Nomology, the science of the laws of the mind (Hamilton, 1877, pp. 122-8) is a meta-model whereby issues such as management, personality and spirituality can be considered. The basis of Nomology is that decision-makers tend to analyse problems which involve qualitative distinctions by breaking them into activities, or categories of behaviour, which are each important in themselves and follow natural sequences. This is a natural approach that the mind uses when addressing a problem where there is no clear external frame of reference. The first categorisation is about the degree of uncertainty involved. What sort of problem is it? High uncertainty will require some sort of planning activity, low uncertainty some form of putting plans into effect. The second dichotomy relates to where is the main focus of the problem? Is it more to do with people, or more to do with structures, organisations, i.e. the “place” where some system is based? These categorisations and the language associated with them are very general, and are applicable to many different situations. The fundamental generic set of adjustment activities is shown in Figure 1. There are numerous examples of adjustment in management based on these general activities (Brugha, 1998a) and on eight particular activities (Brugha, 1998b).

A most important case is where the decision-maker “owns” the process in the sense that he or she decides “subjectively” when to proceed between stages, rather than when it is in some sense “objectively” “right”. The key difference is that,
consequently, the decision-maker cannot "pull" himself or herself to make the
decision. Hence the pull activity in Figure 1 disappears. The tone of the decision
then changes from adjustment to “development”, in the sense that the decision-maker
develops a subjective view or decision. The emphasis then becomes more one of
building on levels rather than finding a balance between different activities.
Development decision-making can be introverted or extroverted (Brugha, 1998c).
The first introverted level is the somatic, and refers to tangible things such as needs.
Then there are psychic (psychological) aspects such as preferences. Finally the pneumatic level refers to values or higher goals corresponding to the highest
introverted level of commitment of one’s will. Soma, psyche and pneuma come from
the Greek words for body, soul and spirit (literally wind).

The extroverted dimension corresponds to stages of convincing and starts with
technical or self-orientated issues. Then it relates to the context of the problem and
how other people see it. Finally it takes account of situations and how to achieve
goals or business-purposes. The introverted and the extroverted combine as two
dimensions and lead to the construction of nine levels, stages of activity and types of
thinking and the reconstruction of Maslow’s (1987) hierarchy of needs and Jung’s
(1971) orienting functions (Figure 2).

<table>
<thead>
<tr>
<th>Committed Phases</th>
<th>Convincing Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical</td>
</tr>
<tr>
<td></td>
<td>Self</td>
</tr>
<tr>
<td>Somatic</td>
<td>Physical / Have</td>
</tr>
<tr>
<td></td>
<td>Need</td>
</tr>
<tr>
<td>Psychic</td>
<td>Social / Do</td>
</tr>
<tr>
<td></td>
<td>Prefer</td>
</tr>
<tr>
<td>Pneumatic</td>
<td>Artistic / Are</td>
</tr>
<tr>
<td></td>
<td>Value</td>
</tr>
</tbody>
</table>

Figure 2: Levels of developmental activities and types of thinking

Jung’s insight was to identify intuiting and sensing as not only different
personality types, but also as related to introverted and extroverted dimensions. He
named two others as thinking and feeling. These are expanded to seven in Figure Two. The Myers-Briggs test also extends Jung’s types, but retains its either-or
dichotomies. The Enneagram (Table 1) arrives at the same set of nine types but in a
complementary manner. A complication is that Enneagram Type 4 needs to be
repositioned in order show a parallel with the other systems (Brugha, 1998c). The
differences between Myers-Briggs and the Enneagram are so great that people could
learn from doing both tests.
Table 1: Enneagram Numbers, Avoidances and Traps

<table>
<thead>
<tr>
<th>Introverted Orientation</th>
<th>Somatic</th>
<th>Psychic</th>
<th>Pneumatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self</td>
<td>1. Anger / Perfection</td>
<td>5. Emptiness / Knowledge</td>
<td>4. Ordinariness / Authenticity</td>
</tr>
</tbody>
</table>

Table 2: Systems Development Life Cycle activities

<table>
<thead>
<tr>
<th>Introverted Orientation</th>
<th>Technical</th>
<th>Contextual</th>
<th>Situational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatic</td>
<td>Survey project scope and feasibility</td>
<td>Study current system</td>
<td>Define the end-user's requirements</td>
</tr>
<tr>
<td>Psychic</td>
<td>Select a feasible solution from candidate solutions</td>
<td>Design the new system</td>
<td>Acquire computer hardware and software</td>
</tr>
<tr>
<td>Pneumatic</td>
<td>Construct the new system</td>
<td>Deliver the new system</td>
<td>Maintain and improve the system</td>
</tr>
</tbody>
</table>

The Systems Development Life Cycle fits this nine-phase structure of convincing within committing (Table 2). Nomology implies that these nine-stage models show different facets of the same structure. Consequently they can inform each other. For instance, the acquisition stage is likely to involve emotions, to require trust, and often be a painful choice. The information systems manager who is attuned to emotions and personality types uses such information in a therapeutic sense and when building teams.

A central claim of Nomology is that adjusting, convincing and committing comprehensively describe the three dimensions of how the mind structures decisions. For instance, each stage of the Systems Development Life Cycle is carried out as an adjustment process (Brugha, 2001). Consequently, the decision to move from one phase to the next and, within each phase from one stage to the next, is subjective. However, each stage, itself, must be done correctly. So, there are objective ways to decide if one has a good study or design.

Nomology uses a systematic approach to explore constructs that we think we understand. For instance, it suggests that to explore a term such as spirit one should start by asking “spirit as distinct from what?” The answers might be body and soul. Doing it again with the word body might suggest the word mind. Part of the nomological exploration of “body, mind, soul and spirit”: is to relate them to the generic terms proposition, perception, pull and push (Figure 1). If they relate properly there should be a consistent qualitative difference between each corresponding pair. This should reflect itself in meaningful phrases linking each pair such as “we propose in the body”, “we develop perceptions in the mind”, “we are pulled in our soul”, and “we push with our spirit”.

A simpler version of this structure, which is used for personal development, has two levels: committing and adjusting, making a twelve-step programme (Peace Pilgrim, 1981). The committing phases are (somatic) preparations, (psychic) purifications, and (pneumatic) relinquishments. Each phase has four steps corresponding to body, mind, soul and spirit.
A decision structure, where the dominating issue is the wish to adjust, is the Twelve Step Programme of Alcoholics Anonymous (Anonymous Authors, 1955). Each adjustment phase has three commitment stages. This version can also be used to change people to a higher level of spiritual activity, viz. the Spiritual Exercises of St. Ignatius of Loyola, which has been presented (Tyrrell, 1982; Fessard, 1956) as to “reform the deformed”, “conform the reformed”, “confirm the conformed”, and “transform the confirmed”. Clearly these also take place within the areas of body, mind, soul and spirit. Such a representation could be applied to any adjustment process, depending on how broadly one interpreted the idea of being “deformed”.

REFERENCES: