THE PORTUGUESE AND SWISS PRISON SYSTEMS COMPARED

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the portuguese prison photo project – Estabelecimento Prisional de Santa Cruz do Bispo Feminino.



From the start, national prison systems have been compared in order to observe similarities and differences in detention and to identify best practices. Due to a lack of data and of common indicators, scholars had to resort to legal texts for their comparisons, rather than observing prison realities. Today, researchers have at their disposal several data sets covering long periods¹, though with important loopholes.

In this contribution, I will compare key figures of the Swiss and Portuguese prison systems. My analysis starts with conviction rates, the use of the prison sanction and its length, examines material aspects of prison infrastructure (number and size), and finally compares the number of persons incarcerated and the occupation rates. These figures reveal differences and similarities between the two prison systems. They also raise new questions about the causes of these differences.

Finally, since Switzerland has good data on recidivism rates, this subject will also be discussed, as well as some long-term trends in the use of the prison sanction.

The objective of this research on prisons in both countries is to contribute to the definition of a general framework for the comparison of prison systems, in the following four dimensions: convictions and the use of the prison sanctions; prison infrastructure; prison population and staff; moral performance of prisons.

INTRODUCTION

From the start, national prison systems have been compared in order to observe similarities and differences in detention and to identify best practices. Due to a lack of data and of common indicators, scholars had to resort to legal texts for their comparisons, rather than observing prison realities. A research published in four volumes in France in 1950 provides a good example; the country studies contain large descriptions of the sanction system and its enforcement as well as information on the prison system, however it doesn't document justice and prison practices based on data². The same can be said of a comparative book on prison systems published 30 years later by one of the authors of the book of 1950³. And the Handbook on Prisons⁴ contains no chapter on comparative studies of prison systems; certainly, some indications of a comparative nature are disseminated in the different chapters, but it lacks a systematic comparative study. Even in the last edition of the Oxford Handbook of Criminology⁵, the sixth, few comparisons are made and few suggestions given on how to proceed for a comparison of prison systems.

As modern states are bound by the rule of law, and because freedom of movement is one of the most precious goods to be protected by law, depriving a person of her

liberty must be based on the law, whether for pre-trial detention, for the imposition and enforcement of prison sanctions, or for any other form of deprivation of liberty (police custody, fine enforcement, deportation, mental health problems, extradition, military detention, among others). This means also that the comparison of prison systems should not begin with the system alone, but with the legal provisions for imprisonment. It should cover the study of the use of all forms of deprivation of liberty, including police custody, pre-trial detention, prison sentences and decisions regarding administrative forms of detention, and finally a comparison of the reality of imprisonment, which has at least two sides, the physical set-up of the prison system, and the detention practices, regimes and moral performance of prisons.

The idea of this contribution is to provide a short, but nevertheless innovative overview of the subject and to look at the different aspects which should be examined and the data which should be used when undertaking a comparison of prison systems. It also documents two of these aspects which are well researched in Switzerland, one the recidivism rates after the 2007 modification of the sanction system, namely from prison to mainly pecuniary sanctions, the other the long-term trends in the use of the prison sanction in the country.

1. STATE OF THE ART

David Nelken (2017) has written for the recent edition of the Oxford Handbook of Criminology a contribution which offers a description of the state of the art. He speaks of the growth of comparative criminal justice studies, which are on the one side cross-national descriptions and on the other attempts to explain differences and similarities in the judicial systems and practices of countries. He states that today more attention is accorded to theoretical and methodological issues of comparative criminal justice studies than in the past. However, he himself does not treat the three main pillars of the system, namely police, justice and prisons, in an equal way; rather, he focuses his attention on the comparison of justice systems and pays less attention to police and prison systems. Therefore, most examples he refers to concern the justice system.

In his contribution, he states with regard to the objectives of this type of research, that «(t)he point of comparing is to produce unexpected, and therefore new, findings⁶». The comparative approach should aim at finding similarities and differences «where research did suppose the other way». When comparing changes in criminal justice systems, attention must be paid to push and pull factors; push factors are those which transform the system from inside, whereas pull factors are those which

change the system through external mechanisms, such as international conventions or international courts, for example the European Court of Human Rights. What are the criteria to judge change? On one side, it is the national law, on the other the international standards. Currently however, using the sole nation-state as criterion increasingly presents a problem: «Neither sources of crime threats nor the responses to them are confined to the national level», as shown by phenomena such as «crimmigration» or «xeno-racism» (racism displaced onto foreigners).

If we look at comparative studies of the 1970s, one is struck by the fact that Switzerland presented then a kind of exceptionalism, together with Japan. The country was taken as a starting point for several comparative studies. There was general agreement among criminologists that Switzerland had a low level of crime and a small prison population. Several books were published on the subject, most famously Cities with Little Crime: The Case of Switzerland, by Marshall B. Clinard, published in 1978, or the work of Freda Adler, Nations Not obsessed With Crime, 1983, to mention just two. But others considered that, for different reasons, among which tourism, Switzerland was hiding crime by not publishing complete crime statistics. Flemming Balvig, a criminologist from Denmark, wrote The Snow-white Image: The Hidden Reality of Crime in Switzerland, published in 1988. However, since this period, as far as my knowledge goes, Switzerland is seen by some researchers, even from Switzerland⁷, as normalizing, attaining European standards of crime, claiming at the same time that prison sanctions were used with restraint. Killias's argument is that regarding crime it is the end of Swiss exceptionalism, despite the fact of exceptionalism in matters of sentencing. But is it really the case? I argue that the answer to this question is clearly no.

To compare «prison systems», my concept of reference is «deprivation of liberty», in German «Freiheitsentzug», in French «Privation de liberté», in Italian «Deprivazzione di libertà». It is a concept that embraces all forms of detention, based on legally determined forms of limitation of freedom of movement, as compared to the unrestricted freedom of citizens not under the control of the police, the judicial, military or sanitary authorities. It also designates, in the name itself, the tension between liberty and deprivation of liberty. Ideally, one should take into account all laws defining a form of deprivation of liberty, which are:

- Police authorities Police detention, administrative, preventive and security detention;
- Authorities of prosecution Pre-trial detention, remand detention;

- Courts Prison sanctions; pecuniary sentences converted into prison sanctions;
- Courts Deprivation of liberty due to mental troubles. Convicts with addictions;
- Administration and courts Enforcement of expulsion orders. Extradition regulations;
- Sanitary administration Deprivation of liberty on grounds of severe psychic problems.
- Army Deprivation of liberty for military code offences.

In my view, the comparison of prison systems would encompass five levels:

- Legal provisions for imprisonment: police detention; pre-trial detention; prison sanctions; therapeutic measures while convicted and imprisoned; retention and detention for expulsion and extradition; psychiatric confinement; military detention;
- Decisions of deprivation of liberty;
- Material base: system of establishments, types of prisons, size of cells, norms on space and rules of functioning;
- Enforcement of imprisonment, population in prisons, liberation;
- Moral performance of prisons⁸.

My approach would start by using the statistical sources available today, namely the *European Sourcebook of Crime and Criminal Justice Statistics* (henceforth Sourcebook) and the *Council of Europe Annual Penal Statistics* (SPACE), two complementary statistical instruments at the European level.

2. COMPARISON OF THE PRISON SYSTEMS OF SWITZERLAND AND PORTUGAL

Data used for comparing prison systems should be harmonized and the difficulty lies precisely in ensuring that data combined from different sources meet this criterion. The Sourcebook, in its fifth edition (2015), provides figures for the years 2007 to 2011 only. The situation is better regarding the data collection of SPACE which contains figures on prisons until 2016, without quantitative information on convictions

As indicated, it would be interesting to have fully comparable data on all components of the sanction system, including decisions of imprisonment, places of detention and prison population. To mention just one example: it seems easy to compare the number of detention places. However, even in this field, the comparison is not

obvious. As table 1 shows, Portugal considers as not applicable several categories included in the Swiss data; on the other hand, it takes into account forms of detention which are not or only marginally counted in Switzerland. Fortunately, in quantitative terms, these differences are relatively marginal.

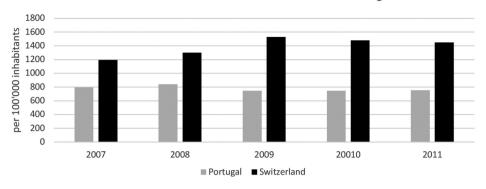
Detention forms	Portugal	Switzerland
Police detention places	NAP	31 places
Juvenile custodial facility	183 places	60 places
Juvenile educational facility	NAP	23 places
Drug addiction outside penal inst.	NAP	No
Psychiatric disorder outside penal inst.	275 places	No
Asylum seekers/Expulsion centers	NAP	316 places
Private facilities	NAP	No
Persons under electronic monitoring	NAP	No
Psychiatric disorder inside penal inst.	unknown	Yes
Military detention	unknown	Yes

To go into such details for each aspect under analysis is not possible in this contribution – the interested reader will have to refer to the data and the metadata in the publications mentioned above. For reasons of comparison, all further data used here will be relative figures, weighed with the population figures.

2.1 CONVICTION RATES

Without detailed information on the system of sanctions, the number of offenses covered by the penal code and the sanctions defined for each offense, without detailed information on the system used for recording offenses in the national penal registry, it may prove difficult to understand fully the data collected on convictions. However, it is still interesting to compare the levels and the evolution of conviction rates, especially in relation to the use of the prison sanction.

G1 Rate of convictions in Switzerland and Portugal



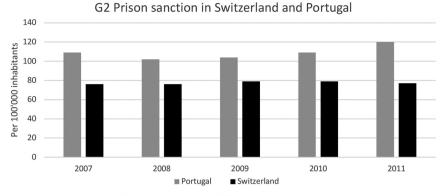
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The results in graph G1 show a much higher conviction rate, based on the national penal registry, for Switzerland than for Portugal. The reason lies in the important use of penal convictions for traffic offenses such as drunk driving and other severe violations of traffic regulations, offenses which are mostly punished with monetary penalties. These account in Switzerland for close to 60% of all registered offenses. As in most other European countries, average traffic offenses in Portugal are sanctioned with a bonus-malus system and are not recorded in the penal registry. With regard to the evolution of registered offenses, Switzerland shows an increase over the five years under observation, whereas Portugal presents a stable situation.

2.2 RATE OF PRISON SANCTIONS

The data available in the Sourcebook provide comparative information about the use of the prison sanction in both countries, again for a period which is not very recent. I pondered them with the population figures.

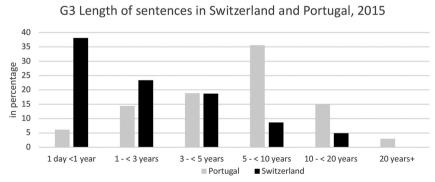
The results (G2) show a higher frequency of prison sanctions in Portugal compared to Switzerland. In 2011, it was some 50% higher. Whereas the ratio of prison sanctions to convictions for those who have been convicted (G1) is about six times lower in Portugal (in 2011: 120 to 800), in Switzerland the ratio is almost 18 times lower (80 to 1400). The evolution is parallel in both countries. It should be indicated here that in 2007 Switzerland introduced the pecuniary sanction and community work as two main forms of sanctions, next to the prison sanction, of which the use has also become very restrictive for sanctions under 6 months.



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2.3 LENGTH OF PRISON SANCTIONS

Next to the rates of convictions and of prison sanctions, an important indicator of the use of imprisonment in a country is the sanction length. The data for the length of prison sanctions in Portugal and Switzerland show a strongly differing distribution. For Portugal, the most important duration category is for sanctions of 5 to 10 years. For Switzerland it is the category of 1 day to 1 year and afterwards, the percentage diminishes for each subsequent category of the length of prison sanctions. On the contrary, Portugal presents an even curve, close to a normal distribution. Two hypotheses might be drawn from these data:



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first, the structure of offenses must differ, with more severe types of offenses committed in Portugal; second, the severity of the sanctions imposed on the offenders must be much higher in Portugal than in Switzerland.

Large distortions between the frequency in the imposition of the prison sanction and the real number of incarcerations may be observed. The use of pre-trial detention provides one explanation since in this case, at the moment of sentencing, part of the sanction has already been served. And it also depends on the crime policy, the occupancy rate of prisons as well as other practical decisions that a part of shorter prison sanctions will never lead to an incarceration.

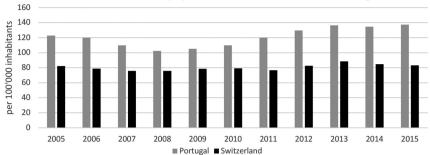
To get a full picture of the use of deprivation of liberty in a country, one would need also to compare data on the length of pre-trial and other forms of detention. In this contribution, I will continue to explore the comparison by presenting data on the prison system.

2.4 KEY FIGURES ON THE PRISON SYSTEM

The prison systems of Portugal and Switzerland differ in the size as well as in the number and dimension of detention facilities. Whereas Portugal has 49 prisons for all forms of detention, including two psychiatric-penal institutions, Switzerland has 114, of which 5 are psychiatric-penal institutions. The average capacity of a facility in Portugal is 260 places, in Switzerland it is 75. The biggest facility in Portugal – the Lisbon penitentiary – has a capacity of 890 places, in 2017 occupied by around 1300 inmates, whereas the biggest Swiss facility has 460 places; however, one facility (Prison of Champ-Dollon in Geneva) with 390 places is regularly overpopulated, occupied in 2017 by over 600 persons. The two southwestern cantons of Vaud and Geneva have since several years overcrowded facilities; in the rest of Switzerland the inmate population is evenly distributed, with a general occupancy rate of less than 90% (2017).

The prison population of Portugal in 2005 amounted to around 13'000 inmates; it decreased in the following years, then from 2009 on rose again to reach 14'000 detainees in 2015. The Swiss prison population rose from about 6000 in 2005 to 7000 in 2013 and has since decreased slightly. In relative figures (per 100'000 inhabitants) the evolution in Portugal presents a similar figure; in 2005 it has a rate of 122 inmates per 100'000 which first decreases to 100 and then raises to 140. Because Switzerland's prison population raised in parallel to the general population, the rate is stable, revolving around 80 inmates per 100'000 inhabitants.





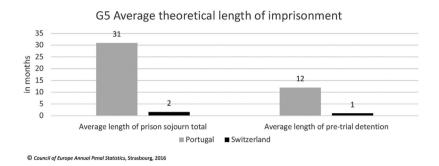
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Both countries have an equal distribution of the prison population by gender: female inmates account for 6% of the total. However, in Portugal foreign female detainees represent 40%, in Switzerland some 90% of all female inmates are foreigners, especially among sentenced detainees. The same difference applies to the population as a whole. Even though, due to Portugal's peripheric position as one of the entry points to the European Union, one would expect a greater number of migrants in the country's prisons, foreigners in fact represent only 18% of the prison population. Switzerland, with its central position in Western Europe, a country of transit for all kinds of goods and persons, has since the middle of the 1990s over 70% of foreigners among its prison population, especially in pre-trial detention.

With 14'222 inmates for 12'591 detention places in 2015, Portugal had an overall occupancy rate of 109%; Switzerland – with 7343 places and a prison population of 6884 – had an occupancy rate of 92%, with just a few overcrowded prisons.

The length of the prison sentence is one thing, but the effective time spent in prison after sentencing is another. This duration is reduced according to the time spent in pre-trial detention, which is deducted from the total sentence; the effective duration is further reduced because of releases after half or two-thirds of the sentences have been executed. In the absence of data on the real time spent in prison, it is possible to calculate an average theoretical length of imprisonment by multiplying the total annual entries by 365 days and then dividing it by the average annual number of prisoners. Using this measure, results show that on average Portuguese prisoners remain imprisoned close to 31 months, whereas Swiss detainees stay on average 2 months in detention; the difference is slightly smaller for pre-trial detention: whereas Portuguese detainees stay 12 months in detention while awaiting their sentence,

Swiss detainees stay one month. The difference is due to the fact that Switzerland has 10 times as many persons entering prison each year as Portugal, which counts only 5000 entries.



This comparison would be complete if we could also take into consideration the effective living conditions, rather than remaining at the theoretical level. Issues such as the relationship between detainees and staff, the housing conditions, the possibilities of work and of contact with the outside world, of day leaves, issues of nutrition and health, suicide and death, among others, should be examined. But they have seldom been described⁹, and data, for Portugal and Switzerland, are lacking, which makes a comparison impossible.

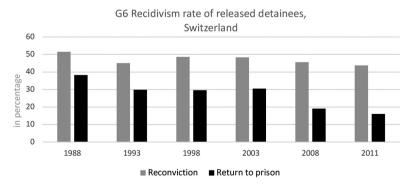
Alison Liebling shows in her research that more needs to be understood about the working and the culture of prisons. She proposes to move from general key figures on prison systems and on material conditions to an assessment of the detention regimes, looking for best practices in the prison culture and the «moral performance of prisons¹⁰». However, for Switzerland as well as Portugal, survey data on the way detainees and staff view the prison regime and on the moral performance of prisons are lacking. Therefore, it would be premature to work in this direction, but in a comprehensive comparison, these dimensions would have to be included.

Another important subject is the recidivism rates. No comparable data are available, but I will present a few statistical insights from Switzerland which might be relevant for Portugal. And to conclude this contribution, I will present some long-term trends in sanction policy, which show some evidence in the tendency to reduce the use of the prison sanction.

3. RECIDIVISM RATES OF RELEASED DETAINEES

In criminology, there are a few statistical regularities which seem to have a law-like character. The recidivism rate is among them, comparable across penal regimes, showing a stable relationship between variables. The following is regularly observed: The recidivism rate is higher for men than women, higher for young than older offenders, higher for persons with a greater number of previous sentences, and finally higher for persons sentenced to a prison sanction compared to any other type of sanction. In Switzerland, in 2012¹¹, the overall recidivism rate over 3 years of all convicted offenders was 19%; men have a rate of 21% compared to 14% for women; offenders aged 18 to 24 years 23%, compared to 22% for those between 25 and 39 and 15% for those over 39 years old. First-time offenders have a recidivism rate of 13%, offenders with one previous sentence 31% and those with two or more 53%.

Switzerland made a large use of the prison sanction in the 20th century. The sanction system, inherited from the 19th century, had put the prison sanction at its center, although the suspended sentenced came to dominate from 1940 onwards, with 75% of all cases in 2006. A modernization of the sanction system was initiated in the early 1980s; it was adopted in 2002 and came into force in 2007. It rolled back the short prison sanction and replaced it with monetary penalties. The result has been a steady reduction in the recidivism rate – the rate fell from 26% in 2005 to 19% in 2011. Better still: the released persons return less often to prison even after reoffending. These reoffenders still have a relatively high reconviction rate of over 40%, but before the reform they showed return rates of 30% and, since the reform, this rate fell to under 20% (2008), even 16% in 2011 (last available year).



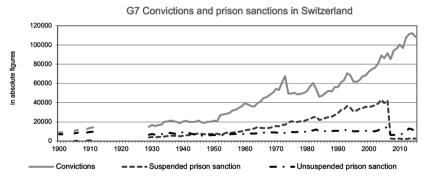
© Data from recidivism analyses, Swiss Federal Statistical Office, 2017

This evolution shows that the replacement of the prison sanction by monetary penalties positively influenced the risk of recidivism. This fact is coherent with all other measures taken throughout history to shorten and alleviate the prison sanction (amnesty, conditional release, work outside the prison walls, temporary leave, etc.) or to replace it (conditional sentencing, therapeutical and ambulatory measures, probation, community work, electronic monitoring, house arrest, learning programs, etc.), which have all participated in the reduction of the recidivism rate over time¹². The opposite can be observed in the United States where the frequent use of imprisonment contributes to a high recidivism rate. According to the most recent studies covering 30 US states, the reoffending rate is 60%, all reoffenders returning to prison¹³.

4. LONG-TERM USE OF THE PRISON SANCTION

In order to fully understand the Swiss reforms mentioned above, it is necessary to observe the long-term trends in sentencing. Until the end of 2006, it was a rather uncomplicated system of sanctions, with prison sanctions and fines. The prison sanction could be suspended. In some cases of an unsuspended sanction, it was possible to impose simultaneously a therapeutic measure. In Switzerland, the long-term trends can be analyzed since 1904, the moment the national penal registry was introduced. It was also at this time that the cantons started to introduce the suspended prison sanction.

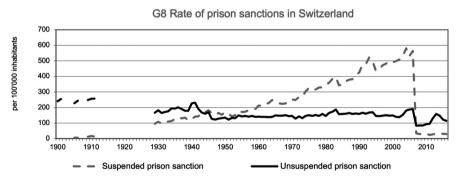
The fact is that the number of convictions increased 10-fold over 115 years, but the number of unsuspended prison terms remained stable – in absolute figures – over the century; and then, after the introduction of the monetary penalty in 2007,



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it fell by a third. The number of suspended prison sanctions was insignificant in the early 1900s. After the 1940s, they became the main sanction form: 75% of all prison sanctions were suspended; 95% had a duration of 3 months or less. Since 2007, the monetary penalty has become the most frequent sanction; among its different forms – unsuspended, partially suspended and fully suspended – the last one is the most commonly used by the sentencing authorities.

Focusing now on the prison sanction and its frequency in relative terms, for 100'000 inhabitants, we can see that the prison sanction fell from about 250 cases to under 100 cases a year in 2007. The change for the suspended prison sanction is even more striking: at its maximum in 2006, it was imposed three times as often as the unsuspended sentence. With the reform in 2007, the suspended prison sanction fell dramatically and has since remained stable with yearly some 20 cases for 100'000 inhabitants. Taken together with the recidivism rates, only one conclusion can be reached: Switzerland has implemented an efficient sanction system which reduces the use of imprisonment and, as a side effect, contributes to decrease the recidivism rates. Despite this positive evaluation, it could still be said that Switzerland makes a too frequent use of detention and the prison sanction, especially when it comes to foreigners without a valid residence permit in the country¹⁴.



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5. CONCLUSION

This contribution started with a few considerations about a comprehensive comparison of prisons systems, indicating that not much has been done in the field of comparative criminology. The study on the Swiss and Portuguese prison systems reveals that the starting point for such studies is improving since two data sources, the Sourcebook and SPACE, are now available. However, well documented as they

are and rather robust, they can only be used for conviction cases, key figures of the prison system and data on the prison population. For both countries, it lacks data on the prison regime and the moral performance of the prison system.

Nevertheless, this analysis points to some significant differences between Portugal and Switzerland in the use of the prison sanction, the structure of the prison system and the prison population. Concerning Portugal, we might say that the average length of the prison sanctions is very long; about Switzerland we could consider that the country makes still a much too frequent use of the short prison sanction and pretrial detention. As for the structure of the prison system, we see a great disparity in the number and size of its units: Switzerland has more facilities but of a much smaller size. The composition of the prison population is also very different: Portugal has few migrants in its prisons whereas Switzerland fills its facilities in a significant way with persons without residence status in the country.

Bibliography:

ADLER, F. (1983) - Nations Not Obsessed With Crime. Littleton, Colorado: Fred B. Rothman and Co.

ANCEL, M., CHEMITHE, P. (1981) – Les systèmes pénitentiaires en Europe occidentale. Documentation française, Paris.

BALVIG, F. (1988) – The Snow-white Image: The Hidden Reality of Crime in Switzerland. Norwegian University Press

CPT, Report to the Portuguese Government on the visit to Portugal carried out by the CPT. From 13 to 17 May 2013. Strasbourg, 26 November 2013.

CLINARD, M. B. (1978) - Cities with Little Crime: The Case of Switzerland. Cambridge University Press.

Council of Europe Annual Penal Statistics SPACE, see: https://www.coe.int/en/web/prison/space

DUROSE, M. R. et al. (2014) – *Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010.* Washington: Bureau of Justice Statistics.

European Sourcebook of Crime and Criminal Justice Statistics (2015, 5th ed.), see: http://wp.unil.ch/europeansourcebook.

FINK, D.; SCHULTHESS, P., Eds. (2015) - Strafrecht, Freiheitsentzug, Gefängnis, Bern.

FINK, D. (2017) - La prison en Suisse. Un état des lieux. Lausanne.

(2018) - Freiheitsentzug in der Schweiz. Formen, Effizienz, Bedeutung, Zürich.

FINK, D., DUCOMMUN-VAUCHER, S. (2014) – *Statistical Recidivism Analyses in Switzerland,* in: Albrecht H.-J., Jehle J.-M. (Eds.), National Reconviction Statistics and Studies in Europe, Göttingen.

HUGUENEY, L.; DONNEDIEU-DE VABRES, H.; ANCEL, M. (Ed., 1950) – Les grands systèmes pénitentiaires actuels. Paris.

KILLIAS, M.; LANFRANCONI, B. (2012) – The Crime Drop Discourse – or the Illusion of Uniform Continental Trends: Switzerland as a Contrasting Case, in J. van Dijk et al. (Eds.), *The International Crime Drop. New Directions in Research*, Basingstoke.

JEWKES, Y. (Ed.; 2007) – Handbook of Prisons. Collompton (UK).

LIEBLING, A. (2004) – Prisons and their moral performance. Oxford.

____(2011) – Moral performance, inhuman and degrading treatment and prison pain. In: Punishment and Society, n°. 13.

LIEBLING, A.; MARUNA, S.; MCARA, L. (2017) - The Oxford Handbook of Criminology. 6th edition, Oxford.

NELKEN, 2017: 422. - FALTA REFERÊNCIA COMPLETA

PEDRO DORES, A.; PONTES, N.; LOUREIRO, R. (2013) - Prison conditions in Portugal. Rome.

Sourcebook of Crime and Criminal Justice Statistics of the Council of Europe (2015), 5th edition, see: website.

Statistiques pénitentiaires annuelles of the Council of Europe (SPACE) (2017), website.

Swiss Federal Statistical Office (SFSO), 2017 – *Rückfall/Récidive*, website: www.statistik.admin.ch (only in German and French).

¹ World prison brief; UNODC data sets; European Sourcebook on crime and criminal justice; the annual penitentiary data series of the Council of Europe SPACE.

² HUGUENEY et al., 1950.

³ ANCEL; CHEMITHE, 1981.

⁴ JEWKES, 2007.

⁵ LIEBLING et al., 2017.

⁶ NELKEN, 2017: 422.

⁷ KILLIAS, 2008.

⁸ LIEBLING, 2004.

⁹ See CPT-Report 2013; PEDRO DORES et al., 2013.

¹⁰ LIEBLING, 2011.

¹¹ SFSO, 2017.

¹² For a short account: FINK; DUCOMMUN, 2014; for a detailed history see FINK; SCHULTHESS, 2015.

¹³ DUROSE et al., 2014.

¹⁴ FINK; SCHULTHESS, 2015.