Conclusion

In the preceding chapters two main aspects of the personality of Linnæus as a man of science have been considered.

Primarily Linnæus' anthropological Dietetic was concerned with the physico-medical and socio-psychical conditions of life tending to preserve bodily and mental health. His recommendations must be viewed in connection with contemporary attitudes, habits and beliefs.

Secondly, the intellectual and personal fountains of knowledge which formed the symbol-milieu apparent in Linnæus' thoughts about medical and moral matters have been emphasized.

On the whole the scientific development of Linnæus shows a very conspicuous continuity, which was never basically broken, notwithstanding some periods of discouragement in his most active years and in his years of failing health. His weakness corresponds with discouragement and alternating signs of an approaching old age in the last two or three decades of his life. It is, however, difficult to establish any decisive turning-point. His most speculative period is incontestably from the late 1740s to the beginning of the 1770s. At this age memories of his youth seem to have been vividly recalled.

The empirical vein in Linnæus, very typical of a young man in the period of Enlightenment, never lost its strong hold on him. On the contrary, it increased through the large contributions of his many pupils which afforded new materials for systematization. It is important to bear in mind that from the very beginning Linnæus' systematical method was based on rationalistic and empirical arguments. Linnæus' systematics had been built on the dichotomy of sexuality in the realm of organisms. As time passed it grew into a universal dualistic principle. In this manner the distinctions in the morphological structure of the vegetable and the animal world became to him biological analogies. Hereafter Linnæus was often faced with the antithesis of the necessity and expediency in the course of nature. The antithesis merged on the one hand, into the question of body and mind

and on the other, into the question of the relationship between the order of Nature and the Moral order of the world.

Whatever may be said about the Linnean science of medicine, the Dietetic was its Alpha and Omega. His anthropological views were derived from Hipporcrates and Galen. Thereby, however, little is said about its real implication. We must not presume that Linnæus obtained his philosophy from Pliny and Seneca or his concept of causality from Aristotle. All such assumptions are vain, because between Linnæus and his Roman and Greek authors there is the pre-scientific learning of the Middle Ages and the Renaissance, and above all, the renewed thought of the old Platonism, the neo-Platonism, the neo-Pythagoreism and the neo-Stoicism, enfolded in the very wide robes of Hermetic science. And not only that, but also the neo-Paracelsian and neo-Hippocratic medicine of the previous century. All this should not be overlooked when speaking of Linnæus' scientific attitudes.

The empiricism and sensualism of the New Science could not, as we have seen above, have left the young Boerhaavian disciple of medicine unaffected. However, Linnæus became neither a spiritualist nor a mechanist in his views on Nature. It is rather astonishing to read the Lucretian epigraph, which Linnæus placed on the last page of *Clavis medicinæ duplex:*

Invenias primis a Sensibus esse creatam Notitiam veri, nec Sensus posse refelli. Qui nisi sint quousque falsa sit omnis.

Certainly, Linnæus was never a disciple of Democritus. But it should never be denied that he was a genuine son of his own century. Seen in the context of the flourishing endeavours of the time to gather new experiences, Linnæus cannot be blamed for an unreasonable interpretation of the evidence provided by the five senses. It seems to us more remarkable, however, that Linnæus did not deny the possibility of the existence of phenomena outside human sensory perception.

When Linnæus seeks for rational answers to questions of extra-sensory perception, his explanations are fundamentally based on psycho-somatic considerations about the dynamics of Life. In his view the immanently divine powers of Nature are combined with conceptions of resistance and

inertia. These can be overcome only through the reluctance of the endeavouring opposite forms to bring about or remove the hindrances in the way of an equilibrium which is structurally foreseen in the order of the Universe. Such dynamics presuppose efficient causes (causae efficientes) through which the conflicts are settled and the invariabilities somehow guaranteed. At least some deliberation of this kind seems to lie behind the symbolism of the Linnean Lachesis.

The dynamic aspect also reduces the *magia naturalis* to a belief in more or less mechanically conceivable activities and accordingly contributes to de-spiritualize the effect of profane magic. But neither science nor magic could dismiss the fluctuating concept of Substance. In accordance with this pattern the ontological connection between Substance and Virtue could not be given up. The occult qualities, primary or secondary, held the field secured for them especially in medicine. Although derided by sceptic poets, the differences between learned and unlearned medicine were practically undisturbed in Linnæus' lifetime, notwithstanding the many positive efforts he made to neutralize popular quackery.

However, the emancipation of the New Science was retarded by the old analogical and homological fashions of thinking about Nature. The relations of the microcosmic and macrocosmic world were decaying in the minds of scientists already during Linnæus' youth. Astrology and alchemy were still afloat, though with expiring lanterns in our polar waters. Linnæus does not mention them again. Only their concomitants, the iatro-chemistry and iatrophysics were revealed to him with faint symbolic values.

The symbols used by Linnæus are, however, not to be underrated. Linnæus was not only the creator of the world-renowned terms *Flora* and *Fauna*. His symbolism in *Lachesis* and *Nemesis* is even more profound, and although it derived from his early years, it became important to him in the 1760s. The symbols of life, generation and destruction were vividly active in his mind throughout the years. It is scarcely necessary to bring to mind the symbols of the flowering tree, the marriage of plants, the dead man's skull in the churchyard. Linnæus' Swedish language abounds in popular symbolism. His expressive symbol-talk is very often impossible to render in any other language. No doubt, these tendencies of Linnæus were often subconsciously motivated by their anchorage in his emotional mind-structure

and his urgent need for evaluating expressions. Much of this symbolism seems to be archetypally founded and, as in *Nemesis*, absolutely formulated.

Considerations like these cannot but lead to the homological thinking of Linnæus, his sweeping parallels and magical similarities, most typically manifested in Clavis medicinæ duplex, but, perhaps even more noticeable in the latest posthumously printed editions of his great work Systema naturæ. It is difficult to say how many of these views were intended as an apology when submitted before a contemporary forum of men such as Albinus, Haller, Swieten, Sauvages, and von Rosenstein. In any case Clavis is written in a rather esoteric medical style. Its medical philosophy is conspicuous enough but is also a link in the chain of the old philosophic tradition in medicine. The most central point is constituted by the symbolized aspect of life as such. All things, human as well as cosmic, are grouped around this marvellous principle of the world. Its fundamentals are the elements, its design is the pre-formed duality of generation, its perfection is the prevalence of quinary organic forms. The origins of these views were unmistakably inherited from the Renaissance and the Baroque. Marsilio Ficino was the great figure. The Genesis was Corpus Hermeticum. But the root-fibres should be sought in even more remote ages of Ancient Greece.

Whether this is accepted or not, we cannot dwell on the purely historical analysis of the conceptual origins of the Linnean symbolism. Its fundamentals lay much closer to Linnæus and his time. How much of his symbolthinking covered his views on reality? It sounds rather paradoxical when Linnæus ends his *Clavis* by adducing evidence from the philosophy of Lucretius. This, however, is not very surprising as he had otherwise suggested similar ideas about the experience of the senses.

More important, at least as seen from outside, are Linnæus' views concerning the intricate problems of the coherences of the phenomena of Nature. Roughly speaking, he often seems to come to a stand-still at the point where his favourite author Seneca had left them in his *Quaestiones naturales*. Behind it all is the awkward question how, with his own eyes, and possibly also with the eyes of his contemporaries, Linnæus may have looked at sympathies as natural causes. When we remember that magic, as *magia naturalis* contained, for him at any rate, traces of truth, we are compelled to cut a very long story short. The plausibility of it is hidden in the fact that the doctrine

of sympathies in Nature always embraces some philosophy of natural causality. The great crux is the ambiguity of the concept of nature which meets us on nearly every page in the history of ideas since the opening of the Modern Age.

Linnæus' sense of reality made such questionings superfluous. It is very likely that he was never much intrigued by problems of this character. On the whole he stuck to his old vocabulary throughout his life. It is, however, not easy to say what exactly he always meant by the terms he used. This is certainly pertinent where the venerable hypothesis of sympathetic magic is concerned. At any rate the symbolic meaning of the homologies in his last works is conspicuous. Symbols are not seldom fragile and changeable, subject to transformation, ambiguous of evaluation and evanescent in more ways than one, but in the patterns of time they preserve a marvellous power of revival.

Obviously *Clavis* was intended as a paradigm and a confession. In the Preface the physicians were urged to stand fast on the solid double ground of reason and experience and not to follow the ways of the quack-doctors. The address is unknown. But the esoteric message is none the less apparent. The *Clavis* is the Linnean System of systems, too speculative to achieve a positive result, too hermetic to become a paradigm. From within, again, *l'esprit de la système* consists in the principle of motion, the Anima and the Creator. It forms the structure and the order of cosmic life. Inherently it is derived from God.

From our point of view the innermost motive of his system is a syndrome of philosophical, religious and magical symbols. *Lachesis* and *Nemesis* were for Linnæus not mere empty phrases. Together they actually represent, as two in one, his philosophy of the human condition and the sum of life.