

## **The Tempered Flesh of Exoskeletons**

by Lawrence English

We find ourselves swamped with possibility, embedded deeply within a world that provides the richest of evolving data sets. It is sense, in all its varied and promiscuous forms, that we call upon to decode and dissect. Our senses, which quite often travel in parallel, and often out of time and cycle with one another, are tools through which we can construct complex readings of environments, situations and other things that might, on first inspection, feel unrelated or disassociated. Sense provides the channels through which we undertake a process of correlation, correction, and connection.

Sense is a method used for accumulative phenomenology, the way we piece together floods of information, seeking to build wisdom and perhaps mute the echoes of Descartes. While the great French thinker may have proclaimed we must 'divide each difficulty into as many parts as is feasible and necessary to resolve it', we find ourselves in a very different moment of history to that of Descartes. While his words might not have been as initially pointed as they are often deployed today, the core tenet of his proposition haunts so much of how we approach our engagement with the world.

Whereas Descartes' breaking down may have been concerned with the macro to the meso, our age permits not just a reduction into the micro, but more often into the nano and beyond. At such a scale the ability to reconstitute and rebuild becomes increasingly challenging, if not impossible. The noise of detail, the many numbers of interlocking elements and associations, spill out like a black tide of information across the pages of our everyday, and to read them requires a capacity that not everyone has space for, let alone an interest in.

It's in these contested spaces of overflow and accumulation that we find ourselves entangled in zones of imagined promise. These are places where the unseen, the intangible and the uninhibited promises of raw materials and circumstances orbit one another. If we are to maintain, we must accumulate and compile these plentiful info-morsels. This process embraces the mechanical, the chemical and the psychological with equivalent temperament, and we must grant ourselves a depth of interrogation. We must dive into the unknown (perhaps even the unknowable) and ultimately apply ourselves to comprehending the opaque points of connection that lurk within, and around, that which is the subject of our sense.

Upon first blush, not everything reads as tangibly relational. It is on us to sense those relations and to test them. We must provoke a composite form and imagine how accumulation might permit us a new view of the materials in front of us.

This process of accumulation and assembly is captured in the opening credits of Mamoru Oshii's filmic retelling of Masamune Shirow's *Ghost In The Shell*, where we are invited to watch as a shell is assembled. It's a procedure through which the cyborg, initially nothing more than a series of interlocking mechanical plates and robotic materials, gradually becomes 'human'. For this to occur, the accumulated organs are collated into a body that passes through a series of transformative portals. Each one of these portals moves us from the nano to the macro and, piece by piece accumulates a mesh of raw material into identifiable form.

In the first montage we see an assemblage that is essentially robotic, it exists as something likely humanoid, but clearly mechanical. The rawest of materials are available for inspection, and as elegantly designed as they are, they still exist as the crudest building blocks of the body's substrate. It is only in the second collection of images that the interface to the human is made clear. The brain is shown, offered here as our ghost, confirming the final aspiration of this process of accumulation.

Throughout the remainder of the title sequence, Mokoto Kusanagi, the stories' protagonist takes form, layer upon layer, eventually becoming the human passing cyborg. The singular elements that comprise her inner workings, flesh and mechanics alike, when studied individually reveal but a single dimension of understanding. It is not until she is complete though, and those individual elements are in relation that her complexity is truly revealed.

By introducing the interiority of Kusanagi in this first instance, we are forced to reconcile ourselves with the inherent complexity of assemblage. We cannot conceive of the whole, the macro, without holding in the same moment the componentry that underpins the very possibility of her being. Degrees of sense and eventual understanding are in an ever-tightening orbit with one another. Their gravity a fundament of our capacities as complex thinkers.

In most of our everyday interactions with the modern world, we are encountering composite and finished objects and things. The buildings, cars, phones, microwave ovens and even the pencils we hold on occasion are rendered objects, processed and combined, to create an approachable and understandable thing with which we can interact, but also name and understand.

What happens though when we work backward, and when we trace objects in reverse? What lies beneath the thin veneer of the finished product? Moreso, what can we comprehend, not just from the components themselves, but also from the auxiliary materials, logistics and economics that forge them? How completely can they be sensed?

When we start to break down the whole, and trace each organ as it were, their united form, the object, thing or product, becomes infinitely more interwoven, and perhaps even becomes a provocation for us. This provocation asks us to contemplate not merely the thing itself, or what it becomes when part of an assemblage, but how it exists in states before that final resting state. Like tracing a leaf to the branch to the tree and its roots, a cascade of connection is present in each and every element we cast our senses towards. It is for us to be willing to freefall within that turbulent atmosphere of understandings and to be open to landing where it is our senses fall.