacy is also achieved by entering into some one's private domain like home, a bedroom, toilet, study area. Homes and work places of great persons provide illusion of physical intimacy.

A **person** projects privacy and intimacy in various proportions, whereas the **space** facilitates various levels of physical closeness, isolation and insulation. The **mental needs** ultimately define the degree of involvement. The culture defines the acceptable or inappropriate types of intimacies. A crowded elevator or bus is not an intimate contact and a shake hand or hug nominally has no sexual meaning. Intimacy could be a **display or an expression** with physical touch (proximity) but with no apparent mental feelings.

Two persons or members of a group can talk in whispers and give out an impression of intimacy in spite of the apparent distance between them. Conversely talk-discussions in high pitch could be used to present bonhomie and thereby a close-knit entity. Politicians and celebrities talk in whispers to state things that need to be made public and talk loudly things that need not be public, both ways they draw the attention. A public orator changes the pitch from normal to very low or high to draw the attention of the audience and thereby register a point.

Privacy and intimacy are factors of environment for conducting certain tasks. In appropriate environment, ingress, distraction and unwanted participation by others are controlled. These are achieved in several ways: by placing required types of barriers, by physical and metaphorical declarations of the territorial markings, by suitable space planning and style of space occupation. Privacy is personal as well as group requirement, but intimacy is intra personal. The nature of a group behaviour mechanism defines the nature of privacy and degree of intimacy that is required.

The need to be alone or be part of a group arises from factors like **personal** (psychological and physiological), **intra-personal** (communication, exchanges) and **group** behaviour mechanisms (sense of belonging, sharing, participation, confirmation).

- For an individual the space that ‘distances’ own-self from others allows privacy. Whereas for a group, spaces that allow easy communication and recognition (without any aids or extra strain) are of nominal scale. Such ‘reasonably’ sized space provides intimacy for the group but do not allow personal privacy.
- Enclosing space forms (corners, cones, concaves) force individuals to be closely spaced and be intimate enough to form a group, or join an existing group.
- Crowded spaces force intimacy of coexistence. The coexistence may force an individual to mentally barricade own-self or *open-up*.
- Some environmental and other effects are highly focussed (illuminated spot, under the fan area, sunny patch, breezy path) and so help format new group sharing the same space segment.

Contacts between persons involve verbal and nonverbal communication. Verbal communication involves bodily movements mainly of the mouth and gesturing. Hall (1959) has stipulated that **spatial separation** also serves an expansive function. He made a study of the **spatial relations** that seem appropriate to various kinds of interactions. *They vary with intimacy, they depend on the possibility of eye contact, and they vary with the culture.*

One can easily distinguish strangers from friends in an airport lounge. Strangers will keep a distance taking alternate seats wherever possible. Friends tend to form clots, and families even pile one on the top of another. Total strangers will comfortably seat themselves only inches apart if the seats are back to back, but friends and the members of the family never arrange themselves in this way. Eye contact invites interaction and so is sought to the degree that intimacy already exists. (Hall E. T. 1959 The silent language).

Hall argues that there are **spatial zones** appropriate to various types of interactions. Impersonal discussion, for example, takes place at 1200 to 1500 mm; cross the inner boundary of this zone and one’s interlocutor will retreat; cross the outer boundary and he will advance or subtly change the manner in which he behaves adopting the pattern appropriate to the new distance. -Spatial zones of Social interactions (Hall 1959) (for American culture). Hall identified four ranges of distance based on the nature of the relationship between individuals: 00-450 mm is **intimate distance**; 450-1200 mm is **personal distance**; 1200-3600 mm is **social distance**; and 3600-7500 mm is **public distance**. Although, these ranges appear to be supported for **face-to-face interactions**. Distances for **virtual communication technology mediated** interactions have yet to be examined. Hall has shown that South American needs much closer distance for impersonal information than a North American desire or is accustomed to.

Very close	75 to 150 mm	Soft whisper, top secret
Close	200 to 300 mm	Audible whispers, very confidential
Near	300 to 500 mm	Soft voice, confidential
Neutral	500 to 900 mm	Soft voice, low volume, personal subject matter
Neutral	1300 to 1500 mm	Full voice, impersonal information

Public	1700 to 2500 mm	Slightly over-loud, information for others to hear
Across the room	2.50 to 6.00 mts	Loud voice, talking to a group
Hailing privately	6.00 to 7.5 mts	Indoors, Loud voice departures
Hailing public	30.00 mts	Outdoors, Loud voice shouting, departures and calls

One can move from impersonal discussion to personal matter by reducing the distance, or to a non personal information exchange by increasing the distance. TV anchors do the *distance trick* on their show. For an intimate question the anchor pushes forward the body (Larry King of CNN) but as soon as the question sinks in with the guest, the anchor withdraws not just to the nominal position but little further backward. These distancing movements allow the guest to deliver the answer more objectively and the camera frame the guest alone for such a 'heroic effort'. However, a host may intimidate the guest by doing exactly opposite of this.

The chairs for personal meeting of two important (equal status) personalities (e.g. Presidents of two nations) are upright single seat units (placed parallel but very slightly askew). But we still find dignitaries taking on different 'positions' by moving towards or leaning on one handrest, sitting cross way (diagonally), leaning forward or backward. The reasons are: *one is trying to enlarge or reduce the distance, take postures that imply affability, propriety, esteem, etc.* However, the sitting arrangement between two unequals, like a president and a prime minister (or a prime minister and a foreign minister) has two unequals (size, form, style) seats. The person with higher status sits in a single seat unit, whereas the other party is made to sit at a right angle and on a wider seat (double or triple seat sofa or even stiffer - upright seat). The furniture arrangement, the angle and the distance between them are regulated by set of rules or '*protocol*'. In spite of the strict protocol people through minor posturing do *subconsciously express their real attitude*. The **body language** reveals the nature of the encounter. The body language is just one facet of behaviour.

Coffee house and pub tables are small, so that people sitting across maintain intimate distance of 600 mm or less. Banquet tables are 1200 mm to allow talking across the table, but a wider table 1500 mm or more discourages the personal interactions and makes the occasion more formal. Important personalities use office tables of 900 mm or more depth to create a person to person (face to face or eye contact) distance of 1600 mm, which makes the interaction formal and noncommittal.

Living rooms of economic housing schemes are 3000-4000 mm wide. The eye contact or person to person distance for such sofas across the room is 2400-3400 mm, just adequate for *social or non intimate chat*. However, for a living room width of 5000 mm, the interaction distance becomes (for sofa across the room) 4400 mm. This is not conducive to social interaction, unless one can makes own-self herd by talking loudly, or seating forward -at the edge. In such wide rooms chatting is more common with persons sitting on the side sofas.