

Chapter 7: Anticipation of Criticism

7.1 HASSELT AND FÜRSTENFELDBRUCK ARE UNSUSTAINABLE

Some might argue that I have studied unsustainable cases, which devalues my findings and conclusions. However, I have never claimed that either Hasselt or Fürstfeldbruck are sustainable. Admittedly, I have to be able to defend that they are "cases that achieved significant steps toward sustainability, that is ... positive ecological, social and economic effects." This is one of the criteria I established in section 3.2.1 to select my case studies. Officials of both cases assert explicitly that the projects are meant to work toward sustainable development. Lambrechts, a Hasselt city employee, phrases the definition of a sustainable mobility policy according to the famous Brundtland definition of sustainable development: "Mobility that meets the needs of present generations without compromising the ability of future generations to meet their own mobility needs" (2001, p. 11). Elsewhere, this goal is disaggregated to the no-less-famous "Three E's": "a social goal, because more people become mobile, an economic goal, because Hasselt becomes more accessible—and this is positive for the tertiary sector—and an ecological goal" (*Hasselt: Stadt*, 1998?, p. 1). The guidelines for the cultivation of Unser Land products follow the same established criteria of sustainable development by explicitly mentioning "ecological criteria ... economic criteria ... and social criteria" (Brückmann, 2002b).

I am cautious to take these proclamations at their face value, not only because their authors might be biased, but mostly because I agree with Hajer: "Whether a given project fulfills the goals of sustainable development can never be determined with recourse to the 'theory.' What sustainable development means is essentially a political decision" (Hajer, 1995/1996, p. 29). Whether the projects in Hasselt and Fürstfeldbruck can be sustained will only be revealed over time.¹¹⁰ Will enough citizens in Hasselt

¹¹⁰ My co-evolution hypothesis is therefore provisional and would be severely damaged if either of the cases I studied fell apart. In this case, I want to reserve the option to modify my thesis if I could show that a failed project had violated or neglected a meme of co-evolution; either one presented in chapter 6 or one that I overlooked and thus would need to be included in a revised theory of co-evolution.

continue riding the bus, even when hydrogen-powered cars become affordable? Will the Flemish people continue to vote for politicians who support tax schemes that subsidize public transportation? Will the ecological effects produced by Brucker and Unser Land be sufficient to keep an eco-fascist away from the Bavarian state government? Since I cannot wait for these questions to be answered with time, I want to develop an educated opinion regarding whether these projects violate the widely accepted minimal criteria of sustainable development. Related investigations have to examine the trend of the capital base in both cases, whether "capital" is defined as natural, financial, or social.

Natural capital

A very rough quantitative assessment of the ecological implications of Brucker Land was presented in section 4.2.2. By now, it appears legitimate to assume that these effects have multiplied due to the expansion of the concept to eight other counties. An assessment of further effects in terms of "ecological citizenship" (Light, 2002) due to a reconnectedness of the people to their environment would require a sizeable new study.

A quick calculation with the few quantitative data available for Hasselt shows that for 1998, the approximately 920 trips avoided per day by people who switched from their car to the bus amounted to a savings of roughly 28,400 gallons of gasoline or 250 tons of carbon dioxide per year.¹¹¹ This number does not account for the effect of people switching from car to bicycle travel, nor the CO₂-sequestration effect of the over 400 new trees. It also does not include the additional emissions resulting from the upgrade of the bus fleet and those resulting from the construction works.

Nevertheless, I feel safe to claim that both projects did not worsen the preexisting ecological conditions.

Financial capital

Moerkerk is very frank about the role of financial capital in Hasselt:

¹¹¹ This calculation is based on the following assumptions: Trips through the city center avoided per month: 28,529 (see chapter 4.1.2). Average length per trip: 4 km (2.49 miles). Average fuel efficiency of a car in city traffic: 8 liters/100 km (29.4 miles/gallon). The combustion of one liter of gasoline produces roughly 2.3 kg of carbon dioxide.

For authorities in the United States who leave everything to ... private investment and no state intervention, this is the worst example that you can have because everything works here because of state subsidies. ... But of course that's where Steve's Socialist part comes part in. ... [Some argue] "if you get so many subsidies from the state for this and that, then you can do this kind of project of course, then it's easy." (interview 11-27-2001)

The words Moerkerk put into the mouth of critics represent an economic determinist position, according to which everything that is good will automatically be selected by the market.¹¹² I would argue, however, that the decision to support the project in Hasselt with tax money was selected in the marketplace of *opinions*. A fair assessment of this decision requires a significant amount of context, which is presented in the appendix. The information provided therein may explain the quick assessment I draw in the following paragraph.

The external funds acquired for the construction of the physical infrastructure were one-time payments for exemplary and innovative projects. The money was available to every community—at least within the special EFRO funding zone—and Hasselt simply managed to obtain this funding with bold ideas in an open competition. Moerkerk phrases this logic in the following words: "If you get only subsidies you still have to do it. I think that many people, if you give them the same amount of money, they wouldn't have the same result that was achieved here" (interview 11-27-2001). Whether the free public transportation erodes the local or the state budget is hard to tell. Lambrechts, the traffic expert of the city, wanted to show with a study he conducted in 1997 that "the free transportation in Hasselt is not a stunt; it is maintainable for the city and the city budget in the long run" (cited in Jacobs, 1997, August 1, p. 17). Whether he is right will be decided in the marketplace of opinions, concretely on election day, when politicians who think that the economic, social, and ecological benefits of free buses outweigh their costs will be elected, or not. A city government led by the Flemish Blok, for example, would probably abolish the free buses.¹¹³ But even some supporters of the free buses begin to

¹¹² Some economic determinists are even consistent enough to claim the reverse: Everything the market selects must be good.

¹¹³ Mr. Lieshout, a member of the right-wing Flemish Blok, complained in our interview that "people who never use the free buses say, 'Why do I have to pay for it [with my tax money]?' " (interview 11-27-2001).

think aloud about modifications to the system—essentially due to its own success: "Keep the buses free outside peak hours, but let the passengers pay a small fee (e.g. 0.5 EUR) during the peak hours" (Moerkerk, email correspondence 02-10-2003). The Flemish railway company established a similar system for senior citizens, intended to "prevent the crowded peak hour trains from becoming even more uncomfortable for the daily commuter" (Ibid.). Even if this decision is made one day, it should be remembered that Hasselt's mobility policy is supported by many more pillars than the free buses alone.

Brucker Land owes its existence in part to financial support from external sources. The two sponsors in the first years were the Centrale Marketinggesellschaft der deutschen Agrarwirtschaft (CMA, Central Marketing Association of German Agro-enterprises) and the Bayerische Landesanstalt für Ernährung (Bavarian State Agency for Food). Each sponsor funded one-third of the marketing-related expenses (Brand, 1997, p. 93), which was very welcome because "we needed some money to be able to print at least a few flyers and brochures" (Haberkorn, interview 01-22-2002). For the diploma thesis I wrote in 1997, I asked 23 key individuals of Brucker Land about the perceived importance of external funding. The answers were scattered along the whole range from *very low* to *very high*, with a pronounced focus around *high*. One respondent explained that "in the beginning, we did actually not reckon with external support, but in hindsight it was of course helpful" (cited in Brand, 1997, p. 93). "Marianne Baumann" believed that "it ought to work without external support, but I can't prove this" (cited in Brand, 1997, p. 93). Another retrospective look reveals that private advancements were also necessary during the first months of Brucker Land, as no income had yet been gained but some expenses—for the legal advice, the design of the logo, the purchase of vehicles—were already necessary. The Landesbund für Vogelschutz (State Association for Bird Protection), for example contributed DM 10,000 (~U.S. \$5,440) (Seiltz, interview 01-15-2002) and a baker reports that he helped to advance DM 22,000 in the first year (Herrwig, interview 01-30-2002). All interviewees for my diploma thesis agreed unanimously that if funding is crucial at all, be it external or internal, it is so only in the initial phase. "If you don't get out of the red numbers during the funded phase, you did something wrong"

is how "Hubert Eichinger" (cited in Brand, 1997, p. 93) summarizes this consensus. By now, the Brucker Land GmbH is indeed financially self-sustaining.

Currently, the Unser Land Community of Solidarity is in the initial phase and receives seed money in the amount of DM 700,000 (U.S. \$ 386,000) over three years from the Bavarian State Department for Health, Alimentation and Consumer Protection (Seiltz, interview 01-15-2002). The commercial arm of the initiative, the Unser Land GmbH, is supported by the CMA and the Bavarian State Department for Agriculture and Forestry with "up to DM 554,000" (U.S. \$ 305,700) (Miller, 2001, p. 14). Unser Land is also in the final round for additional federal funding as a "model region." Seiltz justifies this support with the necessity to "coordinate the buildup of the network over all these counties. Otherwise you couldn't coordinate all the active people anymore; there are about 30 in each county, times nine, that is 270 volunteers. The money we get is for this task" (interview 01-15-2002). Brucker Land is already independent from the financial umbilical cord and Unser Land will likely be in this position in few years. Thus, nothing indicates that they are eroding their financial base. A massive change in consumer preferences could, of course, create financial troubles, but this would not be due to an inherent failure in the design of the project.

The financial assessment of these two cases gains another layer of meaning if the amount of tax money being spent is weighed against the subsidies pouring into other projects, industries, and infrastructures. The case of mobility is perhaps the most drastic example in this regard. It is extremely difficult to quantify the stream of public money that flows into the technological regime of the automobile, and it is even harder to reach agreement on where to draw the system's boundaries. Should, for example, tax breaks for auto manufacturers and/or military expenditures for securing raw materials enter this calculation? And should this amount also include the cost of road construction and maintenance, parking spaces, signage, remedies for environmental damages, asthma- and accident-related healthcare, traffic courts, and school traffic guards? De Moor draws the boundaries at a safe distance to anti-car ideology, considering only the "costs of providing roads, space and complementary traffic services" (1996, ¶ 4.2). Under this definition of car-related governmental expenditures, the taxes paid by car users in the

U.S. pay for only 20 to 50 % of the total costs of individual motorized traffic (de Moor & Calamai, 1997, p. 44). As could be expected, other authors, such as Samuel (2001), claim the exact opposite, which reveals that objectivity is very elusive in this context. Nevertheless, it is clear that public transportation is not the only means of transportation that receives public subsidy. In addition, considering that the German word for taxes, *Steuern*, is also the verb for *steering*, why should a society not steer its path in a socially desired direction as long as this steering is sustained?

Social capital

Lieben-Claes alludes to an important element of Hasselt's social capital: "The mayor had a young team. ... The leader and his team have to be creative—or else nothing works" (interview 06-29-2000). Mulders identifies exactly this strength as a potential unsustainability in Hasselt's mobility policy. In his view, the people working for the city are

very good people, [but] they work much too hard, and if one of them drops out they have a big problem. It is dangerous if a whole city depends on a few people who work very enthusiastically. ... It is not clearly structured to make long-term policy; the substructure, the sustainable organization is missing. These are the weaker points. (interview 06-30-2000)

I would imagine that the workload was especially high in the early stages of the project, most notably during the drafting of funding applications and the coordination of the design phase and construction works. If this assumption is correct, it could mean that Hasselt lucked out with a loyal and enduring team; but this strategy would not deserve further recommendation. However, I heard these concerns only from one person, who is actually not a city employee. I conclude, therefore, that the issue of work organization and overwork should be taken seriously in all other projects—regardless of whether they are co-evolutionary in nature and structure.

Something that deserves additional mention in this regard is, of course, the increase of social capital among the whole citizenry of Hasselt. As I documented in section 4.1.2, the new mobility policy created a "local dynamism" (Educatieve Wegwijzer, 1999, ¶ 1), social cohesion, and city pride, which must not be forgotten in an

assessment of the new initiative's effect on social capital in Hasselt. It seems fair, then, to conclude that the bottom line is positive.

Brucker Land might be accused of facing a similar drawback to that in Hasselt, the exploitation of staff members and more precisely of volunteers, because no one in the team of founders was financially reimbursed for their contribution in the first years. According to unanimous accounts, it was only possible to overcome the initial absence of an official budget with an army of unsalaried helpers. They "carried the message to the people, ... built the exhibition-booth" (Kellermann, interview 01-25-2002), "worked like a bee, ... explained everything to the consumers" (Haberkorn, interview 01-22-2002), "helped to push a lot" (Kugler, interview 01-16-2002), and "conveyed the idea to other social camps" (Dengler, interview 01-28-2002). Eighteen out of 21 people interviewed for my diploma thesis in 1997 ranked "personal commitment and idealism" in the highest fifth on a scale from *very low* to *very high importance* for the project's overall success (Brand, 1997, p. 84). This assessment was upheld in 2002, when Haberkorn (interview 01-22-2002) asserted that "nothing works unless you have the right crew," and Klein added "one person can't go alone" (interview 01-25-2002).

Erosion of this social capital would mean that, over time, more and more volunteers would quit their service because of feeling exploited or exhausted. These concerns are not verified by empirical data, however, which show that the cumulative workload peaked in the early phases of the project. A personal commitment of "70 hours per week in extreme phases" ("Erika Segmeier" cited in Brand, 1997, p. 84) might be required in the initial stage, but over time the overall workload decreased asymptotically to a level that could be administered by those who could get compensated after reaching a break-even point, individuals who work for Brucker Land as part of their main job (e.g. employees of the county Office of Agriculture or of the consulting company BAUM), or those who continue to genuinely enjoy their volunteer work. Authentic satisfaction seems to be the main motivation for all volunteers who work for Brucker Land, regardless of the stage of development. Langer mentions three related sources of motivation: "One thing is awareness of a problem. Another motivation is 'I could earn some money there.' Third, 'this could simply be fun'" (interview 02-05-2002). The last point is confirmed by Karg,

who quotes "an energetic member of Unser Land: "The active involvement increases my quality of life" (2002, p. 17). Monetary motivations were not openly admitted in the interviews I conducted, but the financial prospects for farmers and craftsmen were certainly no obstacle. The motivation mentioned most often, however, was the prospect of success and the chance to make a difference. Dengler describes this as "the possibility to concretely move something, ... a real option to act" (interview 01-28-2002). The same fascination for success is underlined by Langer's smile and by his clicking fingers as he says, "We moved something ... it works, it works!" (interview 02-05-2002). Klein offers the most elaborate comment on this issue.

There is this clever proverb about "teach the longing for the sea,"¹¹⁴ but I actually don't think it is true. ... She [Seiltz] didn't teach the longing for the sea, but she offered a toolkit with which you can build a ship. ... She offered something that made people say, "I am not alone here; I don't have to take all the responsibility; I can back out again. ... It is very likely that this is successful. This produces a result. That's not a discussion club where you waste your talents. ... There is somebody who plays the head, there is an idea how to walk this path, there are tools and there are other people." (Klein, interview 01-25-2002)

If this assessment is correct—and the responses I received in the "member checks" confirm it—then, it would follow that the Brucker Land volunteers were not exploited but might actually be grateful that they were given an opportunity to make a difference. With this information in mind, it should be comprehensible why I do not see the sustainment of Brucker Land's social capital in jeopardy.

The title of this dissertation contains the phrase "*toward* sustainable development." In this sense, I dare claim that even though neither Hasselt nor Fürstenfeldbruck have reached the Olympus of sustainability, both have probably come closer to it. At least, I could not find evidence for the unsustainability of either case in terms of either form of capital. It also has to be kept in mind that Hasselt and Fürstenfeldbruck are experiments in the sense of Holmes, who said that "democracy is an experiment, and it is in the nature of experiments sometimes to fail" (according to

¹¹⁴ "If you want to build a ship, don't drum together the men to gather wood and to distribute the labor. Rather, teach your men to long for the wide and endless sea" (Saint-Exupery cited in International Network for Environmental Management, 1995, p. 47).

Menand, 2001, p. 432). The harsh selection mechanisms of social evolution will demonstrate whether the Hasselt and Fürstenfeldbruck memes are fit enough. Neither I nor those who agree with the allegation in the heading of this section can determine this *ex ante*.

7.2 CO-EVOLUTION IS A RECYCLED IDEA

A number of people working in the field of sustainable development might argue that the concept of co-evolution is not really new. To some it might even appear banal because they can identify a plethora of existing approaches that call for better technologies *and* for a change of behavior. The Wuppertal Institute, a German sustainability think tank, could be proffered as an example because it accommodates a research group on "Factor Four" resource efficiency *and* a task force on "New Lifestyles" (www.wupperinst.org). Even the *Brundtland Report* contains passages that demand efficient technology (chapter 8: Producing more with less) *and* "painful choices" (World Commission on Environment and Development, 1987, p. 9). The United Nations Conference on Environment and Development, which was convened in response to the *Brundtland Report*, declares in its core document, *Agenda 21*, "Achieving the goals of environmental quality and sustainable development will require efficiency in production *and* changes in consumption patterns" (UNCED, 1992, chap. 4.15; emphasis added). Ten years later, at the World Summit in Johannesburg, Ricardo Navarro, chairman of Friends of the Earth International, said in a live broadcast on the PBS television network that "we don't only need eco-efficiency but also eco-sufficiency" (2002).

All of these statements seem to be phrased according to an additive logic, where the best thing we can do is to split the national budget for sustainability issues—if there was one—equally among eco-efficiency laboratories and groups that campaign for sophisticated simplicity. The concept of co-evolution, however, goes further. It proposes a synergistic, rather than additive relationship between technology and behavior; not a little bit of both, but concerted action between them; not mixing black and white to an amorphous shade of gray, but a xylograph that cultivates the artful composition of black