



# The contested spaces of Cuban development: Post-socialism, post-colonialism and the geography of transition <sup>☆</sup>

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## Abstract

The experience of the (post)socialist South has been marginal to the study of transition, despite the many similarities between processes of transition and development. This paper tries to better understand this overlap by exploring some empirical and conceptual connections between processes of development and processes of transition in Cuba. In doing so it makes two sets of arguments. The first set of arguments concerns the nature of ‘transition’ itself. I use the ‘contested spaces’ of the Cuban (socialist) biotech sector, and specifically its attempts to attract foreign (capitalist) investment as a case study. As a high profile industry, biotechnology functioned in Cuba as a political space within which questions of transition and development could be reconfigured by blurring the boundaries between them. In turn, this has enabled the Cuban State to legitimise responses to transition that would otherwise have appeared contradictory. The second set of arguments try to explain how this was possible. I argue that the slippage between nationalist and socialist visions of development allowed biotechnology (as a specifically developmentalist project) to be variously understood as, for example, a post-colonial socialist, or anti-colonial nationalist project in ways that suited the needs of transition at any one time. Such recombinations in many ways account for the non-linear and reversible nature of transition in Cuba. I speculate as to whether Bruno Latour’s work on the way capitalist societies understand themselves to be ‘modern’, helps explain how, in (post)socialist countries, processes of transition can be shaped through different historical constructions of modernisation and development.

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## 1. Introduction

The geography of the transition to a post-socialist world encompasses many sorts of change. For countries which formed the ‘third world’ within what was once the ‘second world’ – countries such as Cambodia, Cuba, and Vietnam for example – transition has not necessarily meant a wholesale rejection of socialism. In Cuba, the political ideology at least remains socialist, and Vietnam and Cambodia have both seen the persistence of the former bureaucratic elite (Hoffman, 2001; Gainsborough, 2002; Roberts, 2003). Nev-

ertheless, unlike North Korea, for example, these countries have undergone significant transitions as they re-think their political-economic systems in light of the pressures of an increasingly post-socialist world. In these countries, processes of transition have also always been closely bound up with processes of development and post-colonialism: two similar but different forms of negotiating and narrating change (Doty, 1996). These countries offer an important transition experience, therefore, and yet they have been largely overlooked. This is something that I think is not just reflective of our understanding of transition, it is constitutive of it.<sup>1</sup> In exploring some of the connections between

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<sup>1</sup> See Hoogvelt (1997) for a similar argument focussing on the ‘overlap’ of development and globalization.

processes of post-socialism, post-colonialism and development this paper seeks both to extend our understanding of transition and to pose ways of rethinking it. I do this on the basis of a close reading of business literature in and on Cuba throughout the 1990s, supported by interview material with foreign businessmen and Cuban officials within the biotech sector.<sup>2</sup> Rethinking the relationship between transition and development is a task that earlier studies of smaller, poorer, or otherwise more peripheral former socialist states has begun: Fish (2001) for example, has looked at the case of Mongolia, and King and Váradi (2002) have looked at the case of Hungary. I want here to make that task more explicit and to set out a geographical perspective for doing so.

The Cuban experience of transition differs in some important ways to experiences in the former Soviet Union and East Central Europe. To date, March-Poquet (2000: 109) has most directly engaged with the nature of Cuba's transition. Despite Castro's continuing commitment to socialism, March-Poquet concludes that the country has nevertheless undergone what he calls 'a valuable transition experience'. Some of these transitions have met the criteria of what many see as the essential features of a transition to capitalism: experimentation with private markets (such as house lettings) for example, or currency reform (such as legalisation of the dollar). But the Cuban state has always sought to position itself somewhat differently from its Eastern European counterparts and the country lacks in sheer size to be able to follow China's example of genuinely contained zones of private ownership. Indeed, as the government's withdrawal of the dollar in 2004 suggests, privatisation and liberalisation have tended not to exceed the bounds of what has been required by stabilisation. Examining how the Cuban State was simultaneously negotiating processes of development and transition provides one way of accounting for this. It also offers a different perspective on the two related issues that this special edition – 'The end of socialism...ten years on' – takes as its point of departure. Rather than work within this problematic conceptualisation (one which suggests an evaluation of how far we have come along a particular route) I want to show instead how geographies of the past are remembered in the present and how this helps determine why 'the end of socialism' means rather different things in different places.

This paper seeks to develop such a perspective over three parts. In the first part I argue that transition studies has tended to overlook the experiences of South-socialist countries. The South, I argue, sits uncomfortably within certain dominant temporal and spatial assumptions of transition

<sup>2</sup> This includes, for example, the annual Havana International Trade fairs, biopharmaceutical events, and speeches by party officials, often to business delegations, as well as discourse analysis of the Party Congresses, legislative changes and interviews with key actors. A full list of archival sources is provided at the end of the paper; interview sources are footnoted.

studies. I suggest that, as a result, traditional concepts of privatisation, liberalisation and stabilisation do not fully account for the varied and often contradictory experiences of transition in countries such as Cuba. In the second part I examine the case study of Cuba's high-profile biotechnology industry. What did the sorts of transition that Cuba was undergoing mean for this high-tech sector, and what, in turn, did biotech mean for Cuba's experience of transition? This section shows how Cuba's response to transition cuts across processes of privatisation, liberalisation and stabilisation. The final section accounts for this by examining some alternative ways of conceptualising transitional processes that can better account for the Cuban experience. Specifically, some of the insights of Bruno Latour are used to provide a conceptual framework to account for the informal politics of representation that lie behind the formal politics of transition in Cuba, and to further dislodge the view that transition sits more or less unproblematically along a socialism–postsocialism axis. But first I want to set out how processes of transition in Cuba were shaped in relation to processes of development and, in particular, how different historically-informed ways of imagining the latter (development) were used to help negotiate the former (transition).

### 1.1. Cuban transitions

In 1989 Cuba conducted as much as 83.1 per cent of its trade within the Council for Mutual Economic Assistance (CMEA), the socialist trading-bloc.<sup>3</sup> The collapse of the CMEA in 1991 initiated an economic landslide in Cuba. The state responded with a series of reforms that it hoped would ensure political stability and ameliorate the worst of the economic crisis. These reforms were part of an austerity footing known as the 'Special Period in Time of Peace'. While the Special Period made it clear that Castro was not prepared to compromise on socialism, it also laid bare the recognition that the government needed to "heighten interest in Cuba as an investment destination" (Miguel Figueras<sup>4</sup>). The result appeared to be a somewhat ambivalent policy that set political stasis alongside economic reform. Three industries were selected to carry the weight of this twin-track policy: sugar, tourism and biotechnology.<sup>5</sup> These industries were to be revamped and

<sup>3</sup> *Cuba Business* (CB), 1990. *Cuba Business* is a 'wholly independent bi-monthly report' (Cuba Business, mission statement) produced in the UK, but also distributed within Cuba and internationally, that aims to present 'the latest statistics and commentary on the Cuban economy, trade and payments' (ibid).

<sup>4</sup> Economic Advisor to the Minister President of CECE – the State Committee for Economic Cooperation, CB, December 1993, p. 4.

<sup>5</sup> In 1991, 'Castro confirmed that the strategic lines of utmost priority for the country's development in these difficult times are: the 'food plan', the development of tourism, and the promotion of biotechnology and the pharmaceutical industry' (FBIS, 1991, *Castro concerned about trade with USSR*, 02.04.91).

doubled to the task of clawing back the balance of payments deficit.

This paper focuses on the biotechnology industry.<sup>6</sup> I argue that one of the ways the state overcame the often conflicting imperatives of political stabilisation and economic renewal within the biotech sector was by inventively recombining nationalist and socialist discourses of development. Both nationalist and socialist accounts of development on the island are prominent in much of the planning literature at JUCEPLAN (the central planning agency). Because they propose different forms of development, they have also both been used to provide different accounts of the policies being introduced in the wake of the collapse of the Soviet Union. To implement policies that would ensure economic development without compromising its politics, the Cuban government sometimes couched its justifications in a strongly nationalist rhetoric; at other times it couched its justifications in a socialist rhetoric, or somewhere in between. In this paper, I want to show that Castro's government was able to effectively (re)combine these two discourses of development on the basis of Cuba's unique experience of having been involved in colonial relationships with Europe (1492–1899), America (1899–1902) and the Soviet Union (1962–1991). Historical memory of these different geo-political relationships has provided a wealth of different ways of understanding and framing processes of modernisation within political discourse. Such different ways of imagining encompass the Cuban state as, for example, a post-colonial nationalist polity or an anti-colonial socialist one and have been actively taken up within Cuban political discourse in the 1990s (Miller, 2003). Selectively drawing on these different historical experiences allowed the Castro government to respond to the pressures of transition in ways that would otherwise have appeared as either politically or economically impractical, illogical, or simply self-serving. In so doing, the Cuban government has forged new approaches to transition and opened an important window of opportunity that lies between 'neoliberal radicalism' and 'political immobilism' (Pickel, 1998: 75).

The use of history to justify or inform the struggle over geography is nothing unusual of course. Socialist states have often appealed to notions of 'true' socialism as a foil for engaging in non-socialist activities. Such recourse to the past seeks to hide the 'truth' of what are often simply pragmatic responses and legitimise them in the name of an unfolding historical logic. But Cuba's recourse to the past is more complex and subtle than this. The state has deliberately (re)engaged with the various ways that the struggle over geography has been waged in the past. Far from simply using historical narratives to justify actions in the pres-

ent, then, the Cuban state has used the *experience* of its struggles over geography in the past (and in particular its struggle for independence from various colonial relationships), as a resource in its struggle over the geography of transition in the present. It is therefore not a case of 'hiding' the truth (of, say, pragmatic responses) behind a rhetorical veneer of 'true socialism', but of creating new figures of truth by which to understand development. Such an argument breaks with traditional ways of interpreting Cuba's (post)socialist experience as a gradual process of limited but growing reforms along a reluctant East-European model. It also breaks with understanding the Cuban state's recourse to history as little more than a justification for pragmatic responses in the present. Quite to the contrary, there was in Cuba in the 1990s a concerted attempt to re-imagine the project of development in light of transitional processes. Understanding this is crucial to understanding the nature of Cuba's transition. It therefore warrants examining the relationship between transition and development more critically.

## 2. Part I: Representations of transition and new representational mappings

### 2.1. Cuba in context: transition vs development?

Studies of transition and studies of development obviously have much in common. In their basic formulation, concepts of transition and development are both based upon a theory of linear progression, both can be seen as discursive constructs as much as fields of study, and both encompass a wide variety of terms and conditions that make just these sorts of generalisations precarious. Both sub-disciplines relate also to the various area studies centres founded on either side of the Cold War. In the US, for example, the National Defense Education Act (1958), in particular, authorised the public funding of national resource centres to foster greater knowledge about politically sensitive areas. This included parts of the developing world, of course: the Balance of Power doctrine was at heart about seeking to determine the 'type' of development that countries such as Cuba underwent. Development has always been political; it has always been strongly related to socialist and capitalist discourses. In the post-socialist period, however, conceptualisations of transition have largely failed to take into account the politics of development in the socialist South. Indeed, there has been an overall decline in published studies of the socialist developing countries since 1991. The briefest of bibliometric studies reveals this. The *Journal of Communist Studies* (Continued as *Journal of Communist studies and Transition Politics*), a non region-specific journal (unlike *Europe-Asia Studies* for example) being a good case in point. Though generally providing a higher number of articles on the socialist South (from which I exclude China as a special case), it has showed markedly fewer articles covering the South since 1991. A glance at

<sup>6</sup> For an overview of the role of biotechnologies in development, see Fransman et al. (1995) 'The Biotechnology Revolution?', and Hobbelink (1991), 'Biotechnology and the Future of World Agriculture'. See also 'Increasing economic opportunities', editorial, *Biotechnology and Development Monitor*, No. 20, September 1994.

*Post-Communist Economies* (formerly *Communist Economies*), *World Politics*, and *Communist and Postcommunist Studies* (formerly *Communist Studies*) reveals a similar retreating around the metropolitan core post-1991, if less marked.

The above trend suggests that, the ‘metropole’ of the former soviet world system has more strongly called for attention. Hence, whilst vigorously denying the ‘end of history’ in the empirical record of post-socialist experiences, many writers have none-the-less subscribed to a regionalisation of historical agency in their analysis: the former core is deemed to be where we need to look to properly understand the situation.<sup>7</sup> Such a lack of attention seems remarkable given that, often, the countries of the socialist-South remain socialist. It is particularly surprising within geographical analyses of transition, given the discipline’s attention to countries of the South more generally. Adrian Smith has commented, in an exchange with Rob Potter, that such a lack may well reflect “funding regimes and availability of research money, linguistic expertise and very practical issues of working away from home” among other factors (Potter, 2001; Smith, 2002). This is a valid point, as is his caution that trying to make currently marginalised sub-disciplines more ‘central’ may be just as problematic. But I am not advocating that transition studies be more like development studies. Rather, I am interested in the consequences of the epistemic distance between them.

Of these, we might include, firstly, the pervasive discourse of path dependency which tend to focus attention on macro-economic shifts and leaves less room for other processes of transition. By the ‘discourse of path dependency’ I mean to include not just those (relatively few) analyses taking a self-acknowledged path-dependent approach, but also those analyses influenced by the assumption that we can unproblematically define an ‘a’ and a ‘b’ and a route between them. Holmes’ work on post-communism, for example, builds a succession of ‘stages’ into a generalised model of transition. Although Holmes considers Cuba and mentions anti-colonial nationalism as an important factor – ‘Castro’s regime was being legitimised to no small extent through anti-Yankee official nationalism’ (Holmes, 1997: 126) – the causes of this cannot properly be explained from within a path-dependent approach.<sup>8</sup> The path-dependent approach leaves little space for considering other parameters that shape transition.

Secondly, there tends to be a focus on what ‘transitional’ states should be, are, or will be (Cross, 1995; Mes-

<sup>7</sup> Though Fukuyama also said that some regions would remain ‘mired in history’, my comment is directed more to the disciplinary treatment of regions, wherein transitional trends are firstly picked up on in the former ECE-USSR and then compared to experiences in the developing world transitional states. The benchmark remains the former colonial core and meaning is constructed in its terms.

<sup>8</sup> For an alternative, and more contextually sensitive work in the same vein, see Sakwa (1996).

bahi, 1994; Vacs, 1994). This tends to ignore the slippage between different states that their very transitional nature allows for. It thereby ignores, for one, the feminist Butler’s (1996) maxim that ‘there is no being behind doing’. Butler argues that identity derives through action. States, likewise, can also be different things at different times (different institutional make-ups, different socio-economic systems). Their development is not linear and can be subject to reversals, changes of direction and even multiple and conflicting objectives.<sup>9</sup> To understand this empirically requires understanding the context in which transition takes place. Processes of postcolonialism and development – which are of great importance in shaping how a state orients itself in a globalising space-economy – must therefore be an integral part of any analysis of transition in the socialist-South, and we need to understand the specific role of each.

The third reason relates to the conceptualisation of transition itself. Despite the wealth of research within geography on the themes of colonialism and postcolonialism, there have been few attempts to apply these theoretically informed literatures to the relationship between the South-socialist countries and the former soviet ‘core’. There may be an historical explanation for this. Studies of transition certainly became more theoretically informed in the latter half of the decade (Smith, 1999; Molchanov, 2000) but they also often failed to incorporate the experience of the more peripheral socialist states within this – Smith and Pickles’s (1998) *Theorising Transition* being a notable exception. The socialist-South therefore remains largely unproblematised within transition analytics with the poorer socialist states cast as subject to overwhelmingly strong external economic processes. Such external pressures supposedly leave these states devoid of any real capacity to construct alternative futures. This, in effect, forecloses the possibility for any discussion of reforms other than the neo-liberal adjustment programmes that resulted in Latin America’s ‘lost decade’, and which contributed to Moscow’s defaulting on its loans in 1998. Furthermore it tends towards repeating, within transition studies, the metropolitan and teleological assumptions of socio-economic change that contributed to the ‘impasse’ of the 1980’s in development studies (Corbridge, 1995; Munck, 1999).

By the end of the 1990s, at least some transition scholars appeared to be similarly at loggerheads over the question of how to generate *appropriate* theory from the field’s rich empirical archive. Hence, where Molchanov (2000) saw too much of the wrong sort of theory being used, Paul Kubicek

<sup>9</sup> I am aware also that in talking of ‘the state’ there is a risk of simplifying what is a complex institutional constellation of power and actors. In the present context, the state can be defined as a relatively coherent (and powerful) entity. Although it has a legislative assembly of 400 plus delegates that meet twice a year, effective power resides in the State Council, a body of 32 advisors centred around Castro. The biotechnology sector is directly accountable to this organisation and so it is reasonable to conceive of the main direction of biotechnological decision-making being determined at this high level.

saw not enough of the right sort of theory being used. In his article ‘Post-communist political studies: ten years later, twenty years behind’, he asks ‘are we doing any more than presenting new wine in old theoretical and conceptual bottles?’ (2000: 296). Often present in the background of these debates was an earlier warning issued by Valerie Bunce (1995a; though see also Agh, 2000). Bunce pointed out that those transferring models across regional boundaries – and indeed disciplinary boundaries – risked falling prey to ‘designer social science’ (but cf. Schmitter and Karl, 1994) and comparing apples with kangaroos. Geographers should be able to respond to this imperative. Firstly, we ought to be well positioned to transfer existing transition concepts to new regions (such as the socialist South) in such a way that acknowledges the importance of local context. Secondly, we ought in turn to be able to report back on what we have learned about those concepts through the very act of displacing them. In what follows, I hope to make some headway towards both of these. The first one I hope to address in the remainder of this section. The second one is left until after the case study.

## 2.2. *Theorising socialist-south transitions: towards a politics of representation*

Looking at transition in the South in a way that takes the importance of context into account involves at least three things. Firstly, it requires taking into account the importance of national identity and in particular what Gills and Qadir (1995) rightly identify as the socialist-nationalist nature of socialist-South transitional polities. Secondly, it enjoins us to overcome what Smart (1998: 430) has called the ‘dualistic claims over the effectiveness of state intervention versus market forms of governance’ by seeing economies (and the practices that constitute them) as inherently socially and culturally embedded. That means we need to frame economic choices in historical terms. In particular it means we have to consider how such choices are situated within particular stories of modernisation and development (such as may be provided by national identity, for example). Thirdly, it proposes a *reconsideration* of two mutually constitutive assumptions that tend to hinder our understanding of transition in the South:

- *The temporal assumption.* That in transitional processes, such as liberalisation for example, there can be little choice between gradualism and shock therapy, between reversibility and commitment, between accepting or rejecting externally imposed choices. This denies transitional states the possibility to draw on their own historical experiences as they try different futures on for size.
- *The spatial assumption.* That transition implies such a comprehensive levelling of geo-political space that long-standing geographical relationships (e.g. core/periphery/network) are somehow rendered obsolete. This over-

looks the persistence of such geographical relationships within historical memory and the responsiveness they occasion to other ways of imagining a state’s geo-political positioning in the present.

Looking at Cuba suggests reasons why it is important to challenge these two assumptions. Cuba’s transition defies the first assumption because the state has used Cuba’s rich experience of different geo-political positionings to experiment with various forms of market-socialism, always looking for the most effective balance between political stability and economic reform. So, for example, it has called up memories of the dangers of over-production of sugar cane during the US neo-colonial Republic (1902–1959), in order to circumscribe land-holding reforms within agrarian markets. It defies the second assumption because it has pursued a geo-politics fashioned from out of the many relationships it has had in the past with different geopolitical centres and indeed peripheries (Madrid, Washington, Miami, Moscow, and so on). So, for example, in the 1990s it has renewed bilateral arrangements with Vietnam (rice imports) and China (medical exports), whilst negotiating joint venture financing with Spain (for tourist infrastructure).

## 3. The Cuban experience

This part aims to flesh out the arguments in Part I through a case study of Cuban industry, and particularly the politics of representation that surround Cuba’s biotechnology industry (Coronil, 1998; Harvey, 1996).<sup>10</sup> Biotechnology offers an interesting case for exploring the geography of transition. On the one hand it has always been held up as an example of a possible Cuban future: high-tech, independent and free from the shackles of the sugar-economy that has so encumbered the island in the past. On the other hand it has been informed by precisely the sorts of historical narratives that sustained those earlier forms of modernization, such as sugar. It is both new and not so new. As such, it offers an ideal canvas for examining how the Cuban government has been able to draw upon different historical narratives of development as it negotiates processes of transition in the present.

### 3.1. *Informational industries and representational spaces*

The idea of developing biotech was seized upon by Castro in the early 1980s. He saw in it an opportunity to leapfrog his country into what was then beginning to be understood as the new informational economy. Accordingly, Cuban biotechnology was promoted as a development sector throughout the 1980s and developed on an impressive scale. There were three main factors that

<sup>10</sup> Representational politics have been well discussed by anthropologists such as Harvey (1996) in her work on universal exhibitions, and Coronil (1998) in his work on the Venezuelan state.

supported this: the maturation of revolutionary educational policies, the most secure socio-economic period of the revolution, and a mature health system that required the sorts of products biotechnology provided.

Shortly after the revolution of 1959, around half of Cuba's mainly middle-class medics left, unhappy with what they saw. This left a significant gap to be filled which the revolution immediately set to do, providing crash courses in medicine and medical education, with an increasingly political component. By 1975–76 1477 medics were graduating annually.<sup>11</sup> Castro had already noted in 1961 that 'the future of our nation is necessarily the future of men of science' and by the early 1980s the first generation of scientists fully trained under the revolution were entering positions of importance within scientific institutions such as CENIC (the National Centre for Scientific Research) and were beginning to work on advanced biological projects (Batista et al., 1981).

Secondly, Cuba had been a member of the CMEA since 1972 where it benefited considerably from exchange of sugar above world market prices (on average 5.4 times higher during the 1980s). At the end of the 1980s, an estimated 57 per cent of the total calorific consumption was being cheaply imported.<sup>12</sup> It also enjoyed a healthy scientific exchange of both personnel and resources.<sup>13</sup> As a result, money was available to put into research-oriented projects, and particularly the production of homegrown medicines, prompted by the US embargo's 'squeeze' on any pharmaceuticals Cuba might have tried to obtain from the West (Delgado García, 1991).

Finally, the very success of Cuba's health reforms had resulted in the elimination of many curable diseases. This made non-curable diseases such as cancer major priorities for the government and made biotechnology an appealing option. On hearing of the potential economic benefits of interferon, then widely perceived as a possible 'wonder-drug' against cancer, Castro immediately dispatched some of his top scientists to the US and Europe, and particularly to the labs of Kari Cantell in Finland, then the world's leading expert on interferon, to learn more about it (Bialy, 1986). Their ability to reproduce the technology to make interferon back in Cuba, and its successful use in a Dengue fever epidemic in 1981 was the spark for a massive investment project in biotechnology infrastructure amounting to over \$1bn in the first decade, and resulting in a self contained 'scientific pole' that today counts 49 research and production institutions, and which by the end of the 1980's had already produced the world's only Meningitis B Vaccine and a recombi-

nant Streptokinase (Kaiser, 1998; Simeón and Clark, 1988).<sup>14</sup>

### 3.2. Geopolitical crisis and Cuba's politics of representation

Biotech became of even greater symbolic importance after the collapse of the CMEA. The subsequent reform context, in which the representation of biotechnology as a successful, modern and integrated industry would come to play such an important role, was the implementation of the Special Period in Time of Peace from September 1990. As discussed earlier, the Special Period sought to retain Cuba's political and social structure, while attending to both the new economic realities of declining trade from the Soviet Union – in the years preceding 1991, Cuba had received on average \$5bn in annual Soviet subsidies – and the opportunistic tightening of the US embargo through the Torricelli and Helms-Burton laws (Reid-Henry, 2002). Cuban transition was negotiated on two fronts at once therefore: declining trade from the former CMEA countries on the one hand, and increasing economic pressure from the US on the other. Within this context, the reform emphasis officially set by the 4th Party Congress of the Cuban Communist Party (PCC) of December 1991 focused firstly on survival and then on the creation of the diplomatic space that would allow renewed social and economic development. Such development would subsequently come in the form of dollarisation (1993), farmer's markets (UBPC's)<sup>15</sup> (1993), and joint ventures (1995).<sup>16</sup> But it was biotechnology that was chosen to be the high profile industry in which some of these economic transitions would be put together in a more coherent vision.

In the early to mid 1990s, Cuba's biotechnology sector was used to convey a very clear message to the world's business community. This was a community that had now become of considerable interest to the Cuban State. The message it carried was that "the measures adopted to deal with the new emergencies are adequate and allow one to be optimistic about the future".<sup>17</sup> Such a message was conveyed through, for example, special issues devoted to the 'modern science' of biotechnology by the main investment magazines including the UN sponsored *Business Tips on Cuba*, and UK/US Based *Cuba Business*. It was also con-

<sup>14</sup> Science Pole is translated from the Spanish, '*Polo Científico*'. Although 'science park' is the more accurate translation, the Cuban biotech spaces exist at a more amplified symbolic, political, geographical and economic scale than 'science park' suggests, hence the reason for the literal translation. The figure of \$1bn circulates through much of the literature on Cuban biotech and is confirmed by spokespersons for the industry in Cuba. I have not, as of the time of writing, been able to trace the initial source of this figure.

<sup>15</sup> Unidades Básicas de Producción Cooperativa (Basic Units of Cooperative Production).

<sup>16</sup> See Dominguez (1998) for an alternative interpretation of the Cuban state's durability.

<sup>17</sup> Jose Luis Rodriguez, Deputy Director of CIEM, the Centro de Investigaciones sobre la Economía Mundial in Havana, quoted in CB, Vol. 5:1.

<sup>11</sup> Ministerio de Salud Pública (MINSAP), '*Informe Anual*' 1976, La Habana, Cuba.

<sup>12</sup> Lehmann, *Biotechnology and Development Monitor*, no. 42, p. 18.

<sup>13</sup> Yiliam Gómez Sardiñas y M.Sc. Blanca E. Martín, Ministerio de Ciencia, Tecnología y Medio Ambiente, Dirección de Política Científica y Tecnológica: '*Estudio Prospectivo de la biotecnología en Cuba*' (1998).

veyed by dissemination through scientific channels of work being done in the field of HIV and other high profile diseases (Aponte, 1998). By 1998, export revenues from pharmaceutical and medical products accounted for about \$130 million annually (*Biotechnology and Development Monitor*, No. 42, 2000). This compares relatively well to annual sugar revenues, which by then only amounted to \$590 m (*ibid.*).

Biotech's success in providing hard currency and substituting certain medicines also meant that it became a space onto which national imaginings were projected.<sup>18</sup> To some extent this was made easier by the concentration of most biotech activity in what became known as the Science Pole: a bio-region of some 14,000 scientists located on the outskirts of Havana. Within the Science Pole, considerable economic and scientific independence was afforded the various research and production centres, so that they might keep abreast of changes in a rapidly advancing field. Politically, however, the centres were all kept directly accountable to the State Council. In 1998/99, for example, it initiated a reshuffle of key positions and many of the previously key figures in Cuban biotech were removed. This included former CIGB director, Manuel Limonta, described by *Science Magazine* in 1998 as the 'entrepreneur' who 'has made Cuba's biotech investment pay dividends', and José de la Fuente, former Vice-Director of Regulatory Affairs at the CIGB. The state has close control over strategy and presentation in the Science Pole.

As biotechnology became increasingly touted as Cuba's means of gaining a stake in the global economy on its own terms (biotech has certainly always been Cuba's best chance to develop a comparative advantage within high technology industries), the Cuban government increasingly came to project its hopes for future development onto this physical space. Visiting foreign dignitaries were regularly toured around the Science Pole (in 2002, this included former US president James Carter) and the principal biotech centres such as the CIGB figured prominently in literature and websites promoting business on the island: here visitors can see a view of the new Cuba. Throughout the 1990s, the Science Pole also functioned as an important symbolic space. Most simply, it provided a window on to Cuba for investors. It also provided the Cuban people with a glimpse of how the Cuban government might be intending to join back up with the rest of the world: the scientists working there appeared to have good opportunities for travel and housing benefits, even if their salaries were pegged at a fairly standard rate. Here too a new Cuba was promoted, and it was one that was shown to be dealing with the pressures of transition without relinquishing all that had been put into place in the years since 1959.

The Science Pole, and biotechnology in general, also became a space within which a growing series of contradic-

tions were negotiated. Such contradictions arose precisely because, at the same time as the state was promoting the economic cogency and flexibility of its socialist economy within and through the spaces of its biotechnology sector, it was by no means relinquishing the political structures it had spent so long building up. So, while a state-sponsored investment guide distributed to selected investors in late 1997 confirmed the Communist Party's endorsement of existing economic reforms and the tightening of financial management, the political resolution debated at the 5th Party Congress in that same year endorsed no further political reforms. Similarly, in January of 2001, Castro, attempting to re-assure jumpy venture capitalists about doing business with Cuba, was quoted in the *Financial Times* as saying that 'Joint Ventures do not clash with *any* aspect of Marxism–Leninism, Socialism, or the Revolution [my italics]'. Such pronouncements appear to suggest that Cuba's attempt to negotiate transition on its own terms (socialist political control of a 'delimited' and capitalist leaning biotech sector) and its apparent willingness to turn back reforms within the sector was a strategy coming apart at the seams. They would seem to suggest that the temporal and spatial assumptions of transition analytics hold good and true in the Cuban case: that transitional states are weakly positioned to resist the logic of global capital. I want to suggest, however, that far from being a contradiction in terms that indicates the failure of Cuba's response to transition, Castro's comment in fact makes perfect sense within a particular set of representations because it draws on a *thoroughly normal* slippage between nationalism and socialism and that it in fact points up the success of Cuba's response to transition.

### 3.3. *Inventive recombinations of the past: anti-colonial nationalism and post-colonial socialism*

Such slippage, I suggest, is made possible through the placing of contradictory political narratives in the same political space. The adoption of communism in 1961 (two years after the 1959 revolution) has meant that, in Cuba, although socialist policies have always been closely allied with nationalist and post-colonial objectives, they have not always been congruent.<sup>19</sup> As discussed earlier, a certain mixing has always been accepted as the norm. But this potential for inventively re-combining nationalism and socialism was most fully activated during the Special Period, allowing the Cuban state to play up the best of each world, and play down the worst. For example, when being a socialist polity limits what the state can do to secure economic stabilisation (such as pursuing joint ventures), it can downplay socialism: in its investment literature, CIMAB (the marketing wing of one of the biotech centres) for

<sup>18</sup> Within the Caribbean context this is particularly important. As work by the likes of Sidney Mintz (1985) on Sugar and Fernando Coronil (1998) on Oil have shown, the main primary product of these nations plays an important role in the political and social identity of the country.

<sup>19</sup> It is important to remember that the guerrilla movement that resulted in the overthrow of the Batista government was not in the first place avowedly socialist. Castro himself acknowledged in 1962 that he had personally read little of Lenin or Marx.

example, often describes Cuba itself as a ‘company’ consisting of ‘11 million shareholders’ – a contradictory statement, given the context, but one that with repetition becomes accepted: it becomes an acceptable hybrid.<sup>20</sup> The creation of such hybrids rests in turn upon the ability to recombine different historical explanations of Cuba’s position in the world. In the case of CIMAB, above, the production of generic pharmaceuticals in conjunction with a British firm was justifiable as acceptably non-socialist through recourse to an anti-colonial nationalist rhetoric. Subsequently ensuring that a market was found for these drugs was achieved by giving up the right to work the patents to the British (this time a non-nationalist move) and was justified through recourse to a post-colonial socialist rhetoric.

### 3.4. Transitional processes

By such means, different ways of representing the past in Cuba (nationalist, socialist and post-colonial rhetoric and their variants) are used to negotiate the geo-politics of transition in the present. I now want to outline how this politics of representation within biotechnology cuts across the three main transitional processes, or spheres of reform – stabilisation, privatisation, and liberalisation.

#### 3.4.1. Stabilisation

The main aim of stabilisation reforms in Cuba was to rectify the monetary and foreign imbalance that was the immediate consequence of the collapse of external funding from the USSR. These reforms required a guaranteed capital inflow in the near future. The biotechnology industry, with a portfolio that included the only available Meningitis B vaccine in the world, was an obvious space onto which to project these short-term cash requirements. Biotechnology was used to represent both to the outside world and to the Cuban people that Cuba had its own stake in the ‘new informational economy’. Privatisation and liberalisation were more strongly contested processes. They should be understood as having taken place within, and as being subordinate to, the overall stabilisation drive.

#### 3.4.2. Privatisation

Decentralisation of state enterprises began from as early as 1992. Enterprises engaged in foreign trade were granted autonomy in their use of foreign exchange, coordinated by the new Ministry for Foreign Investment and Economic Cooperation (MINVEC) from 1995. This was effectively a circumscribed introduction of privatisation intended to restore import capacity and improve the country’s responsiveness to the global economy. The biotech sector was one area where this was tolerated because it was absolutely necessary to the continued viability of the industry: most simply put, the level of Soviet-supported

investments that the industry had become used to before 1991 had to be sustained, and therefore a certain unbundling of political strictures was required. But ultimately, as in all the other areas (including sugar production and tourism) the state retained control through the institution of *property*: by owning the patents and marketing rights it could set limits on the extent to which foreign countries could gain a stake in the Cuban economy. The industry directors are, furthermore, keen that these viewpoints be heard in the international business community: Pedro López-Saura, the new Vice-Director of Regulatory Affairs at the CIGB openly criticised Puerto Rico’s tax-friendly pharmaceutical manufacturing base as being nothing more than a ‘pill factory’ for Western Pharmaceutical companies. (López-Saura, 2001: *Financial Times*, Jan 13/14). This policy resulted in many rejected business proposals, such as one to process Chitin from sea shells, proposed by British company Biognosis, and it attests to the biotech industry’s willingness and capability to hold priorities of commercial independence over potential economic income and financial stability. This, again, can be seen as a shift from a post-colonial socialist rhetoric to an anti-colonial nationalist one.

#### 3.4.3. Liberalisation

Part of the aim of liberalising measures in Cuba was to remove the distortions in the economy caused by the gap between the official and black markets.<sup>21</sup> They have, however, only gone as far as to create sufficient space to accommodate and control the new economic processes, such as joint ventures: reforms which the biotech sector has exceeded. For example, Heber Biotec, the wholly-owned marketing subsidiary of the CIGB formed in 1991, has engaged in joint production, development contracts and joint venture financing and in 1999 it reported sales of \$45 million coming from operations in 38 countries (Satz, GEN, 2000: 55).<sup>22</sup> As more focus was put on the international marketing of products, greater emphasis was placed on joint ventures and this tended to push at the door of liberalising reforms. Hence CIGB director, Luis Herrera, said in 2001, that the ‘CIGB is reinventing its mission to investigate, develop, produce and commercialise abroad biotechnology products,’<sup>23</sup> and we might take Cuba’s becoming a member of WTO and signing of TRIPS (Trade-Related aspects of Intellectual Property Rights) in 1995 as indicative of this ‘post-nationalist’ move. The state response, made most emphatically at the 5<sup>th</sup> Party Congress, was to then re-affirm that state control of the economy, albeit decentralised and using market signals, remained a political priority. It asserted a national-socialist vision to counter the

<sup>20</sup> The dedicated marketing arm of the Centre of Molecular Immunology (CIM).

<sup>21</sup> *Economist Intelligence Unit*, London: Cuba County Profile, 2000.

<sup>22</sup> Figures for the entire biopharmaceutical industry have been estimated as up to \$150–200 m annually (Scrip Magazine, February 1999).

<sup>23</sup> Luis Herrera, Opening Address at International Symposium on Interferons and Cytokines, Centre for Genetic Engineering and Biotechnology (CIGB), La Habana, 6 December, 2001.



political reversals implied by its economic policy. Again, this conscious re-mapping of possible ways of representing the tasks of development and modernization, set against the necessities of transition, became increasingly important to allowing the state to pursue a dual-policy of political stasis and economic reform.

Cuba's 'reforms' appear not to be aimed at achieving an end-state, so much as at resolving, as March-Poquet (2000: 106) suggests: "the immediate origin of the crisis: the dislocation of Cuba in the international economy". I hope to have shown in this section that, as it undertakes this struggle over the geographies of the present (even in the traditionally conceived spheres of privatisation, stabilisation and liberalisation), the Cuban state employs a representational politics in which the tasks of development can be variously rationalised. In such a way, its often pragmatic responses to the pressures of transition become part of a new way of conceiving the process of development on the island. As I have suggested above, such a representational politics relies on an historically conditioned slippage between nationalist and socialist discourses of development. In the following section I want to provide a fuller account of how such slippage operates.

#### 4. Evaluation

The above demonstrates how different understandings of the way Cuba is situated relative to the rest of the world were drawn upon in the 1990s as the Cuban State attempted to negotiate its transition on more favourable terms. As Fernandez observes, such appeals to different historical accounts of the present are germane to Cuban political culture and are particularly pertinent to discussions of transition in the Cuban context: 'throughout its four decades, Cuban socialism has been identified with experimentation' and 'doing and undoing...despite structural constraints' (2000: 58; see also Kapcia, 2000). Such experimentation creates a political space of the sort that radical political theorist, Chantal Mouffe (1993) describes with the phrase, 'fuzzy boundaries'. Within such spaces, processes of transition can be set up in such a way that diverse actors are each able to read different things into them and therefore be accommodated in a space they would normally find antagonistic. The 'contested spaces' of Cuban biotechnology operated in such a manner and, in turn, Cuban biotechnology became a focal point for negotiations between the state and foreign capital over the nature of Cuba's transition. Within the biotechnology sector political meanings were assigned and re-assigned in order to reconfigure actually existing economic changes. By such means, transitional processes and the government's responses to them could be legitimised, played down, played up, or denied.

But such conscious re-mappings of the present through recourse to geographical narratives of the past go beyond the sorts of agency that Mouffe considers in her text. One alternative means of explaining them might be found in Fernando Coronil's depiction of what, in his well-received

book, *The Magical State*, he calls "the magician's trick" of the state. For Coronil, single-party states with charismatic leaders deriving legitimacy on promise of perpetual improvement (states such as Venezuela and Cuba, for example) have "the power to replace reality with fabulous fictions" (1997: 2). In the case of Venezuela, such promises of a brighter future are mortgaged against the country's undeniable oil wealth. In the case of Cuba, such promises are mortgaged against a discourse of possibilism, which holds that the Cuban people can achieve anything with the right guidance and if they put their mind to it. It is here that biotechnology becomes so important. Held up as a non-natural resource route to modernisation, it offered a means of overcoming a reliance on nature (fickle and limited) in exchange for a more 'scientific' (reliable and limitless) means of development. It was because it was held up as all these things that biotechnology was one of the chosen industries intended to bring in the much-needed hard currency to keep the government afloat in the first place. Biotechnology promoted a vision of development in which the promises of modernity did indeed look rather more promising than they did in the sugar fields. From this perspective, just as important as policies to promote technological development – see for example the set of essays on 'the technology of transition' (Dyker, 1997) are what we might think of as 'technologies of transition' in a rather more Foucauldian sense. The slippage between nationalist and socialist discourses of development, and the way that such a slippage makes space for the State to switch between otherwise contradictory responses to transition, is very much a technology of transition in this way.

It is in order to explain how such slippage operates as a technology of transition that we might usefully turn to the work of Bruno Latour. Latour (1993) provides an account of the modern condition (and an appropriate one given the focus on biotechnology) that helps to account for how the Cuban government was able to successfully represent biotechnology as new, even as it resorted to much older vocabularies. Latour's whole analysis of modernity turns on his account of the way that contradictions are a normal part of 'modern' life. Falsely constructed dichotomies, such as those between nature and culture, ensure that these contradictions are held in place, because they direct our attention away from the hybrid nature of our world (nature-culture). In continually shifting its accounts of the present, from nationalist to socialist and so on, and in promoting by doing so the idea that socialism and nationalism are distinct, the Cuban state is, in Latour's words "fleeing from the moment of rupture" – continually changing the rules of the game so that its little shifts of position between different forms of the hybrid 'socialism–nationalism' are overlooked. This process leaves in its wake a proliferation of now naturalised hybrids such as the '11 million shareholders'. As Latour says, "the more we forbid ourselves to conceive of hybrids, the more possible their interbreeding becomes" (1993: 12). Taken as a whole, these new flecks of meaning gradually shift what is understood as development in the first place.

## 5. Conclusion

Through the experiences of its biotechnology industry, Cuba does indeed offer a valuable transition experience, but not necessarily in the way that March-Poquet suggests – that is, as a particular constellation of processes of stabilisation, liberalisation and privatisation that can be logged and then compared to the same processes in the former Soviet Union and East Central Europe. Rather it suggests that South-socialist transitions may exhibit their own special features and it draws our attention to at least three of these. Firstly, that reform may not always be linear. This has been most recently demonstrated by Cuba's renunciation of the dollar. Secondly, that it is not just large countries that are able to re-negotiate their position in a changed world. Small ones can too. Thirdly, it suggests that as they engage in this struggle over geography, such countries may draw upon the narratives of past geo-political relationships to justify, support, and effect a far more varied range of responses to transition than we might otherwise expect. I have delineated the operation of such a representational politics in the case of Cuba.

Representation is not a new term for those studying transformational societies. The cognizant and effective use of a representational politics is, however, particularly in a socialist-South country context in which state practices are often presumed to be more circumscribed. Focusing on representation is therefore also useful as a metaphor for re-thinking certain dominant temporal and spatial assumptions within transition literature more generally. These assumptions are rendered a little more problematic when other processes of change, such as development and post-colonialism, are set explicitly alongside those of transition. Exploring the connections between each of these distinct yet interrelated processes is a complex task. I hope to have made some progress towards better understanding here by recourse to scholars less often cited in the transition literature but who have developed useful ways of conceptualising the sorts of non-linear and at times even contradictory processes which characterise the experience of transition in the socialist South.

From such a perspective I have argued the following. That in responding to transition, the Cuban state has drawn upon historical memory of the numerous ways that the island has been positioned geo-politically (as colony, as neo-colonial republic, as independent state, as satellite state, as post-colonial state and so on). That it has combined these accounts of the past into myriad recombinations in order to justify its continual re-presentation of the task of development. And finally, that Cuban biotech is not only sustained by these conflicting narratives drawn from the past; it also comes to redefine their meaning in the present. After all the hype about biotechnology in the 1990s, after it had re-articulated the relationship between development and transition, the task of modernisation meant something different in Cuba than it had before. The question that hangs over Cuba's biotechnology project now is

how long can the moment of rupture be avoided? How long before the contradictions that hold this new compromise quite literally in place become untenable? If the past teaches us anything here, it is that the answer to this may be some time coming.

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## References

- Agh, A., 2000. Book Review of 'Subversive Institutions: the design and destruction of socialism and the state, by Valerie Bunce, *Europe-Asia Studies* 2000(1), 170–171.
- Aponte, D., 1998. 'La ciencia cubana ya creó anticuerpos que neutralizan el virus del Sida', *La Jornada*, 3 June, 1998.
- Batista, G., and Santiago Gómez, M., (eds), 1981. 'Participación Popular en la Salud en America Latina: Experiencias de Chile (S. Allende), Cuba y Nicaragua', Editora de la UASD.
- Bialy, H., 1986. Cuban Biotechnology: Interferon as a Model, *Biotechnology*, April 1986, vol. 4, p. 266.
- Butler, J., 1996. *Bodies that Matter: On the Discursive Limits of Sex*. Routledge, London.
- Corbridge, S. (Ed.), 1995. *Development Studies: a reader*. Arnold, London.
- Coronil, F., 1998. *The Magical State: Nature, Money and Modernity in the Venezuelan State*. Chicago University Press, Chicago.
- Cross, P., 1995. Cuba's socialist revolution: last rites or rejuvenation. In: Gills, B., Qadir, S. (Eds.), *Regimes in Crisis: The Post-soviet Era and The Implications for Development*. Zed Books, London.
- Doty, L., 1996. Repetition and variation: academic discourses on north-south relations. In: Doty, L. (Ed.), *Imperial Encounters: Politics and Representation in North-South Relations*. University of Minnesota Press, Minneapolis, pp. 145–162 (Chapter 7).
- Dyker, D. (Ed.), 1997. *The Technology of Transition: Science and Technology Policies for Transition Countries*. Central European University Press, Budapest.
- Fish, M.S., 2001. The inner Asian anomaly: Mongolia's democratization in comparative perspective. *Communist and Post-Communist Studies* 34, 323–338.
- Fransman, M., Junne, G., Roobeek, A. (Eds.), 1995. *The Biotechnology Revolution*. Blackwell, Oxford.
- Gainsborough, M., 2002. Beneath the veneer of reform: the politics of economic liberalization in Vietnam. *Communist and Post-Communist Studies* 35, 353–368.
- Gills, B., Qadir, S. (Eds.), 1995. *Regimes in Crisis: the Post-Soviet Era and the Implications For Development*. Zed Books, London.
- Harvey, P., 1996. *Hybrids of Modernity; Anthropology, the Nation State and the Universal Exhibition*. Routledge, London.
- Hobbelink, H., 1991. *Biotechnology and the Future of World Agriculture*. Zed Books, Guildford.
- Hoffman, B., 2001. Transformation and continuity in Cuba. *Review of Radical Political Economics* 33, 1–20.
- Holmes, L., 1997. *Post-Communism: An Introduction*. Polity Press, Oxford.
- Hoogvelt, A., 1997. *Globalization and the Post-Colonial World: the New Political Economy of Development*. The Johns Hopkins University Press, Baltimore.

- Kaiser, J., 1998. Cuba's billion dollar biotech gamble. *Science* 282 (5394), 1626–1628.
- Kapcia, A., 2000. *Cuba; Island of Dreams*. Berg, Oxford.
- King, L.P., Váradi, B., 2002. Beyond manichean economics: foreign direct investment and growth in the transition from socialism. *Communist and Post-Communist Studies* 35, 1–21.
- Latour, B., 1993. *We Have Never Been Modern*. Harvard University Press, Massachusetts.
- March-Poquet, J.M., 2000. What type of transition is Cuba undergoing? *Post-Communist Economies* 12 (1), 91–117.
- Mesbahi, M. (Ed.), 1994. *Russia and the Third World in the Post-Soviet Era*. University Press of Florida, Florida.
- Miller, N., 2003. The absolution of history: uses of the past in Castro's Cuba. *Journal of Contemporary History* 38 (1), 147–162.
- Mintz, S., 1985. *Sweetness and Power: the Place of Sugar in Modern History*. Viking Penguin, New York.
- Molchanov, M.A., 2000. 'Review: The post-Soviet States: mapping the politics of transition. In: Graham Smith'. (Ed.), *Europe-Asia Studies* 52, 3.
- Mouffe, C., 1993. *The Return of the Political*. Verso, Berlin.
- Munck, R., 1999. Deconstructing development discourse: of impasses, alternatives and politics. In: Munck, R., O'Hearn, D. (Eds.), *Critical Development Theory: Contributions to a New Paradigm*. Zed Books, London.
- Pickel, A., 1998. Is Cuba different? Regime stability, social change, and the problem of reform strategy. *Communist and Post-Communist Studies* 31 (1), 75–90.
- Potter, R., 2001. Geography and development: 'core and periphery?'. *Area* 33 (4), 422–439.
- Reid-Henry, S.M., 2002. Cuban biotech plans to build on past success. *Genetic Engineering News* 22 (3).
- Roberts, D., 2003. From 'communism' to 'democracy' in Cambodia: a decade of transition and beyond. *Communist and Post-communist Studies* 36 (2), 245–258.
- Sakwa, R., 1996. *Russian Politics and Society*, second ed. Routledge, London.
- Schmitter, P., Karl, T., 1994. The conceptual travels of transitologists and consolodologists: How far to the East should they attempt to go? *Slavic Review* 53 (1), 173–185.
- Simeón, R.E., Clark, I., 1988. El Impacto Social de la Biotecnología en Cuba'. *Cuba Socialista* Havana, April 1988, p. 8.
- Smart, A., 1998. Economic transformation in China: property regimes and social relations. In: Smith, A., Pickles, J. (Eds.), *Theorising Transition: the Political-Economy of Post-Communist Transformations*. Routledge, London.
- Smith, G., 1999. *The Post-Soviet States; Mapping the Politics of Transition*. Arnold, London.
- Smith, A., 2002. Trans-locals, critical area studies and geography's others, or why 'development' should not be geography's organizing framework: a response to Potter. *Transactions I.B.G.*, 2002.
- Smith, A., Pickles, J. (Eds.), 1998. *Theorising Transition: The Political-Economy of Post-Communist Transformations*. Routledge, London.
- Vacs, A.C., 1994. Moscow's Relations with Argentina and Brazil: end or renewal. In: Mesbahi, M. (Ed.), *Russia and the Third World in the Post-Soviet Era*. University Press of Florida, Florida.

### Further reading

*Investment and Business Literature referred to:*  
 Biotechnology and Development Monitor  
 Business TIPS on Cuba  
 Cuba Business  
 Cuba Socialista  
 Economic Eye on Cuba  
 Economist (Including the Economist Intelligence Unit, EIU, Country Report: Cuba, 1999, 2000, 2001)  
 Financial Times  
 Foreign Bureau of Intelligence Statistics (FBIS): 'Castro Speech Database', 1985–1998  
 Granma International (Spanish Language Edition)  
 Genetic Engineering News  
 Wall Street Journal and The Wall Street Transcript