Cildo Meireles is the first Brazilian artist to be given a full retrospective by the Tate. His shocking performance pieces and sensuous installations were a bold response to the military junta of the 60s and 70s. By James Hall

'I wanted to construct something very simple and direct' ... Mission/Missions (How to Build Cathedrals) by Cildo Meireles. Photograph: Daros Latin America Collection, Zurich/Tate Modern

In Understanding Media (1964), one of the pop-cultural bibles of the swinging 60s, the Canadian academic Marshall McLuhan singled out the ingredient that gave the decade its unique flavour. McLuhan believed he was living at a turning point in North American history because, for the first time, the sense of touch - and of sculptural values - was usurping the previously dominant sense of sight:

In cars, clothes, in paperback books; in beards, babies and beehive hairdos, the American has declared for stress on touch, on participation, involvement, and sculptural values. America, once the land of an abstractly visual order, is profoundly "in touch" again with European traditions of food and life and art . . . Perhaps touch is not just skin contact with things, but the very life of things in the mind. McLuhan traced the origins of the 60s sensorium back to the avant-garde educational programme first developed at the Bauhaus in Germany during the 1920s,
and then exported to America by refugees from the Nazis. The preliminary course at the Bauhaus featured compositional "play" with a wide variety of unorthodox materials and textures, but this approach had itself been heavily influenced by the revolutionary "tactile" education espoused by the Swiss-German kindergarten movement and by the Italian educational reformer Maria Montessori. If, as McLuhan believed, the stress on touch had now become "the teenagers' norm", such a proclivity would have begun in pre-school. Where grown-up art was concerned, McLuhan had his eye firmly fixed on New York, with its plethora of touchy-feely "happenings" and "environments", and its unruly gaggle of mixed-media assemblages, neo-dada and pop "combines" and reliefs.

Had McLuhan been writing at the end of the 60s, he would have needed to cast his net much further south, all the way down the eastern American seaboard to Brazil. At the beginning of the decade, the Brazilian art scene, centred on São Paulo, had been dominated by various forms of geometrical abstraction inspired by the European constructivist movement: the greatest monument to this period in Brazilian art is Oscar Niemeyer's starkly limpid architecture for the administrative capital Brasília, completed in 1960. But by the end of the decade, the creative centre of gravity had shifted to Rio de Janeiro, where a new kind of multimedia art had come to the fore that was intensely idiosyncratic and centred on the human body. The leading lights, Lygia Clark (1920-88) and Hélio Oiticica (1937-80), developed a "multisensorial" body art that featured all-enveloping environments and home-made bodysuits, capes, masks, blindfolds and restraints that appeared by turns fetishistic and futuristic, suicidal and predatory. These artists made much of being immersed in their immediate urban environment, and there can be little doubt they were inspired by the exuberant masquerades of the Rio carnival.

The installation artist Cildo Meireles, who will be the first Brazilian artist accorded a full retrospective by the Tate, is one of the most important heirs to Clark and Oiticica. There is a rogue physicality to much of his work, yet it also manifests a formal elegance and economy that suggest he has learned from Niemeyer and from the geometrical abstraction of his youth. Meireles was born in Rio in 1948, but was brought up in Brasilia and attended its art school before returning to Rio, where he still lives.

He first made his name on the international stage in 1970, when he was one of four Brazilian artists to participate in Information, an influential exhibition at the Museum of Modern Art, New York, that put conceptual art firmly on the map. Meireles exhibited Southern Cross (1969-70), a tiny wooden cube. One half was made from pine, the other from oak, and the two pieces were neatly glued together and sanded. This sugar-lump-sized cube has to be exhibited directly on the floor, and should ideally be displayed on its own in a large room. It is usually reproduced in larger-than-life close-up, balancing precariously on one of Meireles's fingertips: this is "skin contact" writ large - and small.

Southern Cross is a minimalist sculpture, on a Lilliputian scale: Meireles calls it an example of "humiliminimalism" - a humble brand of minimalism. He wanted it to be even smaller, "but when I sanded it down to my nails, I lost patience and stopped at 9mm". But unlike most minimalist sculpture, it is no mere "dumb" object - or indeed a stray bit of Montessori apparatus. It is meant to be as richly symbolic, sensuous and potent as an amulet. Meireles's father worked for the Indian Protection Service, responsible for the rights of indigenous tribespeople, and is said to have instigated the first legal trials against racially motivated murders. From his father - and from an uncle who lived deep in the forest - Meireles learned of the native Tupi tribe's belief that oak and pine are sacred trees, and that fire was first discovered by the rubbing together of these two woods, with the softer pine bursting into flame. The potential for friction is further alluded to by the cube's being placed on Meireles's "soft"
fingertip, as if he were about to flip it or roll it like a die, or knead it in the palm of his hand. In the catalogue for the New York exhibition, Meireles wove a Borgesian yarn about the "eastern" side of the cube representing modern urban Brazil and the "western" side representing the wild jungle side - though he didn't say which was which. The oak and pine cube might be said to reprise Constantin Brancusi's The Kiss, in which the rudimentary geometrical outline of two embracing lovers was incised into a single stone block, with no space between their bodies, or Lygia Clark's bodysuits that welded a man and a woman together, face to face. For most people, however, mention of "southern cross" in connection with an artist from Rio would conjure up images of the 100ft-high statue of Christ the redeemer, with outstretched, cruciform arms, that presides over the sprawling metropolis from a mountain top. Far from embracing the viewer like this archetypal catholic colossus, Meireles's miniature "cross" is a site of friction and collision, a crosscultural atom that may split or explode - or simply disappear - at any moment.

At Tate Modern, more of Meireles's large installations will be exhibited than ever before, with many thrown together in an open-plan layout, while a new outdoor commission will be on view at Chelsea College of Art, next to Tate Britain. Last year, the Tate bought one of Meireles's most ambitious and interactive installations, Eureka/Blindhotland (1970-75), in which a large area is encircled by a curtain of black nylon fishing net. Strewn across the floor of the enclosure are 200 black rubber balls, all about the size of a football (Meireles is a big fan, admiring the game's subtlety and intricacy). At the centre of the space, looming over it all like a road sign or gallows, is a pair of scales perched high up on a pole. The scales are perfectly balanced, despite supporting objects that appear to be of different weights: on one scale a wooden cross; on the other, two slightly heavier-looking wooden blocks.

The rubber balls are equally deceptive. They have been filled with different materials, and so their weights range from 150g to 1,500g. The viewers discover this for themselves, as they are allowed to come inside the enclosure and play around with the balls. The "invisible" variations in weight mean they could never quite be an emblem of the supremely beautiful game played by Pelé and Jairzinho while winning the 1970 World Cup. All the while, a recording can be heard of the balls being dropped from different heights and at different distances from the microphone: overlaid sounds are a recurring feature in Meireles's "multisensorial" work.

Meireles talks about this slightly menacing installation in a disengaged, quasi-scientific way, as if it were merely a psychological experiment, and the Archimedean "eureka" in the title adds to this impression: "Blindhotland is the generic name given to a series of works begun in 1970, in which the dominance of the visual gives way to a 'blind' perception of reality through the senses of hearing, smell and taste; through awareness of density, heat, and so on." Yet the age-old symbol of justice is a blindfolded female figure who holds up a perfectly balanced pair of scales in one hand and a sword in the other.

Meireles must have seen Alfredo Ceschiatti's hieratic seated granite statue of Justice (1960), sited outside Niemeyer's Supreme Court in Brasilia, on numerous occasions. She is blindfolded, and lays her sword horizontally across her lap so that it doubles up as a pair of scales that are permanently in balance.

A political reading of Blindhotland, in which the installation would imply that public as well as private judgments must be "blind" in order to get to the truth, is hard to avoid. A military junta, partly backed by the United States, had been in power in Brazil since 1964, and would continue to rule until 1984. After student protests in 1968, habeas corpus was suspended and a nationwide state of siege declared. In 1969, rebels kidnapped the US ambassador, but the rebel leader was assassinated soon after. Judicial torture and murder of political opponents, as
well as "disappearances", were regular occurrences.

Other works by Meireles from the period responded more overtly to the increasingly bleak political situation. Also in 1970, Meireles made a series of Insertions into Ideological Circuits, in which he doctored money and consumer items before putting them back into circulation. Banknotes were stamped with political slogans, such as "Who killed Herzog?" (Herzog was a journalist who died in prison), and had their value changed to "ZERO CRUZEIRO". Portraits of national heroes were replaced by images of a native Indian and a psychiatric patient. The same treatment was meted out to US dollars, and Coca-Cola bottles were inscribed with "Yankees Go Home" before being recycled under a deposit system. In the late 60s, many artists in Europe and America espoused dadaistic "guerrilla" tactics in their art - or "interventions", as they were known.

Germano Celant's famous first manifesto for Italian Arte Povera, published in 1967, was subtitled Notes for a Guerrilla War. But few western artists were as bold, or needed to be as brave, as Meireles. His most shocking work was also made at this time, the performance piece Tiradentes: Totem-Monument to the Political Prisoner (1970). Tiradentes was a national hero who organised the first uprising against Portuguese rule in 1789, but three years later he was hanged and quartered. The military junta tried to co-opt Tiradentes, and the exhibition at which Meireles's piece was showcased coincided with a nationwide programme celebrating him as a great patriot. The exhibition, entitled From Body to Earth, was held in various locations in the city of Belo Horizonte. On a building site outside the main art gallery, Meireles tied 10 live hens to a wooden stake impaled in the ground, at the top of which was a clinical thermometer. He then doused the hens in petrol and set fire to them. He has since said: "Of course I would never repeat a work like Tiradentes ... I can still hear those poor hens in my emotional memory. But in 1970 I felt it had to be done."

A later installation/performance piece that lasted for 24 hours, The Sermon on the Mount: Let there be Light (1973/79), captured the tensions of the time with a mordent wit. At first glance, it looks like a pale imitation of Andy Warhol's Brillo boxes exhibition, for the gallery was dominated by a large, neatly stacked pile of uniformly labelled boxes. But there was a striking difference, for the pile was made out of 126,000 Fiat Lux matchboxes (Fiat Lux means "let there be light"), and rather amazingly the manufacturers of the matches had sponsored the show by donating them. The precious pile was guarded by five male actors dressed as plain clothes security guards, wearing dark shades and with one hand slipped inside their jackets as if searching for a weapon. Meireles has observed: "The accumulated Fiat Lux matchboxes had the potential to create a huge explosion. Danger is a constitutive element in these works. Psychologically, when you come into contact with danger, your senses become more alert: you not only see but feel with greater intensity. My idea was to take away the psychological crutches." This "living dangerously" phase culminates with Volatile (1980/94), an installation in which a solitary candle burned at the end of an enclosed room, its floor covered with a thick layer of ash. Natural gas was pumped into the room, filling the spectators' nostrils, making them fear for their own safety.

The bulk of Meireles's best work was made, or conceived, under the military dictatorship, and most of the work in the Tate retrospective comes from this period, with very little from after 1990. It only goes to show that no necessary connection exists between good art and good governance, freedom and well-being, though we have been inclined to believe this ever since Winckelmann in the 18th century claimed that Greek art was great because it was made by free and fit men living under serene skies. The high quality of the art emerging from New York in the cold war period, from the abstract expressionists onwards, was
frequently put down to the fact that all these artists were living in a "free" society.

The finest piece from the post-1984 period is Mission/Missions (How to Build Cathedrals) (1987), which was shown at the ICA in London in 1990. This is the most visually spectacular of all his installments, and the most explicitly religious. It was made for an exhibition exploring the Jesuit missions to South America between 1610 and 1767, when the Jesuits were themselves suppressed by the papacy. Around 600,000 coins are laid out like a square carpet on the gallery floor, and from the mid-point, a thin column of communion wafers rises around eight feet into the air where it meets a matching suspended square canopy made from 2,000 bones. Meireles has explained: "I wanted to construct something that would be a kind of mathematical equation, very simple and direct, connecting three elements: material power, spiritual power, and a kind of unavoidable, historically repeated consequence of this conjunction, which was tragedy. I wanted a sky of bones, a floor of money, and a column of communion wafers to unite these two elements." Here, as so often in Meireles's work, mathematics is moralised and given a troublingly tangible architecture.

• Cildo Meireles is at Tate Modern, London SE1, from October 14 to January 11. Details: tate.org.uk; 020 7887 8888. James Hall's The Sinister Side: How Left-Right Symbolism Shaped Western Art, is published by OUP in November