

Operation Switzerland : how to build a clockwork nation

Autor(en): **Angélil, Marc / Siress, Cary**

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OPERATION SWITZERLAND

HOW TO BUILD A CLOCKWORK NATION

Marc Angélil and Cary Siress

Libyan leader Colonel Gaddafi's motion, submitted to the United Nations General Assembly in 2009, made a plea in favor of erasing Switzerland from the map and splitting its territories among neighboring countries. As bizarre as such a proposition might appear, it nonetheless brings to the forefront how politics and space are brought to interact – on the very surface of the map. Whatever the intentions, whether justified or not, and whatever maps are drawn, they tend to leave their traces on both the geography of ideology and that of space.

«Attention: Switzerland is being built.» Philipp Bürkler, 1980¹

Maps have an interest vested in them. As a matter of fact, Switzerland has made a name for itself in the production of hyper-accurate maps. Its territory, itself a model of accuracy, has been meticulously plotted to the nth degree with an exactitude that would even make Borges' fabled guild of cartographers green with envy.² But this passion for all things perfect is more than mere myth, for it is the hallmark of Swiss identity, both within and beyond its national borders. To keep things in good order – en état – is nearly constitutional law in the Confederation. In reality, map-making engenders territory, if not the nation itself, triangulating in the process scientific knowledge, politics, and space.³ This cocktail fuels an obsessive machine that runs at full speed, at times threatening to overheat while consuming ever more resources to produce an urban landscape that expands beyond the borders of the map itself.⁴

There is indeed a map that put Switzerland on the map. Not by coincidence, that landmark document is attributed to a military surveyor, Guillaume-Henri Dufour, whose training as an engineer and experience with fortifications for the French military made him the prime choice for charting the first comprehensive map of the country, albeit a country that had not yet been constitutionally formed. The undertaking comprised a monumental task and ultimately lasted from 1832 to 1865.⁵ Switzerland at the time was but a loose coalition of independent cantons, separated by a capsular mentality that has survived to this day. Efforts were made, nevertheless, to standardize anything from different currencies to disparate

1 Announcement for the exhibition «Achtung: die Schweiz wird gebaut» at the HSR Rapperswil in November 2008. The exhibition's title is a play on the pamphlet *achtung: die Schweiz*. Frisch, Max; Burckhardt, Lucius; Kutter, Markus: *achtung: die Schweiz*, Handschin, Basel 1955.

2 «In that Empire, the cartographer's art achieved such a degree of perfection that the map of a single province occupied an entire city, and the map of the Empire, an entire province. In time, these vast maps were no longer sufficient. The guild of cartographers created a map of the Empire, which perfectly coincided with the Empire itself.» Borges, Jorge Luis: *Historia universal de la infamia «Elceteras»*, 1935; translated by de Giovanni, Norman Thomas: «Travels of Praiseworthy Men», *A Universal History of Infamy*, Penguin Books, London 1975, pp. 28-29.

3 «The territory no longer precedes the map, nor survives it. Henceforth, it is the map that precedes the territory – PRECESSION OF SIMULACRA – it is the map that engenders the territory and if we were to revive the fable today, it would be the territory whose shreds are slowly rotting across the map. It is the real, and not the map, whose vestiges subsist here and there, in the deserts which are no longer those of the Empire, but our own.» Baudrillard, Jean: *Simulacres et Simulation*, 1981; translated by Foss, Paul; Patton, Paul; Beitchman, Philip: «The Precession of Simulacra», *Simulations, Semiotexte*, New York 1983, p. 2.

4 Both within academia and governmental agencies, the currently discussed rate of land consumption for new construction is estimated at 1m²/sec.

5 See Gugerli, David; Speich, Daniel: «Topografien der Nation. Politik, kartografische Ordnung und

measuring systems in order to facilitate commerce and strengthen political cohesion while maintaining cultural diversity. With the objective of a unified Swiss economic and legislative space on the table, one of the initial measures was to create a new map that would give contours to «the topographical designation Switzerland» with a precision «beyond all scientific doubt.»⁶

The project set out to homogenize the heterogeneous and gained significance as part of a progressive-liberal movement aiming to unite the country in a military, political, economic, and geographic sense.⁷ A «gigantic machinery of a new national recording system had come to fruition», and with it Switzerland was invented.⁸ When the federal state was founded in 1848, the Dufour Map was well

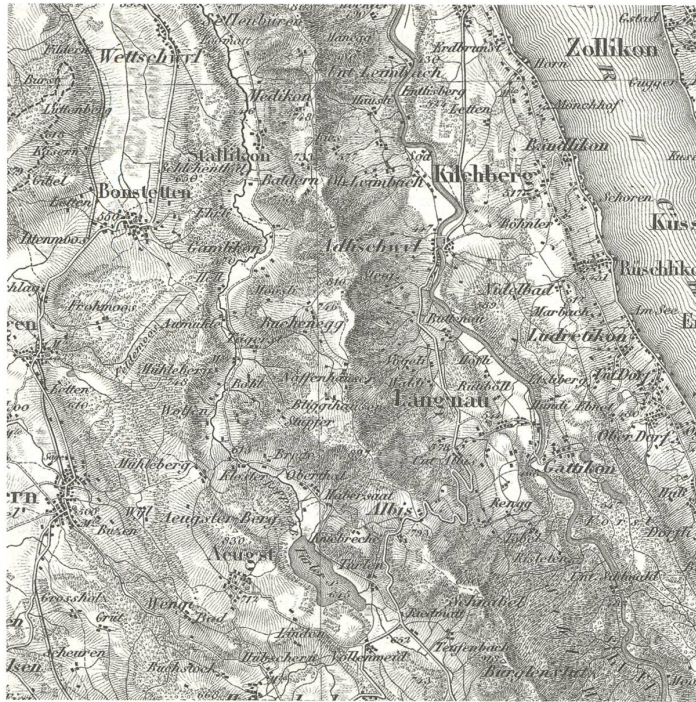


Fig. a
Excerpt from Dufour Map, surveyed at the scales 1:25,000 and 1:50,000 under General Guillaume-Henri Dufour, 1832-1865.

underway, giving legitimacy to the fledgling nation. Dufour himself profited from the enterprise, as he was elected General of the army just prior to the state's formation, a move suggesting that the armed forces had already become more scientific in their orientation. Given that the map was underwritten by military interests, anything that either aided or obstructed the movement of troops was recorded in minute detail by squads of surveyors scaling mountainous terrain. Conversely, the map warranted the creation of new infrastructure – roads, railways, bridges, tunnels, and communication networks – likewise warranting the need to discipline, manage, and control territory. We encounter in this project an unexpected threesome, a «ménage à trois» so to speak, where knowledge, power, and space are entangled. Little did they know at the time that to govern is to urbanize.

The result is a completely managed landscape, whose operational efficiency is understandably the pride of the nation and also inspires awe abroad. Well engrained in collective memory, Switzerland predicated the image of perfection as a consummate collection of places to remember.⁹ Not surprisingly, the conquest of nature by infrastructure and with it the taming of the Alps is celebrated in popular pastime activities by dads and their sons reenacting feats of civil engineering in their basements, by model train clubs attracting hordes of «want-to-be surveyors», and by countless magazines highlighting the latest accessories for miniature Switzerland to customers worldwide.¹⁰ One such model, a replica of the Gotthard North Ramp, was even built behind closed doors, behind the Iron Curtain, to be exact, during the Cold War in the former DDR by model train aficionados who had never visited the actual site. Though born of fantasy, the project required up-to-

Landschaft im 19. Jahrhundert», Chronos Verlag, Zurich 2002. See also Gugerli, David: «Der Hirtenknabe, der General und die Karte», WerkstattGeschichte, Klartext Verlag, Essen 1999, No. 23, pp. 53-73.
6 Gugerli, David: «Politics on the Topographer's Table: The Helvetic Triangulation of Cartography, Politics, and Representation», *Inscribing Science: Scientific Texts and the Materiality of Communication*, ed. Timothy Lenoir, Stanford University Press, Stanford, CA 1998, pp. 96-97.
7 Ibid., p. 96.

8 Ibid., p. 97.
9 See Kreis, Georg: «Schweizer Erinnerungsorte», Verlag Neue Zürcher Zeitung, Zurich 2010.
10 See Hermann, Claudia: «Schweizer Eisenbahn- und Bergidylle im Privatgarten», *Helvetische Merkwürdigkeiten*, ed. Edgar Bierende, Sybille Hoiman, Anna Mintz and Matthias Noel, Peter Lang Verlag, Bern 2010, pp. 19-39.

date maps that were smuggled in and used to plot an elaborate duplicate of the real setting, one replete with rock formations, trees, lakes, snow, and not to forget those Swiss chalets and all the other necessary technical amenities for a picture-perfect, 'Heidiesque' set. What was undertaken as an innocent leisurely pursuit eventually got the East German hobbyists into trouble with agents from the Ministry for State Security, more commonly known as the Stasi, who were baffled by the clandestine operation. But the story had a happy ending, as the maps used were deemed harmless by the authorities and the co-opted image of Switzerland deemed benign.

Without a doubt, the virtue of Swiss maps is their accuracy. Admittedly a cartographer's dream, such accurateness can be blinding. Maps, though cloaked in objectivity, are thoroughly ideological. They are vehicles for translating values, motives, biases, beliefs, and desires into territory. Such translations require protocols based on norms that insure their replication as a system, which in turn validates the values inscribed and the powers behind them. Therefore, any change in ideology will inevitably leave its mark on the land. But vested interests never stand alone. They most often are met with other competing objectives, a clash which equally translates into territorial conflict, however absurd the grounds might seem.

WALLING SWITZERLAND

Case in point, a simple map can make a mountain out of a molehill. A media event in early March 2010 unleashed a firestorm in Switzerland, a country long known for its understated political neutrality. The Swiss press released a military map positioning the small nation in the middle of hostile territory. Europe is portrayed as a battleground with threatening starburst symbols, tanks, nuclear missiles, and dollar signs spotting the continent. By contrast, the center is marked by the little white cross on a red background – by now a brand of anything Swiss – poised to defend the land's fragile peace. In place of natural terrain, the map's geography is drawn in game-board-relief of accentuated national borders, rendered as deep ravines separating countries, with Switzerland cast as a fortress.

The map's legend is quite telling: orange starbursts stand for the states posing a threat arising from political, ethnic, and religious clashes; red starbursts denote post-9/11 terrorist attacks on European soil; black starbursts identify areas of social unrest; nuclear missiles indicate neighboring countries with weapons of mass destruction; tanks symbolize regions torn by armed conflict; and perhaps no less menacing, the dollar sign represents nations with unstable economies. Europe is a scary place.

Truth is, the map is a carefully fabricated and precisely targeted document motivated by multiple agendas, some clearer than others. Its author, Chief of the Armed Forces André Blattmann, presented his case for maintaining the integrity of Switzerland in a routine military report to the Parliamentary Security Council. The transparencies used by Blattmann to make his point were, despite his authoritarian frankness, anything but transparent. The material subsequently made its way to the press, which did not miss a beat to put it in the larger political context and thus to spotlight ulterior motives of the campaign.

To ease entry into the story, local television framed the incident in such a way as to reach the largest audience possible, thereby capitalizing on the scandalous ramifications of vilifying neighbors. Popular vacation destinations across the region offered the perfect foil for the spin, with tourist sites now depicted as the source of unwanted migratory flows of people threatening to invade Confederate Helvetic space. In fact, this is the official message delivered to the public by the military commander himself: «One can imagine situations in which the army has to protect our infrastructure, for large migration streams might require troop de-

ployment.»¹¹ Yet another part of his argument showcased imminent economic risks, using EU-member state Greece as a convenient example of an already destabilized financial system on the doorstep of bankruptcy. As if this is not enough, he went on brazenly to warn citizens about the danger of Taliban-launched nuclear assaults on the nation's power grid just to add fuel to the fire.¹²

Reactions to this episode – which unfolded on the heels of the equally sensitive <Minaret Initiative> directed against the Islamic community and banning Muslim religious icons on Swiss soil – was broad, cutting across party lines and national borders alike. As can be expected, local leaders throughout the country scrambled to soften the blow of political incorrectness. The liberal Swiss Social



fig. b
Map presented to the Swiss Parliamentary Security Council by Chief of the Armed Forces André Blattmann, 2010.

Party (SP/PS) moved to take advantage of the faux-pas, and Greece was outraged.¹³ Ultimately, the fallout led to the heated question: «Of all nations, why does Switzerland need an army?»¹⁴

This seems to be the very question that prompted military leaders to construct the map in the first place. Faced with substantial budget cuts, a plan was concocted to breathe new life into the existential necessity of the army. And territory played no small part in the case made. Blattmann actually framed his argument in a newspaper interview from the vantage of real estate and the immense portfolio of property assets belonging to the armed forces, at the time of the interview valued at approximately 25 billion US Dollars.¹⁵ To make the argument more palatable, he cited in his pitch the decrepit conditions of barracks and significant maintenance costs for their upkeep. So far message clear: more money is needed. Yet, when asked why not resort to selling portions of land holdings, he called attention to the space required for military exercises and related installations. Clearly this was a concerted effort to cloud the more central issue of winning new prestige and thereby justifying the military's *raison d'être* as *raison d'état*. Indeed, according to the Chief, Switzerland does need an army!

A state of emergency had to be induced and a palpable sense of angst manufactured to prop up the call for protecting the homeland, with space played as an agent in blatant politics of fear. With this agenda, a threat-map had to be deployed as a tactical weapon. A difficult geography emerges in Blattmann's doomsday scenario in as much as impending terror is invoked to re-construct territory, thus further institutionalizing national security. By presenting conjecture as fact, he purposely plays the trump card of patriotic identity versus the evil other. Switzerland is interiorized, walled, not physically per se, but rather dogmatically, and all this to secure more funds for the military and its industry.

11 André Blattmann interviewed by Patrick Feuz and Daniel Foppa, «Denkbar wäre ein Pikett-WK,» Tages-Anzeiger, March 10, 2010.

12 Feuz, Patrick: «Achtung, eine A-Bombe! Armeechef warnt vor Nuklearangriff in der Schweiz,» Tages-Anzeiger, March 17, 2010.

13 «Armee Chef Blattmanns kuriose Karte», Tages-Anzeiger, March 15, 2010.

14 See Frisch, Max: «Schweiz ohne Armee? Ein Palaver», Limmat Verlag, Zurich 1989, written on the occasion of the national referendum to abolish the Swiss Army and support a comprehensive politics of peace in 1989 – with 35,6% of the voters in favor of the proposition.

15 Op. cit., Tages-Anzeiger, March 10, 2010.

There is a precedent to this protectionist impulse, which remains deeply engrained in Swiss mentality. Known as the *réduit*, or redoubt, the Swiss-conceived Alpine stronghold denotes a place of refuge in times of war. The term has both a physical and psychological dimension. On the one hand, it is comprised of a series of fortifications strategically situated across the country to defend prominent points and deter enemy attack. On the other hand, it figures as the core of «spiritual national defense» invoked to raise collective morale and remind citizens of the country's critical situation amidst hostile neighbors.¹⁶ Blattmann plays on this very sentiment.

While of vital significance during World War II, the *réduit* dates back to the early 19th century and later on gained importance in connection with the Gotthard railroad tunnel built in 1882.¹⁷ And this was no coincidence, as the Gotthard Pass lies at the heart of the country and forms the key link between north and south. A caricature published at that time entitled «After the Gotthard, the Matterhorn» ironically shows the ramifications of the Alps conceived as a weapon. Thoroughly excavated by caverns and encrusted with roads and cannons, the mountain becomes a technological object. During World War II, defense construction further escalated with considerable investments made in building more fortifications, which, to a large degree, are still used by the army today. No doubt a role model for Blattmann, the General at the time, Henri Guisan, reanimated the national call for resistance in the spirit of the *réduit*.¹⁸ He declared in July 1940 that in case of an attack by Axis forces, the Swiss would defend the high Alps and its infrastructure above all. To get a sense of the scale of the operation, 40'000 fortresses and subterranean installations were built during the war alone.¹⁹ Whereas the majority of these structures form extensive hidden networks, they most often surface in the landscape as idyllic, yet fake chalets, camouflaged by quotidian domestic architecture.²⁰ The Alps have been literally hollowed to become an infrastructural armature for national defense. The image of a perforated mountain range, not unlike Swiss cheese, increased the mythical power of the *réduit* as the last bulwark of territorial resistance.²¹

The effort to arm national space continued after the war, with commanders of the army still stubbornly committed to the idea of the *réduit*. While the rest of Europe had more or less ceased building fortresses, Switzerland kept looking for its protection underground. While approximately a billion US dollars had been swallowed up for fortifying the nation during World War II, an additional 10 billion were invested for the same purpose until the end of the Cold War, providing in the interim a welcome boost to the building industry.²²

Whether in the past or now, this intricate coupling of private sector business with a publicly funded army drives the very production of territory. This joint venture fuels a political economy that churns out state-of-the-art infrastructure turning country into machine. Known for its daunting natural landscape, which challenges the enterprise of grand designs, Switzerland has mastered the disciplining of topography by deploying civil engineering to turn an otherwise picturesque setting into strategic advantage: tunnels bore through miles of solid rock; bridges span treacherous valleys; and highways are laid with seeming indifference to rugged terrain – all built with first-rate cement produced by prosperous domestic industries. To top it off, post-war legislation in 1963, fueled by prevalent Cold War fears of a nuclear offensive on home soil, even decrees that all buildings must be equipped with a subterranean concrete shelter for every Swiss man and woman.²³ Constituting the biggest building project ever implemented in the history of the country, this venture takes the concept of the *réduit* down to the smallest, most filigree scale to form a decentralized network of capsular space. Overall, «fortress Switzerland» as project works to merge civilian and military purpose to secure national protection. Motivated by this insular mentality, it becomes clear that Blattmann's map is just a cog in the wheel of a more complex machinery. By

16 Mooser, Joseph: «'Spiritual National Defence' in the 1930s: Swiss Political Culture between the Wars», *Switzerland and the Second World War*, ed. Georg Kreis, Frank Cass Publishers, London 2000, pp. 236-260.

17 Stamm, Peter: «Farewell from the Réduit: The long walk», *Bunker: Unloaded*, Edizioni Periferia, Lucerne 2003, p. 85. The essay was originally published in *Das Magazin* in October 1998.

18 See Kurz, Hans Rudolf: «General Henri Guisan», *Musterschmidt Verlag*, Zurich 1965.

19 *Ibid.*, p. 77.

20 See Schwager, Christian: «Falsche Chalets», Edition Patrick Frey, Zurich 2004.

21 *Op. cit.*, Kreis, Georg: «Schweizer Erinnerungsorte», p. 182.

22 *Op. cit.*, Stamm, Peter, p. 77.

23 See Fuhrer, Hans Rudolf and Wild, Matthias: «Alle roten Pfeile kommen aus Osten – zu Recht? Das Bild und die Bedrohung der Schweiz 1945-1966 im Licht östlicher Archive», *Verlag für Kultur und Geschichte*, Baden 2010. See also Aeberhard, Robert: «Vom Luftschutz zum Zivilschutz», *Verlag Vogt-Schild*, Solothurn 1983. In addition, see Bachmann, Albert and Grosjean, Georges: «Zivilverteidigung», ed. Eidgenössische Justiz- und Polizeidepartement, Miles-Verlag, Aarau 1969; this booklet was mailed to all households in Switzerland and was accompanied by a letter from the Federal Government in Bern addressed to each recipient.

demonizing surrounding countries, the map serves the battle cry for ever more infrastructure that, of course, enables Switzerland to function like a fine-tuned clock-work-nation should.

GREATER SWITZERLAND

If Blattmann's map seems outrageous, it was outdone by an even more unsettling map published a few weeks later. Whereas the protectionist bid by Blattmann foresaw a walling of Switzerland, a subsequent initiative proposed by the



fig. c
«La Grande Suisse», foreseen expansion of Switzerland's territory as proposed by the right-wing party (Le Temps, June 2010).

right-wing Swiss People's Party (SVP/UDC) envisioned instead an expansionist course for the country. In place of a military cause, here diplomatic negotiation was enlisted – a Swiss asset if there ever was one. A motion was submitted to Parliament on March 18, 2010, by Senate member Dominique Baettig and cosigned by 28 of his fellow party affiliates. The plan is driven by the desire for a «Greater Switzerland» and commissions the Swiss National Council to investigate the legislative and judicial steps required to achieve this objective.²⁴ Simply put, the appeal amounts to a coup as it concerns the annexation of regions from neighboring countries. The said takeover would seize parts of France, Germany, Austria, and Italy, thereby altering the familiar political geography of Europe. The arguments in favor of participating in Swiss welfare are hard to resist: a direct democracy, an affluent market economy, and low taxes. Polls taken in those respective territories show an affirmative reaction by local populations.²⁵ The message seems obvious, everyone would love to be Swiss.

Known as an avid hunter in his pastime, Baettig has made a name for himself in politics as a staunch conservative. His background includes involvement in right-wing radical activities and associated journals. He now likes to see himself as agitator or agent provocateur. In the context of the contentious «Minaret Initiative,» for example, he equated migrants with «territorially-foreign species of invasive insects» when provoking Parliament to consider the economic consequences of uncontrolled immigration into Switzerland.²⁶ Intervening in politics abroad, he even had the audacity in a speech in France to suggest that minarets are phallic symbols of male potency. He received accolades from a cheering crowd of extremists, and that in a country where the Muslim issue is already explosive. Clearly, the ulterior motive was to attack what he considered an icon not just of religious but

24 Petignat, Yves: «Boutefeu, l'UDC est prête à accueillir Aoste ou la Savoie», *Le Temps*, June 10, 2010.

25 «Umfrage: Nachbarregionen wollen der Schweiz beitreten», *Die Weltwoche*, July 22, 2010.

26 Gmür, Heidi: «SVP-Nationalrat vergleicht Ausländer mit Insekten», *NZZ am Sonntag*, October 18, 2009.

also of political power in the Islamic world. He was caught on camera at this event by Swiss TV, a bout of media exposure that only reinforced his position with supporters at home.²⁷ What plainly functioned as propaganda ultimately served his later motion to gain a stronger foothold in Europe for the Helvetic Confederation through territorial appropriation.

Responses to Baettig's proposition varied from applause to appall, both nationally and internationally. Domestically, at the highest echelons of power, an argument was made against disturbing friendly relations with European neighbors, as those relations had already been tested by recent disclosures of foreign deposits in Swiss banks made to evade taxes back at home. To counter this argument the SVP/UDC cites widespread discontent by inhabitants from bordering regions. Situated on the periphery of their respective nations, these presumably dispirited constituencies, according to Baettig and his party, have been disenfranchised by their own governments. The case put forth is to appease these regions by assembling them as new cantons under the umbrella of Swiss democracy and, in effect, prompt their surreptitious defection from the European Union. Viewed by the Swiss conservatives with disdain, EU government officials are portrayed as an elite *classe politique* operating top-down from their remote headquarters in Brussels, the very argument made by Switzerland itself for not joining the EU. At stake is nothing less than the mobilization of sovereignty brought about by the annexation of territory.

This is a touchy issue with a sensitive history. The relationship between Switzerland and Europe has been marked by ambiguity both now and in the past. Although proudly autonomous, Switzerland is nevertheless tied to Europe. The small Alpine country enjoys the best of both worlds by maintaining independence and cultivating select cross-border relations at the same time. Basically, it gets its cake and eats it too. But this works two ways, insofar as adjoining countries have always enjoyed a safe haven of courteous hospitality coupled with gentlemanly discretion in financial matters. Maps of Europe most often reveal this dual condition, with Switzerland depicted as either a blank hole or as privileged refuge. Whatever the case, to be situated in the middle proves to be an opportune place for maneuvering, both politically and economically. This is certainly true for Switzerland in that it plays the role of strategic relay within a space of circulation. Here again, infrastructure is a crucial component in the business of routing and re-routing flows.

But these flows are not always visible, as demonstrated by Switzerland's part in World War II. Then, trade relations and territorial disposition, as we now know, went hand in hand with military diplomacy. The prevalent picture painted during and after the war was that of a small country at the mercy of great powers – a classic David vs. Goliath standoff. While figuring the *réduit* as key to defending Swiss independence might be reassuring even today, in actuality accommodation, negotiation, and political savvy served as equally effective modes of keeping fascist aggression at bay. Yet, as advantageous as it was at the time for Switzerland to play strategic relay for financial transactions, including loans and credit to Axis powers, the exposure of this very practice now taints the image of the country's neutrality. The so-called «Swiss miracle» of coming out of the conflict unscathed is now widely viewed as a «Swiss malaise.»²⁸ It would seem that the business of give and take was crucial to national defense. Government authorities and industrial leaders acted, it is now argued, more pragmatically than heroically when faced with the threat of invasion: industries supplied specialized products and financial institutions offered liquidity essential to the war effort.²⁹ To facilitate the movement of goods and money, things needed to be put in place and a complex apparatus was required, including everything from administrative procedures to logistical protocols and infrastructural systems that stretched far beyond national borders. Project «network Switzerland» was furthered in the process.

28 Perrenoud, Marc: «Foreign Trade and Swiss Politics, 1939-45», *Switzerland and the Second World War*, ed. Georg Kreis, Frank Cass Publishers, London 2000, pp. 26 and 27.

29 *Ibid.*, p. 28. See also the report by the Independent Commission of Experts Switzerland – Second World War, «Die Schweiz, der Nationalsozialismus und der Zweite Weltkrieg», also known as the «Bergier Report», Pendo Verlag, Zurich 2002.

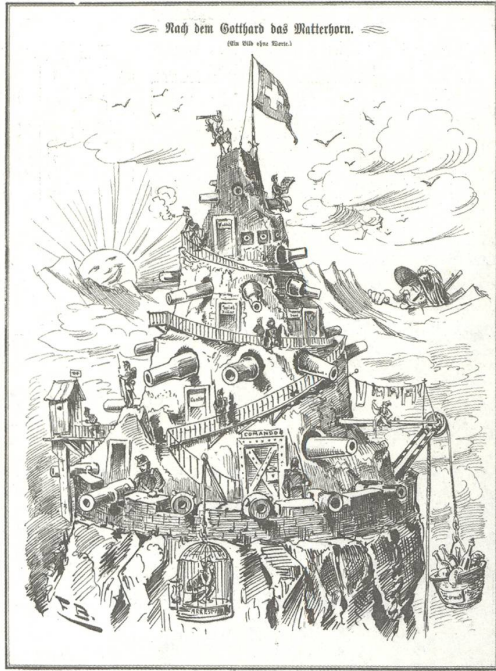


fig. d
Caricature entitled "After the Gottfard, the Matterhorn," published in the satirical weekly *Der Nebelspalter*, 19 November 1897.

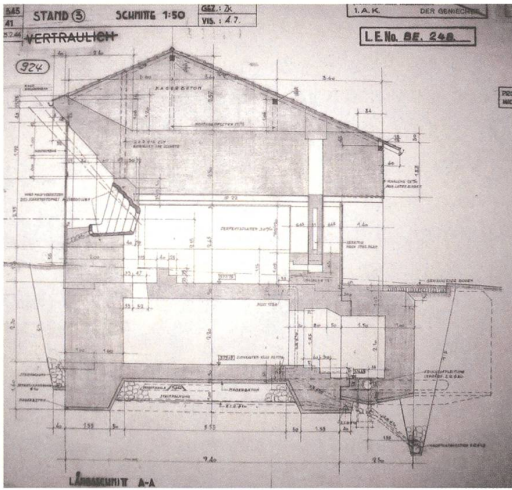


fig. e
Section of World War II bunker, camouflaged as Swiss chalet, 1944.



fig. f
Infantry bunker disguised as Alpine hut, Furka Pass, Realp, Canton Uri, 1941-45 (Photograph by Christian Schwager, 2004).

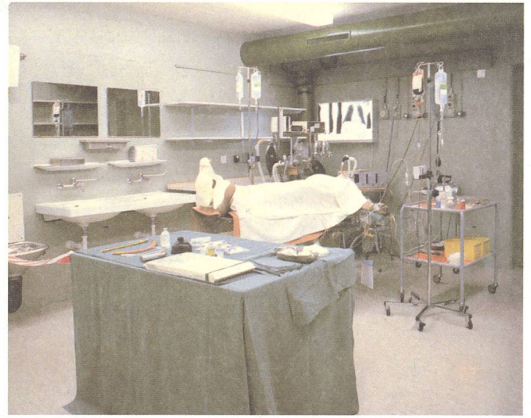


fig. g
Staged hospital, emergency room, and domestic scene in air raid shelters, photographs from the mid-1960s.

Contrary to the *réduit* mentality behind Blattmann's vision for a porcupine-like posture toward the outside, the move to extend political and economic tentacles into a larger arena reveals another attitude toward territory, one this time directed by circulation, movement, exchange, and so forth. This is what Baettig's scheme banks on, for there are significant benefits to his expansionist dream. Take the State of Baden-Württemberg for example. As one of the most prosperous regions targeted in the venture, it performs as a German Silicon Valley and functions literally as the country's economic motor, with elite universities and blue-chip company headquarters such as Porsche, Mercedes-Benz, Bosch, and SAP located there. The proposed incorporation of the region would yield a match made in heaven considering the parity of work ethic between Switzerland and this part of Germany. As a matter of fact, these territories are already integrated at least infra-structurally and commercially, forming a well-functioning transnational entity. But remember, Baden-Württemberg is only one piece of a larger plan for a <Greater Switzerland>.

Were Baettig's motion to be approved by all involved parties, Switzerland would gain an additional 17 million citizens, and its territory would triple in size overnight. To all intents and purposes, this would give rise to a politically ratified metropolitan cluster, if not a megacity in the center of Europe. Whereas current domestic planning efforts and academic studies are inclined to view Switzerland as a large urban conglomeration, most still treat the country as fixed in terms of its sacrosanct borders. Other research projects such as those by *Avenir Suisse* and the ETH Studio Basel have begun to soften the edges of the nation and consider mergers forming between city regions on its periphery.³⁰ Surprisingly, Baettig's map is the next logical step in considering the implications of an urbanization process that is already underway and challenges the political make-up of Europe.

³⁰ See «Stadtland Schweiz», ed. Schneider, Michel and Eisinger, Angelus, an *Avenir Suisse* publication, Birkhäuser Verlag, Basel 2003. See also Diener, Roger; Herzog, Jacques; Meili, Marcel; de Meuron, Pierre and Schmid, Christian: «Switzerland – An Urban Portrait», ETH Basel Studio, Birkhäuser Verlag, Basel 2004.

ENTROPIC SWITZERLAND

Looking back at such figments of cartographic imagination, Switzerland seems to be faced with the incommensurable options of isolation or expansion. Blattmann is pitted against Baettig. Yet, the country is in fact pursuing both routes. What seems like opposing ideologies actually works in tandem to produce territory by taming space. Each plan relies on the provision of infrastructural networks to secure optimal channels for managing order. However, while each ideology aims for order, they unexpectedly contribute to an entropic territorial condition. Against better judgment and counterintuitive to a will to discipline, the more control the more disorder.

By now a well-known phenomenon and one that has plagued scores of scientists, geographers, engineers, planners, and politicians alike, entropy, or the tendency of a system toward spontaneous change, has spawned ever new tools to get a handle on a condition that by definition resists control. From GIS technology and anamorphic mapping to spatial data infrastructure and morphological modeling, empirical data is crunched into what has effectively become our contemporary version of landscape painting, all diagramming urbanity without pause. With due respect, such labor faces the Sisyphean task of trying to contain cities on the loose. As composed as it might appear, Switzerland's urban fabric no longer yields to an immaculate image, whether idealized on a map or rationalized in the mind. Quite the contrary. Although clean and efficient, this urbanized country manifests an amalgam of disjunctive bits and pieces, each operating according to its own rules and agendas.

Though maps tend to homogenize whatever they address, the physical constitution of the territory at issue here is comprised of a heterogeneous mixture of dense urban networks connected by endless conduits of infrastructure, loose

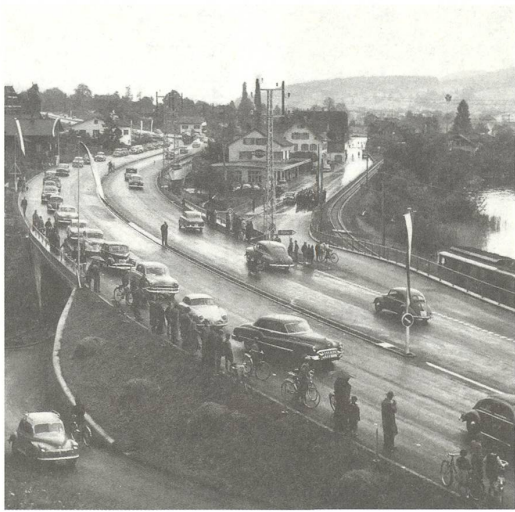


fig. h
Opening of first freeway segment connecting Lucerne and Ennetshorw, June 11, 1955 (Photograph by Hans Blättler).



fig. i
Traffic Roundabouts in metropolitan regions of Switzerland.

agglomerations lined with industrial and commercial strips, areas of little or no activity, land set aside for agriculture, restricted military compounds, and plenty of nature to go around, all driven by the mechanics of interest. What results is a fractured space that nevertheless functions as if by its own momentum, a diffuse arrangement not just of stuff, but also of regulations, standards, customs, and anything else needed to manage the operation of capitalizing territory.

Switzerland's federalist model of governance exacerbates this condition, with over 2'700 constituent communities enjoying direct democratic representation. Everybody has his or her say. The distribution of power to localities is stamped directly into the land. Each community, for instance, devises its own zoning regulations that specify land-use in the spirit of the Charter of Athens's separation of functions, producing a spatial pixelation of sorts whereby territory is peppered with normalizing codes *ad infinitum*. While maps are the instrument of choice for translating normality into territory, the resulting proliferation of regulation gives way to spatial cacophony. This in turn requires even more elaborate administrative protocols for municipal management. But this account is only from the bottom up. Top-down management of territory involving regional planning at both cantonal and federal levels is also at play, inevitably leading to conflict with communal ambitions. One example dates from 1958 when a bill was passed in a national referendum involving a constitutional amendment to give the green light to a new freeway system that by now stretches over 1'800 km throughout the tiny nation.³¹ Add to this the recent trend of roundabouts that has altered the face of domestic transit, with thousands and thousands of traffic circles introduced as if overnight. Darling of engineers, these beloved technical objects are the subject of countless manuals that cite their efficiency in facilitating circulation. You never have to stop while driving around in circles.

And these are only a few examples of the regulatory frenzy that bombards territory at all scales. Disciplining space is the name of the game. Discipline normalizes. «Discipline, of course, analyzes and breaks down; it breaks down individuals, places, time, movements, actions, and operations.»³² Yet it seems that discipline cannot help but generate its other, a let be attitude toward a state of things, when multiplied *ad absurdum*.

As a side effect of hyper-discipline, this *laissez-faire* or *laissez-aller* state of things finds its equivalent in the economy, still another key engine of urban development. Indeed, «letting things take their course» as they will is an integral feature of the free market.³³ While banking on entropy might well serve the financial sector, it just as well leaves its traces on contemporary city regions. With no option except competition within a milieu of free movement of virtually everything, space as much as place is bought and sold. The mechanisms at work in the financial sector align with those of urban production. Anything profitable goes, and if not, is disposed of. For land holdings are just as dispensable as any other commodity, opened to the market, with their scraps scattered across the map. So what is referred to as «open city» in academia is not necessarily an ideal setting for coexistence, for it is most often embraced by developers and investors as a pretext for anything goes.³⁴ Over and above pretty images, freedom of circulation rules as a technology of power in our current political economy.

At work here are modes of territorial production that are not exclusive to Switzerland, as this economic geography knows no borders. With free circulation as its core principle, the urbanization of territory gives rise to a transnational mentality of governance, a «governmentality,» to borrow an expression from Michel Foucault, that is formed by a nexus where profit and power trump space.³⁵ Yet, the pace of deterritorialization and the appetite for unhindered development at all costs demand another frame of mind than those that bank on discipline alone. We need to enter the clockwork itself, operating from the middle out and reversing its prescribed course if necessary. This might require a modified political economy

31 See «Die Schweizer Autobahn», ed. Heller, Martin and Volk, Andreas, Museum für Gestaltung, Zurich 1999.

32 Foucault, Michel: «Security, Territory, Population.» Lectures at the Collège de France 1977-1978, ed. Michel Senellart, trans. Graham Burchell, originally published by Édition du Seuil/Gallimard, 2004, Palgrave Macmillan, New York 2007, p. 56.

33 Ibid., 41.

34 See «Open City: Designing Coexistence», ed. Christiaan, Kees et. al., catalogue of the Architecture Biennale Rotterdam, Sun Architecture, Amsterdam 2009.

35 Op. cit., Foucault, Michel, p. 108. He defines the term as follows: «By governmentality I understand the ensemble formed by institutions, procedures, analyses and reflections, calculations, and tactics that allow the exercise of this very specific, albeit very complex, power that has the population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument.»

that alters its view of territory as neutral backdrop left submissive to forces that act upon it. Instead territory, already a complex network of actors, must take the lead and act to redirect political economy toward a more constructive reflexivity where the physical milieu is allowed as equal delegate at the negotiating table. Then the map could no longer master territory, nor would territory be scattered around as passive victim by the whims of special interests. Rather, territory would be reterritorialized on the vested interests of territory itself. But this may require a change of direction, going against the flow so to speak, counterclockwise.

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Marc Angéilil, born 1954

Professor and Dean at the Department of Architecture of the ETH Zurich. His research at the Institute of Urban Design of the Network City and Landscape (NSL) in Zurich and the Future Cities Laboratory (FCL) in Singapore addresses developments of large metropolitan regions. Author of several books, including «Deviations» on methods of teaching and «Cities of Change: Addis Ababa» on the political economy of contemporary urban territories.

Cary Siress, born 1961

Architect and tenured faculty member in Architecture and Theory at The Edinburgh School of Architecture and Landscape Architecture of The University of Edinburgh, Visiting Professor at the School of Architecture at the University of Nanjing in China. Founding editor of the journal «Architecture &». Following graduate studies at Columbia University in New York, he taught at the ETH Zurich, where he completed his PhD in 2006.