Ellen Gallagher, who emerged in the States in the 1990s, is now at what feels like the start of a significant upsurge in her fame — some might say meteoric — rise to international fame. In Britain, she has shown at such venues as the South London Gallery and Tate Liverpool. But now, with AxME, her first major solo exhibition in this country, Tate Modern offers the British art lover a landmark opportunity to assess her 21-year career more deeply.

Don’t expect it to be easy. Gallagher is a complex thinker and to try to explain her practice is to drain it of much of its oddly mesmerising power. She may come from mixed parentage — her father was a professional wrestler whose family originated from Cape Verde, her mother was Irish — but her work is about much more than issues of race.

Wandering through this intriguing exhibition you gradually come to terms with the mind behind it. If you have ever been scuba diving you will probably recognise the mood. The visitor sinks slowly deeper through the gradually accumulating layers of Gallagher’s vision into a world where ideas start to unspool and drift, carried outwards by elusive subconscious currents.

As you move through the creations of a strikingly varied practice that encompasses watercolour painting and Plasticine moulding; the most restrained abstraction or meandering line-drawing; minimalist austerity and all but psychedelic films, you increasingly sense the density of the references gathering. Here is an artist who has been informed by influences as diverse as the minstrel shows or her experiences as an oceanographer studying the habits of a microscopic pteropod: a wing-footed water snail that flutters through the water at night. The many resonances gather as Gallagher revisits themes, echoing and revising, adding and deepening, shifting and transforming.

If you think this sounds perplexing, you are undoubtedly right. What should you make of her seminal yellow paintings? They begin their artistic existence as images clipped from the advertising pages in black lifestyle magazines. Arranging them in vast grids, Gallagher makes precise changes, whiting out eyes and sticking on Plasticine wigs. But when she tries to explain why, it doesn’t seem illuminating. “The wigs admit an anxiety about identity and loss; they map integration; the civil rights movement right through to Vietnam and women’s rights,” Gallagher says, “and they chart an emerging Afro-urban aesthetic where the Afro becomes this important way of taking up space in the city.”

It’s easy to be confused: even the title of this show AxME needs explanation. It is, apparently, a play on black vernacular language, on the way the artist takes a metaphorical axe to archival materials, on the way that we as the viewer should cut through the surface, and on the Yoruba word for the world’s life-force.

But what will hold the visitor is the sheer fascination of the works. Brought together they seem almost to conjure an atmosphere. They are possessed of an intriguing force. You certainly won’t have seen an artist who sees the world in this way before. Gallagher’s work holds you. Even as it discombobulates you, it makes its demands; enticing the spectator to stand before it, to let himself sink through dense sediments of meanings into an inscrutable but, at the same time, alluring other land.

It takes a lot of time. For all that Tate Modern is admirably fulfilling its purpose by introducing the public to this most enigmatic of contemporaries with a survey show that includes most of her key pieces, I can’t help suspecting that these are the sort of images that work best when you actually own them, when you can peruse them at peace for months upon months.

Ellen Gallagher: AxME is at Tate Modern, London SE1 (020-7887 8888) from May 1 to September 1.