Urban anxieties in times of terrorism

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Abstract

Urban anxieties are often linked to the perception that certain parts of the cities are off limit, with potential danger lurking on the streets or behind the closed doors. People are however not anxious about environmental dangers, but mostly about the behaviour of other people in public spaces. The paper reflects on how in times of terrorism the question about dangerous individuals more and more focuses on the inside of the human body – the gene and the brain. In this search to map danger,
there is a similarity between the social mapping of danger in urban spaces and the biological mapping of it inside the human body. In both cases, danger is perceived as being hidden, opaque, and ungraspable. Behind the desire to clearly map urban danger and to find clear explanation of human dangerousness in the body is the desire to impose new forms of social control. The paper concludes that neuro-architecture and neuro-urbanism also succumb to the desire to find ever new forms of mastery and control of human subjectivity.

Key words: Terrorism, Anxiety, Urban danger, Neuroscience, Genetics, Neuro-architecture, Neuro-urbanism, Social control, Psychoanalysis
I. Introduction

We live in times of heightened anxiety. It is affecting our view of the world, the way we move around, the way we regard others and equally the way we perceive the inside of the bodies. Anxieties that are shaping our lives in times of post-industrial capitalism contribute to creation of new forms of public surveillance as well as to invention of new strategies which try to predict future dangerousness of individuals.

Urban anxieties\(^1\) are often linked to the perception that certain parts of the city are off limit, with potential danger lurking on the streets or behind the closed doors. While we might be anxious about pollution and various other environmental angers, mostly we are actually anxious about other people – especially when we feel them being a threat to our wellbeing.

The paper will look at the way in times of terrorism we more and more search for the answer to where does danger come from inside the human body. Paradoxically, one can observe certain similarity between social mapping of danger

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1) Urban anxieties are well depicted in the film Dheephan, which present the story of Tamil refugees who are fleeing civil war in Sri Lanka being placed in a Parisian ban lieu – the suburban low-income housing projects where people live in social isolation. There is no police seen in these estates, people there live by their own rules and conflicts. The main protagonist, Dheepan, exchanged one violent situation for another. After fleeing violence in Sri Lanka, he ended up in midst of drug gangs. He quickly learns the rituals and risks of his new surrounding where a word or gesture out of place can wreak havoc. His street fighting skills learned from the Tamil Tigers in his homeland served him well in his new setting. After brutal fighting where the ban lieu looks very much like any other war zone, we see Dheepan with his family in a happy ending setting – British country side, nice house, lovely party, happy looking people. The anxiety provoking urban setting has been replaced by the homely, tranquil suburbia. When we see this ideal ending, we, however, question if this idyllic setting is just Dheepan’s dream with the help of which he tries to escape the urban setting in which he lives(Audiard).
in urban spaces and the biological mapping of it in the human body. In both cases, we often deal with danger being hidden, opaque, and ungraspable as well as with the desire to clearly delineate it. The localization of dangerous urban spaces thus goes hand in hand with the desire to localize subject’s dangerousness inside the body.

II. Anxiety and public spaces

When I decided to visit presumably dangerous part of Buenos Aires, called La Boca, anxiety was instilled in me much before I embarked on my journey there. Travel books were warning me about robberies in La Boca, locals were saying that many people there wear guns; Internet forums were showing horror stories of attacks on tourist in La Boca. From these descriptions it was not possible to directly map where danger lurks in this part of Buenos Aires, however, the very name La Boca was heavily pregnant with it.

My anxiety was greatly diminished when one local commented that she feels safer visiting places where criminals live than where they work. What she was pointing out was that most of the robberies actually happen in the rich neighbourhood and not in the poor one.

When I actually visited La Boca, to my surprise, I realized that the presumed dangerousness of the area contributed to its development in the last years. On top of urban areas which were obviously a popular tourist spots, a private museum of contemporary art with its minimalist architecture signalled this area’s rapid cultural transformation from ghetto to cool place to visit and possibly soon to live in.
A few years ago, I experienced similar urban anxiety when I by chance walked in the Mea Shea’rim part of Jerusalem, which is inhabited by ultra-orthodox Jews. I was dressed in trousers and when I saw a written sign on a house which discouraged foreigners to visit the area I remembered reading about stories of tourists who were in the past attacked in this area, of stones being thrown on police and busses. An article in Haaretz described this area as “a lawless no-man's-land” (Sharar 2010). All this news deterred me from entering the place. I was truly anxious that something unpleasant might happen to me where I to walk in the neighbourhood I did not feel safe in. Here, too, not far away from the potentially no-go area one could visit new cool cultural places with small galleries and cafes frequented by artists and tourists.

There exist variety of ways we try to map danger in the public spaces. We can easily look at publicly accessible maps of cities which present data on crimes committed in particular areas. Laura Kurgan together with the Justice Re-investment initiative of the Open Society in New York has created maps that show from which neighbourhood people convicted of crimes come in New York. The maps also show how much the state usually spends for the judicial process related to their crimes as well as for their imprisonment. The project which was named Million Dollars Blocks questioned what would happen if this vast amount of money were to be spend in the communities where potential offenders live. Instead of paying millions for punishment one might pay money for changing the urban spaces and improving the lives of people who often end up in prison.2)

When we try to map where danger might come from in the urban spaces

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2) http://c4sr.columbia.edu/projects/million-dollar-blocks
we have the perception that such mapping might improve our safety, however crime mapping can easily contribute to people’s anxiety.

Psychoanalytic interpretation of anxiety goes in two directions. On the one hand, Freudian theory hinted that anxiety is without an object i.e. that instead of fear where we can pin point what we are afraid of, in anxiety we cannot (Freud). On the other hand, we have Lacanian theory that anxiety is the emergence of the object in the place of the lack (Lacan 2014). An example of that will be a person who looks himself in a mirror and suddenly has a feeling that there is his double staring back to him. In the place of the mirror suddenly appeared an object, which causes tremendous distress and anxiety (Salecl 2014). The perception of urban danger follows both lines of thought in regard to anxiety. Here, too, we have, on the one hand the perception that we do not know what we are afraid of. While, on the other hand, we have also the emergence of the object at the place of the lack. Terrorist, for example, is a person who cannot easily be discerned, but can unexpectedly strike with enormous power.

III. Anxiety and brain

The urban metropolis today looks like a special kind of a labyrinth. The subject who is navigating this space has to overcome many deadlocks and constantly encounters points of danger in the most unexpected places. Paradoxically, we try to understand this maze with reference to another kind of labyrinth – the one that is in our heads. In today’s times we are often under the impression that the secret inside us (brains and genes) might give us a clue as of what is happening in the outer space. Brain images very much resemble images of
labyrinth. We even have a whole set of art works which try to depict the inside of our heads by using images of labyrinths and mazes that we usually find in the urban spaces.\footnote{In 2013, Mark Wallinger, one of the UK’s leading contemporary artists, has used the theme of the labyrinth for his artwork commissioned for London Underground to celebrate its 150th anniversary. Some of the images of labyrinth in a stylized ways how the human brain.}

Paradoxically, we also try to understand why someone becomes a criminal with the help of genetics and neurosciences. The latter has been nowadays extensively used in the courts, as well as in discussions which try to answer the question, what leads someone to join a terrorist organization, is willing to kill innocent people and to sacrifice him or herself for a particular political objective.

These questions were already discussed in Germany in the seventies, when they were dealing with the attacks orchestrated by the radical left movement Red Army Fraction (RAF). When one of the leaders of this organization, Ulrike Meinhof in 1977 in a prison allegedly committed suicide, this question obsessed the pathologist Jürgen Pfeiffer. (Third 2010) He decided to secretly remove the brain from Ulrike’s corpse and place it in a container with formaldehyde. Pfeiffer was convinced that the development of science in the future will show that a change in the brain contributes to the fact that someone becomes a terrorist.

At the end of the nineties, Pfeiffer hoped that such an analysis can be done by his colleague, psychiatrist Bernhard Bogerts, who was studying the biological basis of schizophrenia, which is why he passed the container with Ulrike’s brain to this colleague. Dr. Bogerts stored it in the basement of the University of Tübingen, where they were found by chance in 2002. Ulrike Meinhof’s daughter was appalled that her mother was buried without her brain. She thus filed a
lawsuit and after the court decision the brains were finally buried into Ulrike’s grave.4)

Why was there such an interest in Ulrike Meinhof’s brain? Ulrike was considered to be the “brain” of RAF. The question, however, emerged how come that Ulrike who was in her twenties a well-known journalist suddenly became radicalized. One theory tried to find biological cause for that. When Ulrike was six month pregnant, she started experiencing strong headaches. The doctors diagnosed a brain tumor and suggested immediate surgery, but Ulrike has decided to wait with it after delivery of her twins. At the time of the surgery, it turned out that Ulrike had a benign cyst, however, because of some complication, doctors had to install a metal clip into Ulrike’s head. The procedure was considered a success, but Ulrike’s personality presumably changed. Increasingly, she started getting close to the ideology RAF. In 1970, she even helped its leader Andreas Baader escape from the prison. When the police caught Ulrike and Andreas, due to the lack her fingerprints, they confirmed Ulrike’s identity with the brain scan which showed metal clip in her head.

The question usually posed in regard to terrorism is, how do people get radicalized. Often, the perception is that they have somehow been "brainwashed" when they started identifying with a particular ideology. Previous convictions of a person were somehow emptied out and then his or her head has been "charged" with new ideology. Such explanations, however, often forget the power of identification with the group and emotional ties a person has with important people in his or her family.

4) At the time of this incident, German media were speculating that the brains of three other leading members of the RAF might also have also been removed from their bodies when they died.
IV. Identification and terrorism

Terrorist attacks that we witnessed in the USA and in Europe in recent years of ten involved brothers. The attack on the Boston Marathon was carried out by brothers Tsarnaev; in the attack on the newspaper Charlie Hebdo in 2015 participated Kouachi brothers; in the November 2015 attack in Paris we had brothers Ibrahim and Salah Abdeslam and the 2016 Brussels attack was the work of brothers El Bakraoui. Research has shown that in one third of the terrorist attacks attackers are coming from the same family – usually it is the case of brothers committing the attack.

In this fraternal attachment, however, one can often see some kind of resistance to parents. Many young people who identify with a fundamentalist interpretation of Islam have parents who are much less religious, or are even not religious at all. French psychoanalyst Fethi Benslama (Benslama 2016: 160) in his analysis of radicalization stresses that in some cases of these young people one can observe a process of disidentification and over-identification. Some, for example, cease to identify with the ideology of their parents or the environment in which they live and start strongly to identify with another radical ideology. In this process, we can observe some kind of a re-identification, when an individual begins to behave as if all starts anew, as if he or she has been “ideologically” born again. The idea of rebirth is also linked to the fact that the ideology a person identifies with has not been transmitted by previous generations.

Benslama also points out that terrorists often search for glorification with their acts and actively hope to be quickly recognized after the attacks. Thus they often carry with them identity cards. To prevent post-humous fame, admiration by their leaders and colleagues as well identification of others by their acts, Benslama
encouraged media not to publish images of the terrorists after their attacks. (Borger 2016).

French-Iranian sociologist Farhad Khosrokhavar sees in ISIS a utopia which presents itself as a new universalism. This utopia forms a new imagery where young post-adolescent people are moving to the stage of adulthood with the help of rituals that use all kinds of new insignias and powerful warfare (Khosrokhavar 2014:191).

A particular kind of post-adolescent aggression can be observed in the rituals of violence against women which are common practice in the areas controlled by ISIS. Women are perceived as objects that are passed from one soldier to another. In the aggression against women, one can, however, observe also fear of them. Something terrible can, for example, happen to a soldier if he rapes a woman who is pregnant. And one will not go to heaven if one is killed by a woman.

ISIS attracts young people in the West who do not see the point of identifying with ideas that are part of the liberal capitalist order. Many young people who have joined ISIS live on the margins, many are without a job, without a clear future. The identification with the ideology of ISIS opens the possibility of belonging to a group, a new brotherhood, sacrifice and pleasure in violence. The post-adolescent nature of this ideology is visible in the way ISIS communicates with the public. Instead of monotonous long speeches, which were released in the past by Al Qaeda, ISIS show short few minutes long videos reminiscent of Hollywood movies and video games. Identification with religion is less important here than the identification with what is perceived as "cool". Researchers of ISIS also speak of the phenomenon of "jihadi cool". Here we have similar identification with the group and its insignias in the cases of young people who join certain
gangs. Two young Britons who recently returned from fighting in Syria admitted that they have learned about Islam from books such as "Islam for Dummies" and "The Koran for Dummies", which shows that religion was for them something they tried to learn quickly and was not something they deeply believed in. Belgian researcher of terrorism Rik Coolsaet observes in such superficial commitment to religion in the latest generation of jihadists a similarity to the superficial dedication to communism in the RAF. The latter were in their times also going through the fight with their parents - in particular, with the symbolic remnants of Nazism in German post-war society and the capitalist centers of power.

V. Neuro—fantasies

One of the ways for people to deal with their anxiety is to create a fantasy. Fantasy is a way for the subject to cover up the lack by creating a scenario, a story that gives him or her consistency. However, fantasy also helps the subjects to prevent the emergence of anxiety - i.e. the emergence of the horrible object at the place of the lack. In today's times we create these fantasies in a new way with the help of genetics and neuroscience.

The whole discourse of neuroscience together with the institutions, rituals that go together with this new establishment is creating a new symbolic. We even have new language that emerges, even new disciplines - like neurolaw, neuromarketing, neuroarchitecture etc. At the same time, we have the emergence of very strong imaginary. What exactly are PET scans and fMRI images? They are images that are trying to discern what is in us more than ourselves. The core part of our corporality - our brain.
We often forget that these images are computer generated. In the legal domain we use the term – Christmas tree effect. When fMRI images are, for example, presented to the members of the jury, they are blinding them with their colours, shapes. These images promises to help to create a map of our brain that will enable us to discern that $x$ in us which is linked to puzzling questions – who are we, why we did what we did, are we consciously in control or not, did we lie or not. However, they very much depend on the power of the interpretation and the authority of the scientist.

VI. Forgetting of the social

The very tendency to ground subjectivity in biology is a reflection of important changes that we are going through in today’s society. More and more we can observe the tendency to eliminate the social from the understanding of how society functions and especially how mechanisms of socialization mould the biological being into a social subject.

Social sciences traditionally examine the complex aspects of the human experience contained within the personal, political, moral, legal and aesthetic value systems. They research their origins and development, the changes they undergo and the mechanisms through which they influence people's behaviour. Until recently it seemed that the domain of the traditional knowledge encompassed by social sciences was beyond the reach of the experimental method. It was believed that the central concepts of social sciences could not be contained and observed by means of classic experimental methods one uses in natural sciences
as the empirical approach with its necessary simplifications would lead to losing grip on the essence of the problem.

In the last century of examining the question of the subject of criminal offences, criminology, for example, has abandoned the biological theories once propagated by phrenologists. When it came to explaining the causes of crime, social and psychological theories were at the forefront. The emergence of neuroscience and genetics, however, has reversed the trend and shifted the focus back to observing the physical causes of delinquency.

Many interdisciplinary research groups have been formed around the world, enabling a lively cooperation between social scientists and neuroscientists researching the brain's processes using empirical methods. Alongside these new, established research areas, such as experimental economy, there is an increasing number of research groups sharing a common characteristic: by way of researching brain activity they combine, in a constructive manner, empirical natural sciences with the traditionally »non-empirical« social sciences and humanities. A new interdisciplinary field has also been established, naming itself experimental philosophy or x-phi. Their basic idea is trying to replace the traditional methodology of the logical analysis of problems developed by analytical philosophy with the experimental method of cognitive sciences or modern research into brain function. Experimental philosophers actively cooperate with scientists when researching the structure of thought and emotion on the level of brain activity.

When observing the achievements of modern brain research, it becomes evident that neuroscience is using the empirical method to arrive at similar conclusions as those reached by social sciences and humanities in several centuries via a
different approach. That is why today the wealth of knowledge accumulated by humanities throughout the history can be of great assistance to neuroscience when it embarks on the path of experimental research into the same domain of knowledge that was once limited exclusively to the domain of humanities. This is not merely a breakthrough in scientific knowledge or basic science, such research also has a great practical significance. When facing the empirical research of attributing values, deciding and feeling on the one hand, and studying the same issues via the method of humanities on the other, both sides have much to gain. It is important to emphasize that we can already observe scientific findings on the biological roots of crime having direct influence on social changes. In the United States, for example, initiatives have been made to use brain imaging in determining whether a minor may be held accountable for a criminal offence when tried in court. Neuroscience has discovered that adolescents go through a relatively late development in the part of brain where the centres for making decisions based on moral judgment and assessing the consequences of potentially risky actions are located. In the state of Illinois neuroscientists even used their findings when taking part in a legal process, which aimed to determine the threats video games might pose to brain development in young people. Deliberating the issue of whether the state had the right to limit the sales of video games with violent content was based on the question of how plastic the brain actually is, if its development can be directly influenced by specific video content and whether such an influence could be measured at all.
VII. Freedom re-examined

One of the focal points of humanities and a basic presumption of the modern interpretation of the society is the autonomous, free individual who carries complete responsibility for his actions. By establishing the concept of the autonomous subject, which was most clearly formulated in the influential work of Immanuel Kant and was later analysed in detail within the »continental philosophical tradition«, a new, important domain was opened up in the human mental space. A domain in which people are free, but an area which is, at least in terms of classic interpretation, not in the horizon of the scope of empirical sciences. The opinions on the nature of the relation between the central notion of humanities' interest in the form of the autonomous subject and empirical brain research vary within the theoretic community.

The question is whether today, the domain of freedom or the autonomous decision-making subject as the central category of humanities since Kant can be reached through empirical research of the brain function. This does not mean that empirical science has now come to realize that people are not free on the level brain processes. The progress made in the field of brain research does not threaten this domain of freedom, otherwise of vital importance in understanding the society, morals, the law and political structures on which the modern state is based. However, there are pitfalls that may occur when we face premature enthusiasm for science's newest achievements, especially in the case of applications in technology.

The risks of hastened applications can be most clearly demonstrated by revealing some of the parallels with the achievements in the field of genetics at the beginning of the 20th century when distinguished scientists sincerely
believed that the achievements of the then new science could be simply used to accelerate the development of mankind. In certain cases this conviction degenerated into various forms of eugenics, even in highly developed countries with the highest standards of respect for human rights. In the case of hurried and imprudent applications of new technologies in the society there is always a danger that the fascination with the new might cloud proper judgment.

In court trials where neuroscience is being used we should take into consideration the effect that the fascination with images of the brain might have on the judges and the jury. We should be aware of the assumption that there might be some sort of objective interpretation of brain processes and of the fear that judges and the jury might not be sufficiently qualified to assess these processes. Bearing in mind the influence an expert authority has on judgment, we should ask ourselves whether using neuroscience in the courts of justice does not lead to a loss of autonomy within law itself, when law begins to rely on scientific explanations of the causes of an individual’s actions.

Modern neuroscience is tackling structurally similar problems as those that had been formulated by psychoanalysis via a completely different approach. That is why one of the key questions today is to what extent the mechanisms currently supported by neuroscience can be formulated into essential psychoanalytical concepts that have been established through the long-standing tradition of psychoanalysis.

First one needs to establish that psychoanalytic reasoning about crime is very different from neuroscience. Psychoanalysis primarily asks: Why do some people internalize social prohibitions and others do not? How come that people so differently relate to law: some are oblivious to social prohibitions; others constantly feel guilty; still others claim they have committed crime when in reality they
did not do anything wrong; and reasoning about crime is very different from neuroscience. Psychoanalysis primarily asks: Why do some people internalize social prohibitions and others do not? How come that people so differently relate to law: some are oblivious to social prohibitions; others constantly feel guilty; still others claim they have committed crime when in reality they did not do anything wrong; and some even inflict punishment onto themselves etc. Clear difference emerges here between what classical Freudian psychoanalysis depicts as neurosis and what is known as psychosis or schizophrenia. Even more complicated are cases of perversion.

Second, psychoanalysis, poses the question what is the distinction between the moral law that governs the individual in his inner self and the legal norms that govern an individual in the outer world? The fact is that although this "inner" law is ambivalent, the external law does not always function as a restriction on our "inner" morality. On the contrary, it could function either as the alleviator of an unbearable tension caused by the subject's "inner" law or as a purely instrumental regulator, whose presence subject does not perceive as an obstacle.

One of the main challenges of psychoanalysis in regard to crime is to deal with the issue of responsibility. Paradoxically, psychoanalysis perceives the subject as much more responsible that law often does. Psychoanalysis tries to carve the space for human responsibility that goes beyond the divide nature-culture.

When Freud invented his term Nervosen-wahl (choice of neurosis) his idea was not to perceive the subject as someone who rationally chooses his or her neurosis, but rather to point out how the subject is in a paradoxical way “author” of his or her suffering. He or she is thus not fully determined by nature (biology) or culture (family) – in midst of these important factors, the subject finds his or her own answers, i.e. he or she remains a subject and is not simply an object,
i.e. a tool in the hands of other mechanisms which determine him or her.

The subject is thus perceived as someone who always in a very specific way creates his or her symptom. This authorship of the symptom is not perceived in a rational way. Unconscious mechanisms are very much present in the way neurotic symptoms are formed. However, when we use the term “choice of neurosis” we also open the space for change. The symptom can change, the subject can make changes in his or her life.

Criminology usually explains a criminal act either by locating the instigating causes in external factors (such as poverty, family dysfunctions, peer pressure, etc.) or with the help of psychological factors (such as addiction, aggression, manic-depression, or other psychiatric personality disorders). Significantly, such an explanation tends to dehumanize the criminal: the criminal is perceived as an irresponsible entity caught in the interplay of either social or unconscious psychic mechanisms, or both. In this scientific approach to crime, as well as in the legal treatment of the criminal, the offender is not perceived as a subject, but as an object in the hands of some external or internal operations over which he has no control. Consequently, the only task of the experts dealing with crime is to locate those mechanisms and thereby to determine the responsibility of the criminal.

In contrast to this approach, psychoanalytic theory tries to explain a criminal act in terms that do not dehumanize the criminal. Psychoanalysis agrees that crime could be explained by a variety of causes. For example, murder could be linked to psychosis and shoplifting could be a reaction to the lack of love or other traumas of childhood. But psychoanalysis perceives these kinds of acts as a specific mode of subjectivization, a means by which the subject tries to resolve his inner tensions, inhibitions and traumas. Specifically, in the case of theft, such
an act could be perceived as resulting from a lack of love or as repaying a certain symbolic debt. But according to such an explanation, the criminal is not dehumanized; he is not reduced to being a cog in the interplay of some mechanisms. On the contrary, the criminal's theft emerges as the way in which the subject, through committing the crime, subjectivizes himself in a new way. Psychoanalysis regards crime as a "passage a l'act", as an act by which the inner tensions of the subject are resolved. The essential psychoanalytic consideration is thus what role theft plays in the libidinal economy of the thief.

Jacques Lacan made a typology of crimes in which he designated three types of crimes: crimes of the Ego, of the Self and of the Super Ego. Crimes of the Ego are crimes committed because of simple profit, crimes of the Self are pure instinctive crimes that are reactions to some aggression. But psychoanalysis is primarily interested in the third type of crime, crimes of the Super Ego, where a split between the Ego and the Super Ego is at work in the subject, and it is precisely this split that the subject tries to resolve by committing some criminal act.

Psychoanalysis has been in its own way interested in how our inside looks like. Libido, unconscious, drive, desire, affects have all been words it has used to decipher that something in the subjectivity that in varieties of ways surpasses our conscious capability to comprehend ourselves and others. However, the main idea of psychoanalysis has been that one cannot localize drives and desires while one also cannot embrace normative definitions of subjectivity. The latter is essentially marked by a lack which is why psychoanalysis embraces surprise as well as inconsistency in the way people behave.
VIII. Neuroscience in everyday life

Fascination with leading-edge knowledge can be troublesome when we try to apply findings made in a certain field of science into another sphere. – e.g. from neuroscience into law. In the media, popular interpretations of neuroscientific discoveries are often generalized, which can lead to complications, if such simplified explanations affect criminal policies and judicial procedures. In criminal law, excessive optimism over the application of neuroscientific findings can result in unrealistic expectations relating to early detection of potential new acts of crime.

Similarly as new neuroscientific findings can be used preemptively in drafting of new laws, in the domain of transport, roads are nowadays being built in a manner that enables motorists to instinctively drive safer, regardless of traffic regulations. While the threat of penalty affects the rational part of the brain, alternative approaches try to address the brain’s emotional centres, which react spontaneously. New scientific findings on the functioning of the brain are supposed to be employed also as building blocks in specific social institutions that would inherently reduce the likelihood of certain types of crime or other unwanted social phenomena and incidents. However, one wanders if it is truly enough to differently shape institutions and environments, in order to get people to act more ethically and thus commit fewer crimes. As has been shown in the case of terrorism, identification with an ideology as well as identification with important people in one’s life play most important role when a person decides to commit an act of crime. And one might also not commit crime because of the power of identification.
IX. Conclusion

A few years ago, in the US, The National Science Foundation published a report entitled “Converging Technologies for Improving Human Performance” (Roco and Bainbridge 2002: 482). The credo of the movement was summarized in a short poetic form:

If the Cognitive Scientists can think it,
The nano people can built it, and
The IT people can monitor and control it.

The idea of control, mastery and design is what pushes government interest in neuroscience, especially in the domain of law.

It is not surprising that we are encountering neuroscience also in the domain of urbanism and architecture. We can thus read about neuro-urbanism and neuro-architecture. The premise behind these movements is twofold – on the one hand, there is the perception that cities and buildings have memories in a similar way as human brain has; on the other hand, there is the idea that cities and buildings in a particular way influence our brains.

Neuro-architects also like to refer to epigenetics by pointing out that if environment can modulate the function of genes and, ultimately, also the structure of the brain, similarly, changes in the architectural design can affect the way the brain functions. While one would not deny that design influences our wellbeing, neuro-architecture often in a too optimistic way pictures design as something that can directly influence people in a particular way.
Ann Susman and Justin Hollander in the book, Cognitive Architecture (Susman and Hollander 2014: 212), describe principles of how the brain responds to design. For them humans are a wall-hugging species that avoids the centre of open spaces. People who are outside seem more comfortable when buildings create a room like feel, surrounding them on several sides. People also respond more positively when they can identify a “face” in building design — windows as the eyes, doors as the mouth and so on. Shapes also carry weight.

“Patterns matter,” said Justin Hollander, a co-author of the book and an urban planning professor at Tufts University. “And edges matter. The research argues that not only do we need order but our brain likes hearing stories … When you go to Times Square, you’re told a story. You go to Disneyland, it’s a story.” (El Nasser 2016)

It is not simply that our brains like hearing stories, we as humans (with our unconscious, desires, drives) like to believe in stories. Many arguments presented by neuro-architecture are such stories people like to believe in. Often, these stories present an attempt to appease anxiety. In these stories, the subject often appears as someone who is able to achieve desired outcomes, as well as someone who is able to control and manipulate others.

The power of identification, fantasy, as well as enjoyment in transgressing social norms is often forgotten when people imagine creation of new models of urban planning that nowadays often search for inspiration in neuroscience. These inspirations often embrace utilitarian perception of subjectivity, which takes people as rational agents who want to maximize their well being and minimalize their pain. Psychoanalysis has, however, consistently shown that this is far from truth since many people find enjoyment in pain and self-destruction.

The enjoyment in self-destruction has puzzled neuroscientists who research
terrorism. With the help of brain imaging technology are some, for example, trying to locate which brain systems are engaged when people are concerned with rational choices and which when they follow some sacred, for example, religious values. Early results suggest that incentives in one brain system may not be commensurate with the other. In addition, researchers try to examine how rules and sacred values become fixed in the brain, and which methods are effective at changing them.

Gregory Berns at Emory University has shown that the part of our brains that respond to “utility” (cost vs. benefit) are entirely different from the parts involved in “sacred values” (absolute right vs. wrong) and this unconnectedness of the two parts is worrying for him. (Berns 2012)

Neuroscientists, for example looked at which part of the brain gets activated when a person is facing the decisions like “how much money would it take to get you stop drinking Coke." They saw the test subject’s right Inferior Parietal neocortex activated. However, when these same people were asked whether money could make them kill an innocent person, other areas, such as the Temporoparietal Junction and amygdala lit up. From this they concluded that no amount of cost/benefit analysis will change the strong responses in our brain to fundamental beliefs, like that some people are evil thus they need to be killed. Researchers also estimate that in responding to terrorism, our “sacred value” brains will tend to ignore cost vs benefit and might not be concerned with questions like, how much American military action against terrorists might affect their taxes or how many soldiers and civilians might die as a result of this intervention. In addition, researchers point out that with the escalation of the war and with continuation of terrorist attacks sacred beliefs about Muslim terrorists—and by association all Muslims—become even sacred.
Researchers, like, for example, Eva Telzer, who analyze how difference between “us vs. them” are wired into our brain point out that perceptions of racial differences are not innate, but acquired, and probably changeable up to puberty. And that messages we give our kids—conscious or not—will influence how their brains automatically sort “good guys” from “bad guys.” (Telzer 2013) Neuroscientists who study terrorism thus conclude that the types of responses that societies form to terrorism (increase of racism and military action, for example) very much affect the way children’s brains are formed. (Heseltine 2015).

Psychoanalysis has been for more than hundred years saying the same when it has stressed the power of socialization and identification. If we look at the content of what neuroscience is saying about terrorism, one does not see that new knowledge has been acquired about the way people form prejudice, identify with violence and pass their beliefs to their offspring. What we are offered instead is a fantasy that one might be able to map the brain and thus potentially predict and prevent crimes to be committed. Danger related to this fantasy is that it opens doors to ever new forms of social control.

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References

Audiard, Jacques. dir. Dheephan. Why Not Production, 2015.
Benslama, Feti. ed. L'idéal et la cruauté : Subjectivité et politique de la radicalisation. Paris: Fécamp, 2016.
Berns, Gregory et al. “The price of your soul: neural evidence for the non-utilitarian representation of sacred values.” Philosophical Transactions of the Royal Society B, 367.1589 (2012): 754-762.
Beslama, Feti. Un furieux désir de sacrifice : Le surmusulman. Paris: Seuil, 2016.
Borger, Julian. “French media to stop publishing photos and names of terrorists.” The Guardian 27 July 2016. Accessed 16 Sept. 2016 <https://www.theguardian.com/media/2016/jul/27/french-media-to-stop-publishing-photos-and-names-of-terrorists>.
Coolsaet, Rik. “Facing the Fourth Foreign Fighters Wave: What Drives Europeans to Syria, and to Islamic State?” Egmont Royal Institute for International Relations, 1 March 2016. Accessed 16 Sept. 2016 <http://www.egmontinstitute.be/publication_article/facing-the-fourth-foreign-fighters-wave/>.
El Nasser, Haya. “Smart buildings: Architects using brain science for design guidance.” Aljazeera America, 26 Feb. 2015. Accessed 16 Sept. 2016 <http://america.aljazeera.com/articles/2015/2/26/smart-buildings-architects-turn-to-brain-science.html>.
Freud, Sigmund. “Inhibitions, Symptoms and Anxiety.” The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XX (1925-1926). London: Penguin, 1926: 75-176.
Haseltine, Eric. “Terrorism in Paris: New Neuroscience Tells us How to Respond.” Psychology Today, 14 Nov 2015. Accessed 16 Sep. 2016 <https://www.psychologytoday.com/blog/long-fuse-big-bang/201511/terrorism-in-paris-new-neuroscience-tells-us-how-respond>.
Khosrokhavar, Farhad. Radicalization, Paris: Maison des Sciences de l'Homme, 2014.
Ilan, Sharar. “The Mea She'arim Mob”, Haaretz, 11 May 2010. Accessed 16 Sep. 2016
Lacan, Jacques. *Anxiety: The Seminar of Jacques Lacan, Book X* (Miller, Jacques-Alain, ed. Cambridge: Polity, 2014.

Roco, Mihail C. and Bainbridge, William Sims, ed. “Converging technologies for improving human performance: nanotechnology, biotechnology, information technology and cognitive science.” *U.S. National Science Foundation*, June 2002. Accessed 16 Sept. 2016 <http://www.wtec.org/ConvergingTechnologies/Report/NBIC_pre_publication.pdf>.

Salecl, Renata. *On Anxiety*. London: Routledge, 2004.

Sussman, Ann, and Justin B. Hollander. *Cognitive Architecture: Designing for How We Respond to the Built Environment*. London: Routledge, 2014.

Zakaria, Fareed. “Today’s new terrorists were radical before they were religious”, The Washington Post, 31 Mar. 2016. Accessed 16 Sept. 2016 <https://www.washingtonpost.com/opinions/todays-new-terrorists-were-radical-before-they-were-religious/2016/03/31/9cb8e916-f762-11e5-9804-537defcc3cf6_story.html?utm_term=.44b090aeb24f>.

Telzer, Eva et al. “Sensitivity to Race Is Not Present in Childhood but Emerges over Adolescence.” *Journal of Cognitive Neuroscience*. 25.2 (2013): 234-244.

Third, Amanda. “Imprisonment and Excessive Femininity: Reading Ulrike Meinhof’s Brain.” *Parallax*. 16.4 (2010): 83-100.
도시의 불안은 종종 거리에서나 단한 문 뒤에 숨어 있는 잠재적인 위험과 같이 도시의 어떤 부분들은 출입금지구역이라는 지각에 연결되어 있다. 하지만 사람들은 환경적인 위험이 아니라 대부분은 공공장소에서 이루어지는 다른 사람들의 태도에 불안해한다. 본 논문은 테러의 시대에 위험한 개인이라는 문제가 어떻게 더욱 더 인체 내부, 즉 유전자와 뇌에 더욱 초점을 맞추고 있는가에 대해 숭고하고자 한다. 위험지도를 그리려는 이러한 연구와 관련해서 도시 공간 내 사회적인 위험지도 그리기와 인체 내부에서 그와 관련한 생물학적 지도 그리기는 동질성을 이루고 있다. 양자의 경우 위험은 은폐되고 불확실하며 파악불가능한 것으로 지각된다. 도시의 위험을 명확한 지도로 표현하고 인체에서 위험성을 명확하게 설명해 내리는 욕망 뒤에는 사회통제의 새로운 형식을 부과하려는 욕망이 자리 잡고 있다. 본 논문은 결론적으로 뉴로-아키텍처와 뉴로-어버니즘 또한 새로운 지배형식과 인간주체성 통제를 발굴하기 위한 욕망에 순응하고 있다고 본다.