

types, and similar pores can be detected on fuci; no polypes nor any visible token of life could be discovered by Jussieu in any coralline, a species of which, moreover, a Mr Meese had found growing upon a heath in Friesland; and lastly, the fructification of corallines is very similar to that of fuci and *confervæ*.

Were these the deductions of correct observation and experiment they would unquestionably have been conclusive, but some of them were already known to be contrary to the fact, and the others were weakened with doubts and uncertainties. Ellis, conscious of his superior knowledge both of marine botany and zoophytology, put forth an answer to this attack which is remarkable for clear arrangement, and for candid and honourable bearing to his opponent, who had scarcely deserved this at his hand.\* Having shewn that the presumed coralline which Pallas had compared to a *fucus* or sea-weed, was in fact a *fucus*, Ellis proceeded to prove how widely different every coralline was in structure and texture from any *confervæ*; and that the former, contrary to Pallas's assertion, not only gave out when burned "an offensive smell like that of burnt bones or hair," but afforded also on careful analysis both volatile alkali and empyreumatic oil. † "Dr Pallas," Ellis continues, "proceeds to prove that corallines cannot be animals, as the pores of their calcareous substances are too minute for any polypes to harbour in. These words of the Doctor's seem to imply, as if the coralline substances were only habitations for detached polypes, and not part of the animals themselves. How this affair stands, I hope to have clearly demonstrated long before this, for I have plainly seen, and endeavoured to shew mankind, that the softer and harder parts of zoophytes are so closely connected with one

\* It appears from the *Lin. Corresp.* Vol. i. p. 186, that Pallas had written disrespectfully of Ellis. In his *Elen. Zoophytorum* the latter, however, is profusely complimented:—"Ellisium subtilitate atque acumine observationum omnes super eminentem,"—Præf. p. x.—is praise enough surely, but its sincerity might be questionable.

† This character, as Lamouroux remarks, is insufficient, seeing that the major part of marine plants give out, in burning, odours and products analogous to those of animals.—*Cor. Flex.* p. 12. It is now well known that chemistry affords us, in its minute analyses, no test between animal and vegetable matter.—See Prout's *Bridgewater Treat.* p. 415, and more particularly Tiedemann's *Comp. Physiology*, p. 48, &c.