

## Intelligent Material

The author discusses the possibility of bits being able to control atomic particles. This is an interesting avenue because technology, digital technology is becoming ever present in our lives. We are evolving alongside technology to a point where we are becoming overwhelmed by it. The idea that even atomic particles can be controlled does not seem foreign to us because it is becoming an ever-present element in our society. We are shifting away from atoms and into a world dominated by the usage of bits to affect the perceived environment around us. The author predicts a world where the physical will no longer all-encompassing us.

Microtextures are technology that works on the microscopic level. Such technology can be seen in wearable technologies such as the shark skin imitator where we try to mimic the biological world with our micro machines. The new advancements in additive manufacturing mean that we are mimicking the natural building blocks of the world all the while trying to break through its capabilities and restrictions.

Micro Manufacturing can be seen in the amazing capabilities of these new technologies. Exploring materials and discovering uses for their properties a way in which it can be used to the fullest of its potential. We could transform ourselves to resemble other organisms in their physical properties.

Dynamic structures and the programmable matter is where bits react and change in response to environmental conditions. There has been an exploration in the ways that we can use dynamic and passive facades of machines which can detect regulate and react to minute changes in temperature. This would be great to solve some global issues and it would adapt appropriately to its environment.

These seem pretty great they would be in a way advancing and discovering the properties of every elements and inventing new way of utilising them into a way that will be mostly beneficial to us.

All of these advancements in technology and science help break apart what is achievable in a bit dominated the world. We are increasingly mediating over larger sectors of our environment through the use of machines, microtextures, and other such breakthrough. By continuing to explores the properties of elements the author presents a world in which we will no longer interact directly with the physical, atom based, world. Effectively we are simply continuing or path towards evolution as we have always done only this it is more abstract. Maybe we will be able to alter the ability to change the way we exist in the world.