# The Sitio Roberto Burle Marx: A Case Study in the Garden as Scientific Laboratory or Vegetal Studio for a Moving Work of Art?

JULIAN RAXWORTHY

The garden is a place of experimentation, where gardeners try out plants and both see how they grow and explore how to use them to effect, but does that make the garden a 'laboratory'?

Roberio Dias (2008) has described the Sitio Roberto Burle Marx (Roberto Burle Marx personal garden and nursery outside Rio de Janeiro, Brazil) as a 'landscape laboratory'. Using the Sitio as a case study and Dias's 2008 essay as a point of departure, this paper asks, if a laboratory is 'a room or building equipped for scientific experiments, research or teaching', does the phrase 'garden as laboratory' accurately describe how the garden operates as a creative space? If it does not, what would be a more appropriate description?

Considering the garden as an artist's studio recognises that, even while science is involved in the process of growing plants, its aim is to cultivate plants for aesthetic purposes. If each plant is a test, and the tests interact ecologically, then the art produced in the garden as studio is of a radically different type: a moving work of art. In reconceiving the garden as studio and its art as alive, I aim to help enrich theories of planting design to engage them with growth.

Gardening is a process of trial and error, where the gardener learns what will and will not grow and cultivates plants to achieve the garden as a whole that they desire. While this trial-and-error process is undoubtedly one of testing, does the fact that tests occur in the garden make it a 'laboratory'?

The subject of this special edition of *Landscape Review*, entitled 'Gardens as Laboratories', deserves careful consideration because it brings into question what the garden is and what happens there. Using Brazilian landscape architect Roberto Burle Marx's own garden (figure 1) as a case study, this paper asks, if a laboratory is 'a room or building equipped for scientific experiments, research or teaching', does the phrase 'garden as laboratory' accurately describe how the garden operates as a creative space? If it does not, what would be a more appropriate description?

Roberto Burle Marx used his garden (now called the Sitio Roberto Burle Marx) to test plants for later use in professional projects. Burle Marx and his brother bought the 80-hectare property just outside Rio de Janeiro, in Brazil, in 1949, and Burle Marx lived there from 1974 until his death in 1994. He gifted the property to what is now the Brazilian Institute of National Historic and Artistic Heritage (IPHAN) in 1984, then 40 hectares in size. The Sitio is regarded as one of the world's most significant individual collections of plants, particularly the families of Araceae, Bromeliaceae, Cycadaceae, Heliconiaceae, Marantaceae, Arecaceae and Velloziaceae, which are grown in both the garden and a 1.4-hectare shade house (figure 2).

Julian Raxworthy is Senior Lecturer and Convenor of the Master of Landscape Architecture and Master of Urban Design programs, School of Architecture, Planning and Geomatics, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa.

Telephone: +27 21 650 1752 Email: julian.raxworthy@uct.ac.za

#### **KEY WORDS**

Landscape architecture
Garden laboratory
Artist's studio
Landscape change
Plant growth
Roberto Burle Marx

REFLECTION



Calling it a 'landscape laboratory', Roberio Dias, Professor of Landscape Architecture at the Federal University of Rio de Janeiro and director of the Sitio from 1995–2011, quotes Burle Marx in an essay he wrote while director: 'this site [the Sitio] is the source of my experience in landscape architecture' (Dias, 2008).<sup>2</sup>

Dias's 2008 essay is the most comprehensive and detailed account of the Sitio, essentially a response to an argument he was having as director with the managing agency, IPHAN, concerning the nature of the Sitio. There is more to this disagreement than there might seem on the surface. Some of the argument was about provenance, whether the plants were endemic or not. Other parts concerned the 'look' of the Sitio, whether it did or did not look like other Burle Marx projects. Still others concerned whether Burle Marx himself was actually involved. All of the debate was about change.

Instrumental in suggesting that the site be preserved, Dias was clear that the Sitio was not a museum but a place of experimentation and learning, as suggested in the quote from Burle Marx above. For Dias, this meant that, quixotically, to preserve it was to allow it to continue to change. In contrast, IPHAN sought to leave it as close as possible to how it looked when Burle Marx died. This was largely because of protestations from gardeners who continued to work there and who claimed Dias was changing the site too much according to his own intentions. To this, Dias, who had worked with Burle Marx and talked with him extensively, argues that he did 'things how Burle Marx did them' (R Dias, 2015, pers comm).

In effect, Dias is arguing that the Sitio is a process or type of practice rather than a product, its physical condition simply the result of the tests that were undertaken, many of which, according to him, have failed.

The Sitio is a logical case study to use to answer the research question because Dias has called it a laboratory, and his essay is one of few that deal explicitly with this idea. In this paper, I argue with Dias in depth and from this propose that studio is a better way of thinking of and describing how the Sitio was used by Burle Marx and, more generally, as a model for the garden as a creative, testing space.<sup>3</sup>

Although Burle Marx is now called a landscape architect, his practice arose from a conjunction of his two real vocations: gardener and artist. I have used this bifurcation to consider the question of the garden as laboratory and to structure this paper.

If we think of the gardener as a scientist, then the garden might seem to be a laboratory. In the first section of this paper, I examine Dias's polarising of science and aesthetics and look at the role of subjective judgement in plant choices compared with assumptions about botanical performance testing.

Figure 1: An important feature of the Sitio Roberto Burle Marx is the pond, arranged on site by Burle Marx with plants he collected. (Photo: author's own.)

After demonstrating that Burle Marx's choices were more like a 'plantsman' than a botanist, I propose that if we think of the garden itself as a work of art, then the gardener is as much an artist as a scientist. This renders the garden more like the artist's studio than the laboratory, because it reframes what the tests conducted in the garden are. In considering the garden as a moving work of art, I also propose a way of thinking about plant change in the garden.

### Garden as laboratory

The laboratory is a space for scientific experiments. Epistemologically, this inherently ties the definition of the laboratory to notions of objectivity and a particular experimental model that keeps the personal judgement of the experimenter from interfering in the results. I then explore the Burle Marx experimental model at the Sitio according to Dias's description of it as a garden and laboratory. In his essay, Dias is quick to distance Burle Marx's experimental model from the aesthetic characteristics of the plantings for which he is best known. I demonstrate, however, that this separation is impossible and that Burle Marx's plantings, despite being botanical and thereby having a scientific aspect, were always also aesthetic.

When I talk about aesthetics, I am referring to what Yuriko Saito (2001) calls 'everyday aesthetics'. This involves appreciating, via aesthetic experience, the qualities of plants and making judgements about such qualities in their selection and manipulation according to the taste of the gardener, who in this instance is Roberto Burle Marx. While historically aesthetics are tied to the philosophy of art and the idea of beauty, I am not exercising my own taste, only proposing a relationship exists between plant qualities that arise from growth and a gardener's judgement about them. I am in agreement with Yuriko Saito (2001, p 25), who argues in 'Everyday Aesthetics' that treating fine art as the only subject of aesthetics 'unduly limits the range of aesthetic issues by implying that only those related to [fine] art are worthwhile for theoretical analysis'.

According to Dias (2008), for Burle Marx, the process of learning at the 'laboratory' of the Sitio comprised two stages: *getting* the plants and then *using* them.<sup>4</sup> The getting process involved collecting plants on botanical trips that Burle Marx undertook throughout Brazil. Landscape architect Oscar Bressane was a participant in expeditions in the late 1970s, including one for over a month in the Amazon (O Bressane, 2014, pers comm). Both he and Dias discuss how everyone on these trips had particular roles, Bressane's being, he says, 'a spotter', because he could see plants of certain types from a distance (O Bressane, 2014, pers comm). Part of the getting stage was for Burle Marx to vet the plant at the point of collection because, Dias says, he had a good eye for what would survive and Dias estimates that over 90 percent of plants collected did.

Because many of the plants Burle Marx collected (which Dias calls 'trophies' of his travels) were not even known to science and 'were not accompanied by instructions, it was necessary to find out how to keep them alive and see how they behaved outside of their habitat over a reasonable time' (Dias, 2008).<sup>5</sup> This was the 'using' process. Bressane says Burle Marx would 'put a plant in the shade and also in the sun, in the wet and also the dry, to test what would grow', noting that plants they collected in the Amazon changed characteristics when moved



Figure 2: The 1.4-hectare shade house at the Sitio where plants that had been 'gotten' on Burle Marx's expeditions were acclimatised before they were 'used' in tests in the garden. (Photo: author's own.)



Figure 3: An example from the
Sitio of one of Burle Marx's
characteristic 'aesthetic compositions'.
(Photos: author's own.)

from their native ecologies (O Bressane, 2014, pers comm). Here Burle Marx was developing ways of working with plants that he could use in his own professional practice, including acclimatisation, maintenance and propagation. In the final stages of 'using', after the plant performance research, 'aesthetic compositions were finally tested' (Dias, 2008) (figure 3).

Dias's description of the Sitio as 'a high quality generator of experimental knowledge' rather than as a 'museum for the purpose of exhibition' alludes to a scientism that renders Burle Marx's plant selections empirical, transforming Burle Marx from gardener to botanist, from artist to scientist. This interest in science is supported by both his experimental model in the Sitio and his botanical and patriotic interest in Brazilian native plants. Dias and others are keen to detach this interest from his aesthetic language, making it a serious concern, botanical rather than aesthetic, so that his plantings are not tropical but indigenous and they just happen to look tropical because that was the nature of the environment (Murray, 2006). Stepan (2001, p 208), however, argues that Burle Marx was a "tropicalist" – that is ... someone concerned and knowledgeable about tropical nature'.

A by-product of Burle Marx's enthusiasm for testing native plants is, Dias (2008) says, that 'the collection started invading the gardens' because the plants had not had enough 'vegetal probation'. Dias bemoans that legislation for protection of native species now protects native plants Burle Marx may have collected and been testing even though the test may have turned out to be unsuccessful, possibly resulting in the plant's removal if Burle Marx were now alive to judge it (Marken, 2013). Watching the Sitio turn into 'a chaotic mess', Dias (2008) introduces another maxim of Burle Marx: 'A garden is nature ordered by man, for man', asserting that Burle Marx would have taken a much more interventionist approach (figure 4).

This quote from Burle Marx demonstrates an intervention of judgement into an experimental process that is patently unscientific: even though the plant performs (passes its 'test'), it has some other quality, perhaps aesthetic, that he chooses to emphasise in his desire to order it. This judgement demonstrates Burle Marx's disinterestedness in the outcome of the experiment in botanical terms. About this green-wall designer and botanist Patrick Blanc is emphatic: 'You have to forget the term "botanist" as far as he's [Burle Marx is] concerned ... he was what could be called a "plantsman" (Rambert, 2011, p 287). The plantsman collects plants on the basis of their subjective likes and dislikes. As such, it is no surprise that Burle Marx would abandon a plant experiment if necessary for the sake of the garden as a whole, rather than seeing it through to its full development.

Because Burle Marx's work was synthetic, combining 'artistic modernism and nature in a very tangible way' (Stepan, 2001, p 220), I argue that, in this testing process, he would not 'get' a plant he did not want for his garden in an aesthetic sense and would not experiment with 'using' it if it had not met some design criteria or possibility in his mind. It is impossible to separate the test of a plant's empirical ability to survive from its aesthetic qualities because it is through survival and growth that it gains its aesthetic qualities. As such, it is not surprising that it was only after the performance tests that Burle Marx examined its aesthetic qualities, because there is no point considering aesthetically a plant that cannot survive. Correspondingly, it is also disingenuous of Dias (2008) to separate the biological performance of the plant from its use in the garden as an aesthetic whole. The wilfulness of the gardener in relation to the plant is characteristically disinterested in a way that Ferrari (2010) calls political, because the gardener is only interested in plant performance if it does the right thing for the overall garden's design; otherwise it is removed. The scientist, on the other hand, would persevere regardless.



Figure 4: The transition from the garden edge to the forest shows how the collection in the garden has metamorphosed into forest. (Photos: author's own.)

This brings into question what the tests are: are they for plants or is the garden a test? Presumably both, given each plant is a test and the site holds all the tests. Theoretically, this does not disturb the model of the conventional laboratory because each plant can be an autonomous experiment simply located in the same space of the laboratory.<sup>11</sup> However, a garden is an ecological milieu, where plants interact with their environment and each other. Consequently, any plant or test is a factor in understanding any other plant in its sphere of influence. Therefore, I would argue the ecology of the laboratory is a threat to any idea of experimental rigour, because tests interact, making it impossible for any test, or its results, to be autonomous.<sup>12</sup> This challenges spatial and temporal ideas of how a laboratory works and shows that the analogy of the garden as a laboratory is not a neat fit. If we consider that the Sitio as a garden is both the physical location of the individual tests, the plants, and the result of the tests as it changes dynamically through the interaction of all the tests, we can see this gives the garden a unique and exciting status, unlike, for example, a conventional laboratory, which is just the container for the processes and their artefacts.

Dias (2008) suggests the garden's true nature is hidden from visitors who do not realise it was used by Burle Marx for 'experimental reasons' but who are party to its testing process: 'People are generally stunned by the beauty of the gardens surrounding them, but may be surprised to discover these vegetal symphonies were only provisional tests'. Even a major author on Burle Marx, Sima Eliovson (1991, p 96), does not mention in her review of the Sitio that the garden is a place of testing; only that Burle Marx was a plant collector and the formal house landscape 'blended imperceptibly into the luxuriant vegetation around it', the testing space itself. By making the distinction between process and product, Dias is separating the plants' performance in tests from their contribution to the garden as an aesthetic whole, emphasising science over aesthetics. When Dias suggests the random visitor to the Sitio would not know the garden was an experiment, he is suggesting that it does not look like what was being done there – that is, the experiment and its outcome – was somehow different, and that 'the work triggered by Burle Marx is more than a product' (Dias, 2008). 14

If we substitute 'artefact' ('something observed in a scientific investigation or experiment that is not naturally present but occurs as a result of the preparative or investigative procedure' – *Oxford English Dictionary*) for Dias' term 'product', we see how vital some form of outcome is to an experimental process. The product, like the process, is vital, because it provides the proof for any hypothesis. Perhaps Dias is acknowledging this and, when he says the garden is 'more' than a product, perhaps he is really saying it is 'not only' a product.

Ultimately, I would argue the Sitio is not a laboratory because it is affected by the tests that happen in it, which is not possible in the kind of laboratories of science that the term is inherently tied to. Instead the outcome of the experiment is the experiment itself.

If the Sitio is not a work of art, a botanical garden, a natural area or monument to Burle Marx or, further, if Burle Marx was not really a scientist conducting laboratory experiments in an empirical sense, but nonetheless learnt everything he needed to know from the site, then what is the Sitio?

## Vegetal studio

The Sitio will always be a product and an experiment, recursively interacting in complex ways, because Burle Marx used science to guide unusual aesthetic outcomes through gardening in his vegetal studio. The studio is the place where an artist or designer works. The user's activity in a space is the determinant used to identify it: a cook works in a kitchen, an artist works on art in a studio. Therefore, the question of whether the Sitio is a laboratory or a studio hinges on what Burle Marx did there. In the section above I have demonstrated that even though Burle Marx was mobilising science to grow plants, his ultimate decisions about whether or not to use plants were aesthetic ones. In this section I look at how the garden is really a workshop or studio and then, building on the idea that the plant tests are in different stages and interacting, how the garden as a moving work of art transcends existing planting design categories.

If we accept the idea that the whole garden is a test then it is an enormously complex one, where the terms of reference are unclear and more subjective and individual judgement becomes important. In this sense, the site is more like an artist's studio than a laboratory, though I do not mean to romanticise the studio. In a studio, tests are undertaken to develop a work through trial and error, a process of fine-tuning subjective judgement rather than the pursuit of an essentialist, scientific truth as in the laboratory.

As well as calling the Sitio a laboratory, in his essay, Dias (2008) calls it a workshop. I would argue the latter is a better description than laboratory because it alludes to trial and error and the iterative process common in both the artist's studio and the garden. While I prefer the term workshop to laboratory, Latour and Woolgar (1986, p 236) argue the objectivity of the laboratory is not nearly as clear as science pretends and that knowledge in the laboratory is 'construct[ed through] slow, practical craftwork by which inscriptions are superimposed and accounts backed up and dismissed'. This emphasis on craft suggests the Sitio is a workshop of practices, as a studio is for the artist.

That Burle Marx regarded the Sitio as a workshop of change is evident when Dias (2008) notes that, at the Sitio, unlike in many of Burle Marx's other gardens, 'even in the most elaborately landscaped areas (such as characteristic plantings juxtaposing plant textures and colours, for example), he did not consider plant compositions as completed artworks'. <sup>15</sup>

This perspective is reminiscent of the way an artist works in their studio. Describing the studio, Buren (1979, p 53) says it is 'a private place ... presided over by the artist—resident, since only that work which he desires and allows to leave his studio will do so'. If one is allowed into an artist's studio, their private working space, one can see the process-work produced, provisional tests and half-completed artworks all together and not yet presented how they would be when in the art gallery. Because of the transition from private garden to public museum, Burle Marx's explorations are visible in a way, or rather at a rate, he might not have allowed in a professional project.

While Dias (2008) dismissively refers to 'landscaped areas' and 'plant compositions' in his description of Burle Marx's other projects, he calls the plantings at the Sitio 'vegetal symphonies'; my term for the latter is 'landscape symphonies' (Raxworthy, 2003). Perhaps the planting compositions Burle Marx

undertook in professional practice were complete for him because his work was representational rather than direct, as it was in his 'workshop' where he made decisions at eye level and in an iterative process over time. In the artist's studio, like the gardener but unlike the landscape architect, the artist is operating directly and non-representationally with their work.

With the artist, Burle Marx, now dead, perhaps the question is really what the studio looks like from the outside, without knowing what is being tested and at what stage such tests are. As Dias (2008) sees it, harsh judgement is required for the failed tests, which must go because 'the remains of the tests that did not work are like the scribbling of their children that proud parents regard as masterpieces, foisting them on strangers'. Within the private studio, these tests would not be seen but, now the Sitio is a public garden, they are.

I would still argue, however, that, autonomous of intention, author or process, the garden test remains a thing in the world with its own particular aesthetic qualities that have arisen from the process but nonetheless stand in their own right. However, even as they stand in their own right, they are still a record of the process. Consequently, while the visitor might not know about the test, I would argue they do see something of it in its outcome that they would not have seen if the process had not occurred. In the garden, the visitor takes it as they find it at that moment, without expecting a clear explanation but liking it or not for what it is rather than what it means.

The ephemeral, real-time nature of the 'vegetal symphony' in the garden makes it closer to the performance of music, perhaps by John Cage, which can also be described aesthetically, than to an art object that is a linear accumulation but does not change on its own. Rather than all the instruments – the plants – being composed at once, things are added that have to build on what is already happening and they affect each other, as I described in the previous section. As well as being a different type of laboratory or studio, as I have suggested, the garden and the art work produced in it are very different, composed as it were by 'lives', the lives of plants, as Ferrari (2010) says. As a living entity, the real materiality of a plant is growth, which is why Burle Marx's work is so striking, because he seems to do such contrived things with plants, things that speak not of growth as naturalness but of artificiality.

Although any quality a plant has arises from growth over time, planting design tends to adopt a static painterly model, focusing on 'plant selection' and the qualities of colour, texture, form and flowering cycles (Austin, 2002; Hackett, 1979; Robinson, 2004; Wöhrle and Wöhrle, 2008). Burle Marx is considered one of the greatest planting designers and regarded highly for how he worked with 'mass planting', 'architectural plants' and 'colour contrasts'. In conventional planting design texts, seasonality tends to be the only aspect that takes into consideration that plants grow over time; all the other criteria rely on ongoing maintenance activities to retain the desired effects. At the Rio de Janeiro Museum of Modern Art, Burle Marx made a striking pattern in the lawn out of grass, where a tight, wave-like motif had alternating green and yellow species (figure 5); however, when I visited only a slight ghosting was visible within the otherwise uniform turf (figure 6). This shows the planting design criterion of 'colour', in this instance, requires constant maintenance to weed out the more vigorous green species from the variegated yellow one.



Figure 5: The patterned lawn outside the Museum of Modern Art in Rio de Janeiro before 1990. (Photo: Sima Eliovson.)

This maintenance approach is quite different from that which Burle Marx used at the Sitio. Having united the product of the test and the space of testing itself at the Sitio, Burle Marx's 'vegetal symphonies' show characteristics that make the garden, and gardens generally, a moving work of art because of the particular relation to time as process, growth and result, and plant form.

Certain plants in the Sitio seemed fine for many years and only later began to develop new, useful, frail or sometimes disturbing characteristics. Discussing what he calls 'the time factor', Dias (2008) notes that with plants in the Sitio 'experiments are untimed'. He suggests the tests in the Sitio are ongoing because many species collected have not been tested (for example, they are still in the greenhouses) or are not yet developed enough for the outcome of the test to be evident. Further, some that are being tested are at different stages individually and in relation to each other.

If we refuse to separate the performative from the aesthetic characteristics of a plant, we then have an account of plants that values them as relational artefacts at every moment of their growth. If each plant is untimed in terms of the overall duration of the experiment, as Dias asserts, it is nonetheless still at a particular stage in its growth, whether juvenile or senescent, or at any other qualitatively different stage in between. Because, as I have been arguing, a garden as a whole is an experiment where each plant test interacts with every other, each plant's different growth conditions are also juxtaposed against each other. If we consider the garden as a moving work of art, then individual elements interact in dynamic ways, changing the work not just by degree, where plants get uniformly larger, but in kind, as Deleuze (1991) would say, where the work is completely different over time.



Figure 6: The lawn at the Museum of Modern Art in Rio de Janeiro, showing the previous pattern only ghosted among the different grasses, which have grown into each other. (Photos: author's own.)

This means a plant's ecological role and effects when it is young will be different from those when it is mature, as will its aesthetic or formal characteristics, both on its own and in relation to its neighbours with which it forms a 'composition'. To use a tropical example, the juvenile leaves of many rainforest species are red when the tree is perhaps only 1 metre high, when it will have the appearance of a sparse shrub. These leaves might be the only colour below the canopy. However, when a hole in the canopy opens, perhaps by design through the removal of a tree, the plant may shoot up to occupy it, changing from a shrub to a tree. This interlocking and blurring of form and time relationships ensures that, as Ferrari (2010, p 35) argues, 'as aesthetic arts go, gardening is messy [because it] is fraught with unpredictability, and its work is never complete'.

The idea of planting design compositions as uncompleted artworks is interesting and useful, and an apt description of what the gardener does. At any given moment, the gardener makes an aesthetic decision about the artwork as they fine-tune it, which in turn affects how the artwork is when they next intervene in it. Rather than being labelled incomplete, these compositions should be described as evolving. That these compositions were artworks is undeniable; however, these vegetal artworks redefine what an artwork is when it is not about completion, where art is an ongoing, evolving process.

## Conclusion

The Sitio Burle Marx is an exemplary source to look at when considering whether the garden can be a place of experimentation, as Dias (2008) rightly points out. His definition of it as a 'laboratory', however, is incorrect because it is a creative space: even though testing occurs there, it is as material for landscape design.

While not part of what I call 'the process discourse' – the quasi-scientific discourse in architecture and landscape architecture that focuses on processes of change – Dias's 2008 essay exhibits the same scientism. Like the process

discourse, it is an attempt at objectivity by valuing the allegedly objective testing process but not the subjective qualities of its result, despite these qualities being the ultimate rationale for conducting the tests in the first place.

As a creative space, the Sitio is more like an artist's studio, but one where the artworks in progress interact and influence each other, given the plant material is growing. This redefines what a work of art might be as well as what a studio is. As part of the process of considering the garden as a living work of art, the Sitio provides an example of a new language for planting design that moves it from the painterly to one based on qualities emerging from growth.

#### NOTES

- 1 I visited Sitio Roberto Burle Marx on 27 November 2010 and again on 1 April 2015 and documented my visit photographically. Some of my photographs can be viewed on my Flickr feed: www.flickr.com/photos/julian\_raxworthy/sets/72157648484783738/.
- 2 ('O Sítio é meu lugar de experiências em paisagismo.') All quotes from this essay on Dias's webpage are my own translation and have been checked with the author. I have included the original text from Dias's website in subsequent notes, in case the reader wishes to check my translations.
- 3 While I argue with Dias, I do so to develop an argument about the garden rather than to dispute his account of the Sitio, which is the most comprehensive account available. Additionally, Dias was generous in his correspondence with me as well as his time when we met in Rio de Janeiro. I would like to acknowledge his contribution to this essay and thank him for his help.
- 4 'Podemos dividir, então, as ditas experiências em dois grupos básicos: as de ter e as de usar.'
- 5 'Como seus troféus plantas em sua maioria inéditas em paisagismo, algumas até para a ciência não vinham acompanhados de manual de instruções, era necessário descobrir o modo de mantê-las vivas e como se comportariam fora de seu habitat ao longo de um tempo razoável.'
- 6 'Composições estéticas eram, enfim, ensaiadas.'
- 7 Speaking about Burle Marx's 'tropical aesthetic', Sally-Ann Murray describes how, during his visit to South Africa in the 1960s, gardeners in the tropical city of Durban styled their gardens using tropical plants from Brazil and biomorphic forms in his honour, but Burle Marx was more interested in the indigenous plants of South Africa, which he suggested they focus on.
- 8 'Muito pelo contrário, é como se a coleção de plantas estivesse invadindo os jardins. Iniciava-se então, com copiosa diversidade e indeterminada duração, um, digamos assim, estágio probatório vegetal.'
- 9 Commenting on the importance of removal as a gardening strategy, in Marken (2013), Raymond Jungles 'quotes Burle Marx about maintenance in the tropics: "In the tropics, garden maintenance is what you take out".
- 10 'O jardim é a natureza ordenada pelo homem e para o homem.'
- 11 This is essentially what an arboretum aims to be.
- 12 It is from this kind of realisation that the laws of thermodynamics arose.
- 13 'As pessoas, de maneira geral, aturdidas com a beleza dos jardins que as envolvia, não estavam propensas a acreditar que aquilo tudo, aquelas verdadeiras sinfonias vegetais fossem apenas ensaio, rascunho, teste.'
- 14 'O trabalho desencadeado por RBM é, mais do que um produt.'

- 15 '...[M]esmo nas áreas mais elaboradas paisagisticamente, ele não considerava as composições vegetais como obra de arte finalizada, diferentemente dos demais jardins que projetou.'
- 16 'Manter folcloricamente, perante estudiosos de paisagismo do mundo todo, os restos mortais de experiências que não deram certo é semelhante à atitude de pais que impingem como obras primas quaisquer rabiscos dos filhos.'
- 17 'As experiências que tiveram, e têm, ocorrência ali também precisam ser mais bem compreendidas, pois diferem formalmente das praticadas em outras atividades, principalmente quanto ao fator tempo: são experiências de duração indeterminada, que podem levar décadas e, muitas vezes, depois de aparentemente fornecer certos resultados, apresenta outros, contrários aos primeiros.'

#### REFERENCES

Austin, RL (2002) Elements of Planting Design, New York: John Wiley & Sons.

Buren, D (1979) (Translated by T Repensek) The Function of the Studio, October 10, pp 51-58.

Deleuze, G (1991) Bergsonism, New York: Zone Books.

Dias, R (2008) *O Sítio Santo Antônio da Bica: um laboratório paisagístico*. Accessed 20 October 2014, http://escritosnapaisagem.blogspot.com/2009/11/o-sitio-santo-antonio-da-bica-um.html.

Eliovson, S (1991) The Gardens of Roberto Burle Marx, London: Thames & Hudson.

Ferrari, GRF (2010) The Meaninglessness of Gardens, *The Journal of Aesthetics and Art Criticism* 68(1), pp 33–45.

Hackett, B (1979) Planting Design, London: E & FN Spon.

Latour, B and Woolgar, S (1986) Laboratory Life: The Construction of Scientific Facts, New Jersey: Princeton University Press.

Marken, B (2013) Tropic of Jungles, Landscape Architecture Magazine 67, pp 56-67.

Murray, SA (2006) The Idea of Gardening: Plants, Bewilderment, and Indigenous Identity in South Africa, *English in Africa* 33, pp 45–65.

Rambert, F (2011) In Praise of a Plant Amateur: Interview to Patrick Blanc. In *Roberto Burle Marx: The Modernity of Landscape*, L Cavalcanti, F El-Dahdah and F Rambert (eds), Barcelona: Actar.

Raxworthy, J (2003) 'Landscape Symphonies': Gardening as a Source of Landscape Architectural Practice, Engaged with Change. Paper presented at PROGRESS: The 20th annual conference of SAHANZ, University of Sydney, 2–5 October.

Robinson, N (2004) The Planting Design Handbook, Aldershot: Ashgate Publishing.

Saito, Y (2001) Everyday Aesthetics, Philosophy and Literature 25(1), pp 87–95.

Stepan, NL (2001)  $Picturing\ Tropical\ Nature$ , London: Reaktion Books.

Wöhrle, RE and Wöhrle, HJ (2008) Basics: Designing with Plants, Basel: Birkhäuser.