TACKLING INEQUALITY IN CITIES THROUGH SOCIAL INNOVATION

Petra Mezzetti

Senior Research Fellow, CeSPI petra.mezzetti@cespi.it

Anna Ayuso Senior Research Fellow, CIDOB aayuso@cidob.org

common trend among large and medium-sized cities is that they involve increasing and coexisting multiple social disparities. They are laboratories for social changes and tensions arising from growing inequalities but also provide privileged spaces for adopting inclusive local policies, in particular to face social challenges such as housing shortages, unemployment or poverty. Large imbalances in the standards of well-being in urban areas erode social and territorial cohesion and are sources of social conflict. The risks of marginalisation and exclusion due to the lack of opportunities, the effects of the economic crises and the pressures deriving from intensive population inflows require active policies to prevent ghettos in peripheral and degraded areas. Being the closest administration to the citizens, local authorities are called to guarantee welfare for all people within their territories, adapting policies to specific local factors.

Citizen well-being is at the heart of Wise Cities and an overarching objective for local governments. Providing social infrastructure, including education, culture, health, telecommunications and leisure, is essential for inclusive development. Local authorities often lack sufficient competences and resources to address all these challenges, but they are best placed to make an accurate diagnosis of citizens' living necessities in each urban area, to draw an integrated vision of problems and to generate innovative responses. Urban areas are drivers of social innovation and experimentation with new policies. Comparing and exchanging good experiences is a good instrument for elaborating guiding principles. The demographic agglomeration and the heterogeneous social composition of cities provide a playing field on which to put into practice innovative participatory experiences providing interaction between different actors.

This paper will analyse the state of the art regarding the social cohesion issues and current trends that are causing a paradigm shift in the way cities will be led and managed in the future. A first general overview will be complemented by specific case studies identifying best practices that illustrate new approaches based on fostering collaborative initiatives between local authorities, community-based organisations and other local actors, providing new models of social innovation and entrepreneurship initiatives based on creativity and inclusivity. Specific

cases will be highlighted from Milan and Barcelona, showing data and figures as well as policies and solutions that are relevant for other cities, not only in Europe.

Current trends and innovative solutions that respond to social cohesion challenges

The economic crisis, with higher levels of inequalities and the rise of unemployment, especially for young people and those over fifty is raising poverty levels and putting social cohesion at risk in urban areas. These trends together with ageing populations lead local governments to incur more financial pressures to maintain social services and assure a basic income. Local authorities should provide new instruments to address some of these challenges with an integrative vision. A peoplecentred approach is the priority of brand new social policies.

Popular participation is key to integrated urban development. Formal and informal participation processes to elaborate guiding principles and pilot experiences have been put into practice with the active involvement of municipalities, citizens' associations, third sector and other social actors in a multi-stakeholder approach in policy development. New approaches to local government interventions attempt to be preventive by anticipating future problems and creating resilient societies. They are also less bureaucratic and more community action-based in order to co-produce goods and services with different social groups and the private sector.

Technological and biological transformations affect citizens' lives negatively or positively depending on whether these changes are seen as a barrier or an opportunity to change the development model. The results will depend on the cities' capacity to boost integrated policies that support the development of an inclusive and creative society. The new paradigm includes innovation models that are based on the capacity to generate social networks and collaborative activities that accrue economic, social and environmental benefits for all. The smart city model is trying to be reoriented to focus on developing new technologies to solve social necessities.

To create new jobs and economic growth local governments can provide facilities to encourage circular, sharing and green economies, social entrepreneurship incubators, accelerators, co-working spaces and fab labs. Shared spaces and opportunities for people to start up new self-entrepreneurship projects offer new bottom-up social innovation models responding to urban challenges, as well as top-down processes able to increase the participation and engagement of citizens, while tending towards decentralising the role of public administrations. The availability of open source technologies, access to finance, talent education and vocational training also contributes to spreading the social capital needed to accelerate along the path towards a creative city.

Access to decent and affordable housing is also a big challenge for cities. This involves the availability of social housing at affordable prices. Experts estimate that to meet the needs of social housing a city's public housing should be around 15% of the total. This should translate into

building new homes that meet the necessities of smaller families and old people, but also reforms of the urban layout and old housing, and active policies to avoid empty houses.

Intensive population inflows also require active policies to prevent the risks of marginalisation and exclusion due to the lack of opportunities. Economic migration could be a contribution to improving the demographic transition in towns with aging populations, but it also poses challenges of newcomers' integration and pressures on social services and public spaces. Social infrastructure, including education, culture, health, telecommunications and leisure, contributes to inclusive integration. The current refugee crisis stresses the importance of active public policies tackling the massive influx of foreigners, even in societies with higher levels of social welfare provisions.

The provision of basic needs and services to the entire population is a key priority of municipalities and is increasingly viewed as a citizen's right. To be properly fed, have adequate housing and access to an energy supply have become obligations for local administrations. A more comprehensive debate is also now taking place on the need to ensure a universal basic income (UBI) for every citizen. However, national policies in many countries remain unable to reach everyone. Henceforth, some municipalities have begun to implement pilot programmes to guarantee a minimum income, even though these are still isolated experiences. See Box 1 below on the case of Utrecht.

Box 1. Utrecht: a laboratory for basic income experiments

The idea of a universal basic income for everybody is not new. The first proposal is attributed to Thomas Paine in 1795, and during the 1970s and 1980s several local initiatives were conducted in different countries with poor analysis of the results. The current economic crisis and the horizon of a more robotised and technologically advanced world have re-opened the debates. The Dutch city of Utrecht and the University of Utrecht decided to create several different regimes for the city's welfare recipients and test them to analyse the pros and cons with an empirical basis. Starting in January 2017, in a two-year test period the experiment will give 250 Dutch citizens currently receiving government benefits a guaranteed monthly income.

One group of benefit recipients will remain on the existing workfare regime, under which people who live alone get \in 972.70 and couples \in 1,389.57 (with the obligation to meet various conditions). Another group will receive the same benefits unconditionally, without sanctions or obligations. A third group will also receive the same benefits unconditionally, plus an extra monthly bonus of \in 125 if they choose to do volunteering work. A fourth group will be obliged to undertake volunteering work (and if they fail to do so, they will lose their \in 125 bonus). A fifth group will receive unconditional benefits without the bonus, while being allowed to earn additional income from other jobs.

The hypothesis is that traditional welfare schemes are too bureaucratic and costly and disincentives to work, since people lose benefits at around the same rate their income wage rises. Although the Utrecht experiment is reduced, the accurate design will provide evidence from different regimes, specifically concerning positive and negative incentives and the ability to motivate people to get out of the poverty trap. The logic of the experiment is to end specific social assistance programmes and replace them with a single wage. Future universality would eliminate the stigmatisation of poverty while reducing social barriers.

Sources: Basin Income Earth Network, 2016; Sanchez Diez, 2015; and Brown, 2016:

Some issues at the urban level have great potential – when appropriately put in place through participatory processes – to be used as framework policies and practices that can be replicated and shared between cities at the national and international levels, as well as for lobbying purposes. This is the case for example of the Milan Urban Food Policy Pact (see Box 2 below). By sharing experiences the city can become the positive field of action for healthy competition between public and private actors, for co-creating solutions that are capable of improving the living conditions of all citizens every day.

Box 2. The Milan Urban Food Policy Pact (MUFPP)

In 2014, as part of a EU-funded project titled "Food Smart Cities for Development" a core number of cities – including Milan, as leading partner, and Barcelona – which were able to involved key stakeholders in their respective local contexts, conducted an assessment of existing activities that could fall under a common "food policy", with the aim of changing the urban food production and consumption paradigm. Examples included reducing food waste, promoting healthy food and the purchasing of food produced respecting the rights of people and of the environment, with the aim of triggering global change. Milan City Council adopted its "food policy" and while hosting Expo 2015 (devoted to the theme of food security), expanded its efforts beyond the projects' objectives. Milan has been advocating for an international protocol which would engage most cities in the world in the development of food systems based on the principles of sustainability and social justice. This document was drafted by involving over 40 cities from every continent in exchanging views to define its content. The Milan Urban Food Policy Pact (MUFPP), a commitment to the coordination of international food policies, was launched and signed by 100 mayors on the occasion of Expo 2015 in the presence of UN Secretary-General Ban Ki-Moon. One year later (September 2016) the pact has been signed by 129 cities, and the advocacy and lobbying campaign continues to encourage new joint actions and partners.

Source: http://www.milanurbanfoodpolicypact.org

In the next sections, specific cases from Barcelona and Milan are put forward. Both cities have experienced significant urban transformations in the past decades, from being two industrial poles in their respective countries to becoming capitals of the tertiary sector, with both projected into the international arena. Milan is an important financial district as well as a global reference point for design and fashion. Barcelona is a tourist capital in constant expansion and a leader in new technologies and the creative industries. The 1992 Olympic Games set a different pace for Barcelona's urban development, while for Milan the boost came on the occasion of hosting the Universal Exposition in 2015. Both cities today are dynamic and full of opportunities, although they are also marked by tensions and contradictions, the effects of which have been broadened by the economic crisis. These are linked to growing inequality between inhabitants, housing speculation, gentrification of urban spaces and population inflows generating fear and insecurity. Local governments have been obliged to rethink social policies given the growing requests of the citizens to make changes to the current development model.

Milan: Refinding its purpose through manufacturing and social inclusion¹

Milan is considered the economic and financial capital of Italy. Milan was an industrial city and a major destination of internal migration from southern regions from the 1950s to the 1970s. Employment opportunities were high, and the city's social fabric pragmatically developed solidarity networks and supports. When tertiary and advanced tertiary sectors became the main characteristics of the city's economy, the municipal government was still key in designing and providing social services, especially in social and educational policies. Since the 1990s,² the political situation has changed along with the city's approach to welfare, which has translated to a disinvestment in social services directly provided by the municipality, and a more residual welfare system delivered by non-profit and private organisations and investment in market-oriented tools. This resulted in worsening conditions of social and spatial inequalities in Milan,3 which, combined with a still ongoing economic crisis, had severe consequences in terms of youth unemployment rates.

Since 2011, a new administration has been in place.⁴ "Participation" became one of the keywords, particularly in the field of social policy.⁵ Despite severe budget constraints, the city has experienced an increase both in the quality of life and in the availability of shared spaces and opportunities for people to start up new self-entrepreneurship projects. Milan retrieved its "mission" in line with growth patterns typical of advanced economies, with the aim of returning to "manufacturing" centred on handicrafts and commercial activities, with the idea of producing labour-intensive occupation matched with digital innovation, while in the meantime repopulating the peripheries.

It is interesting to note that the preparation and realisation of the Universal Exposition 2015 hosted in Milan generated a new dynamic in the city, giving a boost to initiatives directed at innovation, inclusion and participation.

Starting from April 2013 the local administration led a process by which *Guidelines for Milano Smart City* were drafted, validated through public hearings and approved by the city council (2014).⁶

In practice this resulted in supporting and funding practices that contributed to: i) generating employment opportunities for young people (470 new start-ups); ii) reviving thousands of square metres of disused urban areas (through fab labs, co-working spaces); iii) implementing business and social promotion activities in different neighbourhoods; iv) "developing a community pattern" through sharing economy platforms in support of socially innovative and sustainable services based on business models that enhance "innovation and inclusion".⁷

In line with the above, one interesting experience led by the administration is represented by a "civic crowdfunding" call for innovative projects (2015) with social impact, for promoting social networks and social aggregation for people with disabilities. Two municipal departments –

- The section on Milan is based on: the authors' personal work conducted on urban and migration issues in the city of Milan and with the Municipality of Milan (in particular the International Relations and Social Policy departments); interviews with Emanuele Polizzi, sociologist and founding member of IN-Innovarexincludere, a laboratory on public policies; and secondary literature.
- After the political collapse of the early 1990s, 20 years of centre-right local governments followed, with a Northern League majority (1993– 1997) and for 14 years with mayors from Silvio Berlusconi's party.
- This is well represented in the case of housing policies aimed at fostering affordability, which were almost abandoned for more than two decades.
- A new administration was elected in June 2016, which is on the same lines as the previous one.
- 5. The Welfare Development Plan of the City of Milan (2012) affirms: "One of the guiding principles for the construction and management of this local welfare plan is greater participation and the real involvement of all the protagonists of local society". http://www.comune.milano.it/wps/portal/ist/it/servizi/sociale/piano_sviluppo_welfare/piano_sviluppo_velfare_%202012_2014
- 6. For more details see: http://www.milanosmartcity.org/ joomla/images/sampledata/programma/SmartCity/milano%20smart%20 city%20-%20guidelines.pdf
- Municipality of Milan and Fondazione Brodolini, Milan White Paper on Social Innovation Accelerating Milan's local ecosystem for social innovation, 2015. http://urbact.eu/file/13514/ download?token=d5fYKDwl.

Work/Employment and Social Affairs – managed the call for projects, providing up to 50% of the projects' budget while the rest was raised through crowdfunding activities developed within the proposals with the aim of promoting greater ownership.

All the initiatives mentioned above tackle social inclusion not through assistance, but by supporting productive activities and the revitalisation of local territories. A specific example with great potential is described in Box 3 below.

Box 3. The Fondazione Welfare Ambrosiano (FWA)

A heterogeneous group of actors created the Fondazione Welfare Ambrosiano in Milan to support individuals and families dealing with short-term risks and reduce economic precariousness. These include the Municipality of Milan; the Province of Milan; the Milan Chamber of Commerce and the three main trade unions (CGIL, CISL, UIL).

FWA promotes access to micro-credits for people not protected by existing, category-based social protection measures who are therefore exposed to new forms of social exclusion, and to persons or families who may not be in disadvantaged conditions but are at risk, due to temporary and unexpected difficulties, of falling into real poverty. The aim is not to substitute for the existing institutions assisting long-term situations of need (such as long-term unemployment); rather, the aim is to intercept the short-term risks of workers or jobless people with exceptional economic problems that often have serious long-lasting negative effects for the entire household. Thus far, two types of micro-credits are available: a) "social credit", reserved for persons who can hardly afford crucial expenses (such as the payment of university fees for their children or unexpected health expenditures); and b) credit for self-employment, to overcome unemployment or under-employment. The basic guidelines for actual and future programmes are an active approach to hardships following the "we help you to help yourself" idea and the rotation of existing funds by privileging financing tools such as micro-credit, as opposed to non-repayable loans. This policy is specifically due to the desire of the trade unions involved to create economic capital for the city that will last over time.

Source: Sabatinelli, S. and G. Costa (2016).

On a more controversial theme, immigration, Milan is also trying to intervene by innovating. Italy is a major destination for new immigration flows from the Mediterranean and Milan is one of the most popular destinations (after Sicily and a few other southern regions). The administration has been able to deal with the so-called "refugees emergency" by creating a hub close to the main central station where, along with third sector organisations, it provides for basic needs. The logistics of the intervention is very effective and it represents a good practice researched by local administrations abroad. Besides this, a consultative process for establishing a "one-stop shop" (called the "Centre of the Worlds' Cultures") – streamlining services to immigrants into one service location, which helps to integrate migrants into both city life and work much faster and with less frustration and fewer false starts – was also put in place.8 This also resulted in the creation of a stable network of organisations working on migrant integration, which includes non-profit and cultural organisations, NGOs, diaspora organisations, all of which are active and mobilised around the centre.

8. For more details see: Municipality of Milan, Immigration http://www.comune.milano.it/wps/portal/ist/it/servizi/sociale/servizi_interventi_sociali/adulti_immigrati/servizi_immigrazione

Barcelona, building a new social contract⁹

Barcelona has a long tradition of public-private collaboration, associations of multiple groups and neighbourhood movements that have developed various initiatives with the local administration. The challenge of the current municipal government is to promote a new model of public intervention that enhances community-based initiatives for greater social cohesion. The struggle against inequality has become the administration's number one social services problem. The previous Barcelona Plan for Social Inclusion 2012-2015 created a public-private cooperation space called the Citizens' Agreement for an Inclusive Barcelona. This was a collaborative initiative to create a "shared strategy for a more inclusive city" and was adopted in 2014. Divided into 12 thematic networks, the strategy brings together more than 370 entities and 6 tractor projects were established in: social economy; social security; social housing; childhood; active citizenship; and inclusive sport. The annual general assembly reports on the implementation of the strategy, there is a governance council working in thematic committees as well as a coordination board.

Through this collaboration with social organisations a multiplier effect of actions was achieved. Social transfers in Barcelona have managed to reduce the risk of poverty rate from 47% to 18%, but there are still pockets of people excluded that demand complementary strategies. Ending poverty by facing inequalities at their origin and tackling the housing crisis are two of the current priorities of the Barcelona government. Short-term measures to alleviate the situation have been implemented, as well as also other medium and long-term policies tending to incorporate changes into the current pattern of growth. The goal is to move from a traditional welfare system to one based on subjective rights that does not stigmatise the recipient families and simplifies access and management of social services. Thus, social workers would be freed of bureaucratic tasks and could work to directly assist families and implement preventive strategies, enhancing community actions. To perform this transformation of the social services the council launched the IMPULSEM (Empowerment) programme, a reflection and action exercise in which professionals, users and other actors are involved, that aims to create a shared diagnosis, identify challenges and make proposals. In line with this new approach, an interesting example is the flagship project "Municipal Income" (see Box 4 for details).

An additional challenge is to introduce new technologies for the implementation of social policies, to facilitate access and improve efficiency. Taking advantage of the Mobile World Congress platform and the Smart City Expo and in collaboration with entities of the third sector the city council launched the "Market Place". This is a space of exchange where social institutions try to match the necessities demanded by citizens with entrepreneurs to develop new technological applications that contribute to citizens' welfare. This is an example of the concept of "techno-culture", which is one of the features of a Wise City.

9. This chapter is based on interviews with: Lluís Torrens, Director of Planning and Innovation, Marta Fabà, Head of Task Management at the Municipal Institute of Social Services, and Emilia Pallas, Head of Social Participation, all of whom are in the Social Rights Area of Barcelona City Council.

Box 4. The municipal basic income

In the field of the fight against poverty and inequality, a flagship project is the establishment of the municipal basic income. It is not fully a UBI, but it is understood as a guarantee of minimum income for families who, due to lack of employment and aid, are below the minimum income according to city standards. The first step has been a broad study on the living conditions in Barcelona designed to identify the number of future beneficiaries and calculate the total cost to the city budget. This will be ready in autumn 2016 and the results will be available for other research and public policy improvements. It is a pioneering project because up to now pilot projects only exist with limited scope. The initiative is intended to be:

- A complement to the benefits that already exist in other administrations;
- Without conditionality, but only for families below the minimum income level;
- A change to make the traditional aid regime a subjective right.

Sources: Interviews with members of Social Rights Area of Barcelona City Council.

The crisis and the rise of unemployment increased the traditionally difficult access to housing in Barcelona. Thousands of families have lost their homes due to unpaid rents or mortgage default. On average, there are 10 evictions every day. This must be added to the escalation of prices in the city due to tight supply, the pressure of tourism demand and speculative buying by investors (most of whom come from abroad). Furthermore, it is estimated that there are still 30,000 empty houses and 15,000 empty premises. Due to the aging of the city's population, many floors are underutilised and/or are inappropriate for the elderly. The municipality is implementing immediate measures under the campaign "L'Habitatge, un dret com una Casa (Housing, a right as a house)", and is also elaborating a new Plan for the Right to Housing 2016-2026.

Box 5. Housing: from emergency to universal right

The municipality is fighting against the housing emergency and implementing the right for all citizens to have a house with various measures.

For cases of imminent housing loss:

- There is a housing consortium with number of social rent houses that are assigned by the Barcelona Bureau of Social Emergency.
- The city council also works with numerous social organisations in the city to provide housing for evicted families.
- A network of Barcelona housing offices offers personalised attention, including legal advice for negotiating payment with owners and financial entities and aid to cover unpaid debts. The municipality has allocated €11.8 million in aid to pay rent.

To expand the supply of affordable rental property:

- The social housing plan approved the creation of 8,000 new housing units with a €17.3 million budget (currently there are 10,000, 1.2% of the city).
- The municipality finances the renovation of buildings, including inside homes, to expand the accommodation capacity, promote shared spaces and plans to expand the homes for the elderly.
- Barcelona City Council is promoting new cooperative initiatives to build new homes in partnership with the private sector.
- A campaign initiated to identify illegal tourist apartments offers the possibility of waiving the penalty in exchange for turning them into social housing.
- The city council collaborates with supply companies to identify empty houses and plans to create new penalties.

Sources: Interviews with members of Social Rights Area of Barcelona City Council.

Lessons learned and/or policy recommendations

The economic crises (lack of opportunities, unemployment) on the one hand and demographic trends (increasingly elderly population, migration inflows, etc.) on the other are increasingly putting pressure on and polarising "global cities" – important nodes in the global economic system – especially concerning social cohesion, the weakening of communities' relational and social fabric, attention to inequalities and the sustainability of welfare systems.

The concept of vulnerability, which accounts for the combination of social disease and economic difficulties, seems to challenge the future, as it is becoming an intrinsic characteristic of the way of living in contemporary societies. Solutions are needed worldwide that can bring together well-being and development, social values and economic growth, technological innovation and the ability to cooperate and share information.

Innovative policies based on sound practices can be a starting point for putting together innovation, while linking it to inclusion (social, territorial, economic, etc.). There are, however, themes and subjects which are more controversial, or might normally be dealt with at the national level, such as migration. For these themes, it is easier to implement innovation through good practices rather than framework policies.

As this paper has been trying to put forward through illustrative selected examples in Barcelona and Milan – which might still appear too limited in time and space, and thus need to be scaled up and/or extended – it is important for cities to share their experiences to co-create solutions that are able to improve the living conditions of all citizens. Local actors are rethinking and experimenting with practices and policies that put people back at the centre while developing "techno-culture" capacities.

On top of the participation of all stakeholders in decision-making and collaboration between homologues (i.e. local administrations), solutions must also be rooted in the local history of each local context. It is impossible to invent new forms of innovation, participation and dialogue between social groups from scratch. It is important for success to find solutions embedded in each specific local context and value system.

Furthermore, it appears clear that today polices or practices cannot be developed by applying positive discrimination – leaving out those affected by disabilities (in a broad spectrum) – towards specific groups (young generations, women, migrants, etc.). The citizenry is one and must be approached through universal solutions that tackle specific themes – for example food, or housing, etc. – which inherently address the poor and vulnerable without reproducing or deepening forms of internal discrimination between different social groups.

References

Ajuntament de Barcelona (2016) "L'activitat de l'Acord. Memoria 2015". pp. 52. http://www.bcn.cat/barcelonainclusiva/ca/2016/4/MemoriaACB_2015_acc.pdf (last viewed 5.10.2016)

Ajuntament de Barcelona (2014), "Estrategia Compartida per una ciutat més inclusiva" December, pp. 99. http://www.bcn.cat/barcelonainclusiva/ca/2015/3/estrategiacompartida.pdf (last viewed 5.10.2016)

Basin Income Earth Network http://basicincome.org/topic/netherlands/ (last viewed 5.10.2016)

Brown, T. (2016) "The Netherlands' Upcoming Money-for-Nothing Experiment", The Atlantic June http://www.theatlantic.com/business/archive/2016/06/netherlands-utrecht-universal-basic-income-experiment/487883/ (last viewed 5.10.2016)

Municipality of Milan and Fondazione Brodolini, (2015) *Milan White Paper on Social Innovation Accelerating Milan's local ecosystem for social innovation*,. http://urbact.eu/file/13514/download?token=d5fYKDwl (last viewed 5.10.2016)

Municipality of Milan, Immigration Service http://www.comune.milano.it/wps/portal/ist/it/servizi/sociale/servizi_interventi_sociali/adulti_immigrati/servizi_immigrazione (last viewed 5.10.2016)

Municipality of Milan (2014) *Guidelines for Milano Smart City* http://www.milanosmartcity.org/joomla/images/sampledata/programma/SmartCity/milano%20smart%20city%20-%20guidelines.pdf, (last viewed 5.10.2016)

Municipality of Milan (2012). *Piano di Sviluppo del Welfare della Città di Milano*, http://www.comune.milano.it/wps/portal/ist/it/servizi/sociale/piano_sviluppo_welfare/piano_sviluppo_welfare_%202012_2014, (last viewed 5.10.2016)

Sabatinelli, S. and G. Costa (2016) "Milan: "We Help You to Help Yourself"-The Project of the Fondazione Welfare Ambrosiano", in Brandsen, T., S. Cattacin, A. Evers, A. Zimmer (eds.) Social Innovations in the Urban Context, (Online). https://www.researchgate.net/publication/299891105_Social_Innovations_in_the_Urban_Context (last viewed 5.10.2016)

Sanchez Diez, M. (2015) "A Dutch city is giving money away to test the "basic income" theory" Quarz, June http://qz.com/437088/utrecht-will-give-money-for-free-to-its-citizens-will-it-make-them-lazier/ (last viewed 5.10.2016)