The Language of Insects — Nigel Cooke

As their Greek name suggests, the order of stick and leaf insects – Phasma – really are apparitions. Positioning themselves in a tangle of foliage, they oscillate between absolute baroque presence and magical invisibility. These 'walking leaves' are generally elongate and hemimetabolous (no pupae stage of metamorphosis). Some are broad and flattened. Some forms are apterous (winged) though often only the male actually flies. They have biting and chewing mouthparts and all are phytophagous (leaf eating: bramble, guava, mango and oak). They all possess compound eyes and some of the winged forms possess 2 ocelli (simple eyes). Their antennae are generally filiform (hair-like) ranging from 8 to over 100 segments and their cerci (abdominal appendages) are short. They are often adorned with numerous spines and other protuberances to make the leaf resemblance complete.

The illusion has always been seen as a defence strategy, and for good reason; Phasma are not built for swift exits. The extra-cellular to the intra-cellular ratio of potassium ions in Phasma is a paltry 4.5 (compared to the cockroach's Olympian 13.1). This means that the creatures are poor athletes next to the roach, managing only a feeble staggering motion at times when a sprint is urgently required. Species such as Phyllium siccifolium opt instead for thanatosis, or 'freezing'. In Greek Thanatos = death, and the journey of the insect from nymph to camouflaged adult could be seen as a pantomime vanitas, a deathly parody of life's transience – perversely, in the mimicry of life itself.

Magically, the resemblance to flourishing plant life only happens once the young Phyllium nymphs have started eating. The animal becomes green in a few short weeks, the body movements slow down from hyperactive to near-inertia, and the corpsing skills of the adult reach theatrical maturity. Only by rehearsing its own death and effacing its own identity like this can it effectively impersonate other organic life.

Yet negativity is present not only in the insect's lack of motion. The Phasma's markings – its visual details – can often have morbid implications too. On identifying the Phyllium amongst a cluster of bramble leaves on which it feeds, this particular 'leaf' looks in worse shape than the rest of the host plant. There are signs of decay where the leaf (body) meets the stem (head). Something has caused a pair of asymmetrical patches of corrosion on the main body. These pallid brown spots may indicate weather damage, malnutrition or infection, or perhaps the onset of lichen or mould. This sick looking leaf has also been chewed by aphids – the space between the antennae (themselves resembling smaller leaves) looks like an aperture caused by nibbling. The Phyllium not only looks like a leaf – it's the worst of the lot, a sorry specimen amongst the nourished and nourishing host leaves. It seems that it is not enough to resemble a leaf; for good measure, the Phyllium replicates the unappetising evidence of disease and parasite damage.

Yet this sort of negative detail blurs the distinction between the mystique of illusion and the harsh realities of survival. Whilst there is an uncanny teleplasty (physical photography) at work which generates counterfeit blemishes, lesions and stains, this witchcraft can backfire on the Phyllium with quite catastrophic results. For it should

come as no surprise to discover that an organism that camouflages itself as its own food should fall foul of the odd careless diner from time to time. It seems that Phyllium are ill equipped to distinguish between themselves and what they copy – that is, between their food and each other. Roger Caillois has noted the unfortunate tendency of the Phyllium to 'browse amongst themselves, taking each other for real leaves'.*

The resemblance, then, carries with it a curse. The success of the mimicry encourages activity at the level of the real as a reflexive response to successful representation. The 'luxury' of a realism expressive of the subtleties of organic growth with all its unsavoury details, short circuits any utility value the realism might have had. Here the cannibal nibbling elicited by this physical photography immediately becomes a part of the language of the physical photograph itself – it supplements and embellishes it, ornamenting it with a violence that immediately sinks into the language of leaf resemblance. The symbiosis between the information of one organism (leaf) and another (Phyllium) becomes grossly involuted to the point of identity collapse, through both verisimilitude and agonising death.

Does this mean that the illusion must be shattered in order for the creature to survive itself? If the illusion were to be broken, this would imply a positive agency on the part of the insect, a kind of imaginative authorship regulating the role of representation for specific ends. Yet is this so improbable? In a micro-universe where bugs graze upon one another in a hell of foliage mirrors, it begins to seem less far-fetched.

Meanwhile, in the Phyllium bioculatum, the morbid teleplasty goes even further. The insect alights on a healthy green bramble leaf, yet something is wrong, the insect is clearly a replica of the plant, but it is not merely damaged. It is a vision of the leaf several months in the future. This fake leaf has reached autumn too soon and sits as a lone auburn leaf on a green shrub. This pathologically autumnal Phyllium nonsensically locates itself as a dead resemblance of the living plant. Reflecting its diet in its colouration, the beast is subject to an internal and external autumn, a glitch in the logic of survival and mimicry. It looks like a leaf – just not one of these leaves at this moment. Which organism benefits in this straying from the script? Does this improvisation of one natural system in relation to another favour the plant or the insect?

In this profane interpretation of one organism by another we witness the 'prestigious magic' of survival as perverse pathological content. By defacing the plant with the talisman of its extinction, the death drama of the Phyllium becomes allegorical and prophetic, a multi-temporal narrative, a visual story of 'luxury' information outside the needs of survival. Out of the running down of the creature's identity to the point of Thanatosis, there occurs this: the disruption of Darwinian linear logic by the leaf bug's parodic and magically pointless 'painterly' vision.

* Roger Caillois, 'Mimicry and Legendary Psychasthenia', trans. John Shepley. October

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