



*Ad al Beit street, Damascus, Syria. Last day of the presidential election, where there is only one candidate: Bashar al-Assad. Me and Isaam are walking along the crowded sidewalk. We stop at a small kiosk. While standing in line I see a newspaper placard. It shows a large ring encircling the word نعم.*

Isaam, what's up with that?  
Why do they say yes?

Are you stupid?!  
It's the last election day today!  
Don't you see the subtitle:

Yes  
Today ... and all days

Still, both the surface-mount and the through-hole components present the hacker with an infinite multiple of potential compared to the flat surface of the Uno packaging. This is the drastic consequence of the developer teams choice of turning the circuit-board into a product. To the hacker, a flat surface is the closing of potential, the end of dreams. Yes, the hacker can still do all the things with the Uno that he could do with the Extreme or the Duemilanove, only the invitation is revoked. Who once was included is now excluded. And the circuit-board might have out-scribed itself from the circle of hackers by reaching the goal nobody at the tool cluttered table really wanted to reach.

Caught in process, biological life, in Arendt's reading of Aristotle's now familiar distinction between *zoë/bios* was not reduction of life, but rather its opposite, production – labour – ever-becoming, without ever-reaching. Biological life, in Arendt's account, is a series of events, a cyclical change, but without being connected to the story of human, social life; its beginning, middle and eventual end, given that every end becomes a new means of producing life. Much like a rat running tirelessly in its wheel, Arendt describes a circular process of life, whose objective ultimately is the reduction of human action, of difference, through the production of animal laborans – of subsuming the alterity and contingency of freedom into never-ending process, or in other words, of containing the potential in the order of the possible and the predictable. Arendt writes: "In the place of the concept of Being, we now have the concept of Process. And whereas it is the nature of the concept of Being to appear and thus disclose itself [to appear as the Other or to appear as political], it is the nature of Process to remain invisible" (1958/1998: 296-97). To insert the invisible within a schema of security, is nothing short than to strive to foreclose the potential to become-dangerous, and hence the capacity to appear as a given threatening Other. In fact, it is to reduce the potential to appear other per se, and hence to appear political.

To the [Anonymous] hacker, a flat surface is also a challenge to deconstruct – to take apart, rewire and write new codes. To create other point-of-views. Katherine Hayles has made a distinction between the dialectic of **presence/absence** and that of **pattern/randomness**. The latter dialectic has taken over from the previous as the language of information or the signal. Instead of a signal being there or not, it can either be perceivable or not. I could argue alongside her that physical computing belongs to the outdated dialectic of presence/absence and has only a subordinate position in the brave new **virtual world**. This would be true for the product. Another way of seeing it is that the Uno is all about pattern, one given pattern leaving no space for randomness. Certainly, there is enough room for randomness in the seeking circuit-boards, where the world of the hacker enters into each and every soldered component. And with that world comes noise and randomness. Or rather, noise if we look at the signal from a certain vertical point-of-view. From another viewpoint, perhaps that upheld by the concavity of the through-hole transistor, the Original or the Serial might allow us to see different patterns.

"...if one could count on what is coming, hope would be but the calculation of a program. One would have the prospect but one would no longer wait for anything or anyone. Law without justice. One would no longer invite, either body or soul, no longer receive any visits, no longer even think to see. To see coming, Some, and I do not exclude myself, will find this despairing 'messianism' has a curious taste, a taste of **death**."

– Jacques Derrida, *Specters of Marx*, p. 212

Yet in suspending the law the sovereign remains irrevocably tied to it. The distinction between law and the exception conditions both elements of the categorical pair. Agamben writes that "The state of exception is thus not the chaos that precedes order but rather the situation that results from its suspension" (1998: 18). In suspending the law, the sovereign remains inescapably related to the law – "included solely through its exclusion" (ibid). Between these poles, caught in their hold, the sovereign stands, stuck in the paradox of inclusion/exclusion.

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– The Norwegian Nobel Committee, October 9, 2009.

"existence is not separate but is somehow identical with the process through which it comes into being: the seed contains and, in a certain sense, already is the tree"

– Hannah Arendt, *The Human Condition*, p. 150



He sits himself down next to me. He created the first circuit board, and now tells me while drawing a large circle on a slip of paper: "This is my world". Making a smaller circle, almost a dot, next to the large one, he says: "This is you. I can bring you in to this world." Underlining his prophecy with a curved line from me to the world.

Obama's commonly announced assertion that "the future belongs to those who build and not destroy" (September 23, 2009) should thus be read as exactly that – as creating desire for the future by drawing boundaries towards the symbolic Other. Through such moves, hope becomes a biopolitical project of security, turning difference/reason into unity, as Obama declared in his inaugural address: "On this day, we gather because we have chosen hope over fear, unity of purpose over conflict and discord" (January 21, 2009).

– Ernst Bloch, *The Principle of Hope*, p. 12

The resistor is the most common component of a circuit board.

The Extreme was the first of the hoping circuit boards, which also includes the NG. NG, says the developer core, stands for *nouva generazione* – the new generation. In technology development circles it is also a widely used general name for the upcoming release of an existing hardware which have not been given an official name. In that case the letter combination is mostly read as next generation. The name NG contains the promise of the future, the hope of moving towards the promise land. Both Extreme and NG, as names, embrace the grandiose and that which is just beyond reach. They are pointing at the light shining through the cracks. Or rather, they are opening canyons in the circuits just enough to let the sparks shoot between the poles, like rainbows over the jagged circuit board horizon.

# BECOMING-BRICOLEUR

"The people of Afghanistan seek the promise of a better future. Yet once again, we've seen the hope of a new day darkened by violence and uncertainty."

– Obama, *Remarks by the President on a new Strategy for Afghanistan and Pakistan, March 27, 2009*

*June 2007, 11.30 pm. El Akhial Street, Qassa neighbourhood, Damascus, Syria. Five people are walking slowly with no other goal then to buy candy up the hill.*

Isaam:  
You know, You always think it's so good in Europe.  
You know. It's far from heaven. You know. My father, when he's here in syria. He's always, happy. He talks to everyone, he stops at the food stop, 10 minutes just talking. And then when he's back home. He's like, always depressed. Just sits at home, doesn't call his friends.  
Husein:  
Fuck, Isaam! Fuck. You don't know how it is living here. What can I do. Should I stay? Like, get a wife, get children. It's my biggest nightmare. My children growing up here. Fuck, man. To let my children have the same situation as me. A child growing up in this country. In this system. You know. Nothing changes here. In 20 years, there still be no education. The same fucking family will rule. Fuck man. I can't do that!

This change in telos is important to acknowledge; while the spreading of freedom promises satisfaction, the promotion of 'hope' carries no such illusions. In fact, just like progress (as progress has no end to it), the promise of hope logically equals the continuation of dissatisfaction. The 'ideology of hope' then is therefore simultaneously an ideology of disappointment – blurring the distinction between 'resentment' and 'hope' and truly highlighting the pacifying power of hope.

I move through a university towards the electronics workshop. Moving, I realize that the white space outside the workshop, is the workshop. The tool cluttered table of the students have been placed outside. It's full of potentiometers, solder irons, computers and pliers. The space is wrapped inside out. The intimacy of the naked circuits are gutted out all over the corridor, walkway and dining hall. I realize, I will never reach the workshop.

The first three releases were more or less immaterial releases. They were circuit board designs released on the website. Hackers would compile shopping lists from the blueprints and follow the instructions. Those in contact with the developers inner network could however order empty double-sided circuit boards in order to not having to produce them by hand, which is a bit of a hassle. Still they had to solder the components along the patterns of the empty boards.

"Imagine what it's like to be a young person living in a country that is not moving toward reform. You're 21 years old, and while your peers in other parts of the world are casting their ballots for the first time, you are powerless to change the course of your government. While your peers in other parts of the world have received educations that prepare them for the opportunities of a global economy, you have been fed propaganda and conspiracy theories that blame others for your country's shortcomings. And everywhere you turn, you hear extremists who tell you that you can escape your misery and regain your dignity through violence and terror and martyrdom. For many across the Middle East, this is the dismal choice presented every day."

– George W. Bush, *President Bush Addresses United Nations General Assembly, September 19, 2006*

"they make what is new into what is expected"

– Ernst Bloch, *The Principle of Hope*, p. 41

Following the hoping are the awaiting circuit boards (Diccimila, Duemilanove and Uno). These boards all have Italian numeral names (10 000, 2009 and 1 respectively), but in contrast to most software and hardware release series it's a descending rather than ascending series. This is significant. With the increasing series, usually starting at 1, developers give themselves the freedom to continue as long as they are interested, and to stop at any time since they have not given any promise of reaching a certain number. The Arduino team however chose to put themselves under pressure. A natural-numeral series decreasing can go no further than to 0, but an increasing series can go to infinity, which drastically releases tension. According to some mathematical definitions of natural numbers 0 is not included, which would make 1 the ultimate end of the decreasing series. Which definition the Arduino team adheres to is yet to see, but with the latest release, the Uno, we might be looking at what we have awaited. We all know that something must happen when the countdown approaches zero.

*2004. Tel Aviv, Israel. Israeli leftwing activist Fredrico explains.*

You hear all this nationalist crap that is taught everywhere and you just don't want to be part of it. I guess. And you can't pretend that things are okay and listen to your neighbor saying some racist shit and just pretend it's okay. You can't escape it really. Some of the activists and I don't think we will be able to stay here for much longer. The fact that I'm staying here now is that I got things to do. I also have a lot of guilt feelings, if I leave, it will be less people here to fight. The fact is that most people at least go abroad once a year if they can afford it. It's not so expensive, so most of the people can.

And you got a Goliath, which is Israel, and a David, which is the Palestinians. But in this case I'm not sure if David will be able to beat Goliath. Really. And that is the sadest thing of all. You don't have much hopesometimes. We will still try. I think it's a moral duty to keep trying as long as you can, but it seems so hopeless some times. It seems really hopeless.

Looking forward from the early hand built releases, which used solely through-hole components, through the industrially assembled boards of the hoping and awaiting series, which used surface-mount components, to the Uno's superficial cartonnage. I see a flattening progression. Surface-mount components lay flat on the PCB (printed circuit board), allowing windings only in one dimension when studying the cross section of the board. Components can extend from the surface but never rise above it. The through-hole components, however, can detach themselves completely from the surface, hovering in a space some millimeter above the PCB. They extend in (at least) two dimensions, since their profile crosses the axis normal to the board several times and in both directions, compared to the one dimensional which only crosses once and only in one direction.

"The anticipatory thus operates in a field of hope; so this hope is not taken only as emotion, as the opposite of fear (because fear too can of course anticipate), but more essentially as a directing act of a cognitive kind (and here the opposite is then not fear, but memory)."

– Ernst Bloch, *The Principle of Hope*, p. 12

*April 2008. Country side 15 km west of Homs, Syria. Family father talking over tea.*

You're from sweden! I love sweden!  
Have you heard about the king when he got arrested? I tell you. Leaders. The king was late. And everybody waited. Then the king showed up. Started to greet people. He came up to the chief of the police: "sorry for being late. My driver got sick, and I had to drive here myself. But I made it in one hour." The police boss asked: "where did you drive from?" the king: "From Stockholm." "In one hour?" "yeah!" The police boss said firmly: "I have to take you're driving license, my majesty. It's speeding if you got here in one hour!" I love it! Something like this happening! Even the King is treated the same way by the law, as any other person.

# HOPE AS

"Only very rarely has a person to the same extent as Obama captured the world's attention and given its people hope for a better future. His diplomacy is founded in the concept that those who are to lead the world must do so on the basis of values and attitudes that are shared by the majority of the world's population."

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# HOPE AS TRANSDISCIPLINARY PROCESS

The multi-dimensional board allow more concave windings than the one-dimensional. All surfaces are visible to the vertical gaze in the industrial boards without the folds of the multidimensional circuitry. These folds are the anchors from which the hacker takes charge, where the hacker establishes his/her point-of-view (as used by Deleuze). Without these holes and concavities the only possible viewpoint is that from above – that of the consumer. By mounting the board by hand, the hacker is able to construct the topography on which his/her work is grounded. In the shadowed folds below the through-hole transistor he can embed his own definition of DIY.

Perhaps, when declaring that the "most powerful weapon in our arsenal is the hope of human beings" (September 23, 2009), Obama means exactly that: controlling desires and in the process controlling the potential, by pre-empting desires' eventual dissatisfaction by avoiding the lofty, perhaps empty, but nonetheless articulated promises of modern politics. Hence without risking to disappoint, to dismiss and to reduce the structural promise of this call from the future.

Electrical load is measured in volts, and can be compared to a force pulling electrons through the circuit. Flowing electrons are called a current. The current that the load of a regular European power plug can generate is life threatening. Circuit boards are seldom powered by such strong currents. Instead, the load is transformed and the current limited, so that it's not even perceivable when applied to the body.

The future remains **absent**, distant, allusive, yet **present**, coming back in the form of hope and desire, causing an ontological rift within the very concept of time. David Runciman has called this the "paradox of presence" (2007: 93), arguing that every representation, in this case of the future, "implies that something must be present in order to be re-presented, but also absent in order to be re-presented" (ibid).

By merging our three voices we hope to enable a dialogue that will guide our separate works towards new and unexpected domains. When we speak, we speak from our separate positions within the fields of art, film and academia. The bricolage presented here is both a documentation of the process of becoming bricoleur, as in the process leading up to this poster, and a starting point for the work to come, a continued conversation to which we hope more voices will connect. This text is an opening-up of space and an invitation to that space.

Through the combination of extracts from our works, we have identified hope and promise as an injunction operating on at least three different levels. Firstly, each respective work deals explicitly with notions of affect, promise and power. Secondly, offering merely a glimpse of each respective work, we make manifest the paradoxical logic of every promise of fullness, which can only remain a force of affect as long as it remains incomplete. Promise necessitates reduction and incompleteness, it thrives in the imaginary, in the parts, and not in the finality of the whole. Thirdly, our collaborative process is engendered by the over-arching promise of transdisciplinarity and the idea that the merger of perspectives 'opens up' new possibilities, not only onto the collaborating subjects of the past, but to the potential collaborative subjects of the future.

Key to this process is the notion of the bricoleur; the idea that the possibility of change comes not through the invention of newness, but through the assemblage of images, signs and actions into different relations.

As such, the content of values are fluid, their meaning open for interpretation and their final establishment remains allusive. They come to us not from the past, dictating our actions in the present, but arrive to us from the future – as a promise of fulfillment. In that sense, following Derrida, "inheritance is never given, it is always a task" (1994/2006: 67). In other words, history's meaning has to be decided in the now, that very action only postpones said meaning to the future, causing an inherent rift in the present. The Derridean notion of future anterior captures well this aporia of time and of history, shining light on how the past is rendered as future – a temporal shift that plays an important and explicit role in the Obama administration's security narrative. Ponder for instance Obama's incessant referral to the nation's **founding fathers** and the conjuring of its founding documents as "not simply words written into aging parchment" (May 21, 2009) but "a light that shines for all who seek freedom, fairness, equality, and dignity around the world" (May 21, 2009).

By the time the **founding fathers** had produced their optimal outcome – the artifact, the son the family had been waiting for – the older brothers and sisters of the Uno had already given birth to bastard sons of their own. And these artificial PCB children, acting as low resistance copper wiring to the capacitor, have in turn attracted new creative condensations of hackers. Countless derivatives have formed a diaspora of circuits emanating from the open source body of the circuit-board. Beside the in-official releases are also the noisy home-brew compatible circuits of hackers who never released any of their breadboard patterns beyond the walls of the workshop.

"... contingency is not arbitrary chance. It represents a complex discourse – set of truth-telling practices – about the knowledge of uncertainty."

– Michael Dillon, *Governing Through Contingency: The Security of Biopolitical Governance*, p. 45

– Jacques Derrida, *Specters of Marx*, p. 94

What we see is the play between pattern and randomness. The charge building up between the poles of the semiconductor about to burst in a flash of light. As the Uno approaches the perfect signal-to-noise ratio and zeroes out randomness in favor of the pattern, the surrounding environment is bound to balance the equilibrium by increasing noisiness. When the Uno compresses all of its potential in the single product and completely reduces the noise, the flat surface paper cover won't hold. The sparks we have seen shooting off until now will ignite the explosion. This is the potential of **open source**. Without the blueprints there would not have been enough of a flow of sparks. From the load built up over the years, and now encapsulated fully in the One, sparks will shoot off in all directions, casting a flickering light over all windings of the circuit board.

Hope – as well as the future – can be tied down to an ideology of deliverance and salvation. Through the politics of representation, hope can be given a direction. It can be conjured, controlled and expanded by a teleological messianism. Such moves render hope into a political concept wrought in power and contest.

"A matter of thinking another historicity [...] an affirmative thinking of the messianic and emancipatory promise as promise: as promise and not as onto-theological or teleo-eschatological program or design. Not only must one not renounce the emancipatory desire, it is necessary to insist on it more than ever, it seems, and insist on it, moreover, as the very indestructibility of the 'it is necessary.' This is the condition of a re-politicization, perhaps another concept of the political."

– Jacques Derrida, *Specters of Marx*, p. 94

"Only with the farewell of the closed concept of being does the real dimension of hope open"

– Ernst Bloch, *The Principle of Hope*, p. 18