Synthetic drugs in Europe: A standardized and widespread phenomenon

These last years, synthetic drug use has been presented as a new phenomenon, whose consequences are impossible to foresee. Hardly definable when only apprehended as a subject of current concern, it needs to be replaced in an historical and geographical prospect in order to achieve a well-documented study.

A global analysis on the European Union level notably provides a better identification of cultural trends consumption areas have developed from, but also a better interpretation of the different data available, which stand as the basis for a current description of the phenomenon.

Historical context: a dual development

- A North-European consumption area where amphetamines are prevailing

This area — the oldest one — has mainly developed from a massive amphetamine use, whose beginnings can be found as far back as the thirties. From the end of the sixties onwards, a surge of LSD (lysergic acid diethylamide) has been added by the psychedelic movement.

Amphetamines were synthetized in 1887 for the first time. They were initially subjected to selective medical studies until their stimulating properties were acknowledged in 1927. Then a therapeutic use period began, whose background was the economic slump of the thirties, and amphetamines were widely prescribed by the medical profession as a treatment for depression. The forties registered the outbreak of an official use of amphetamines. During W.W.II the armies of belligerent countries, especially the U.K. one, would use them to maintain a state of watch and alert among their troops. At the same time, Sweden was developing a totally different use: in that neutral country, the obesity problem was to be faced. Amphetamines were then consumed for their appetite depressant effect. The actual hedonistic use of amphetamines only begun in the early fifties. The injection route of administration developed on a wide scale on Sweden whereas the use was becoming popular among the youth, notably among motorbike bands and some rock and roll fans. An important consumption was also observed in Finland and Denmark. In the latter, more than one conscript out of ten (18-22 years-old) had experimented amphetamines in 1971. At the same period, a lesser use level could be registered in other European countries.

Contrary to amphetamines whose distribution around the Continent appeared to be done regardless of all extra-European influence, the circulation of LSD was characterized by a coming to maturity outside Europe. In 1943, LSD was synthetized for the first time in Switzerland. Scientific experiments were done with it, mainly in the United States, in the hope of finding out psychiatric applications. In the early sixties, it was then used for hedonistic purposes. Careful researches did not make possible the outbreak of actual therapeutic opportunities. Around the same period, and more particularly in the second half of the decade, LSD use was
introduced in Europe thanks to the psychedelic movement. Once again, contrary to amphetamines, LSD maintained nowhere a high and durable level of consumption, not even in the United Kingdom, a country where it was most widely used in the sixties and seventies. Every where in Europe, the eighties registered a fall in LSD use, which increased again during the nineties.

- A South-European consumption area where ecstasy is prominent

This area is more recent because it is linked to the expansion of techno culture, which appeared in South Europe in the mid-eighties. As the northern area, it develops from the use of a main substance, here ecstasy (methylenedioxyamphetamine- MDMA- and other substances sold under that label).

As for LSD, the history of ecstasy is distinguished by a period of development outside Europe, in the United States, but much more by a particularly long phase of research, covering more than half a century. In 1910, the MDA (3,4-methylenedioxyamphetamine) was synthetized for the first time in Germany: it was then tested in the USA, as a treatment for Parkinson disease and as a appetite suppressant, before being abandoned because of side-effects found out among patients. During the sixties, MDA was then used in a roundabout way for hedonistic purposes. From 1970 onwards, MDA was rated among narcotic substances and prohibited; its legal substitute, MDMA or “ecstasy” was then synthetized two years later, giving rise to a new generation of synthetic drugs, the “designers drugs” (substances which are characterized by a very slightly altered molecular structure when compared with illicit substances, which makes possible getting round the law prohibiting the previous molecule.

This synthetic drugs distribution ran parallel to the expansion of techno music, in the United States first, then in Europe in the mid-eighties. At that time, techno and ecstasy were notably expanding from Italian seaside resorts as Rimini, but mainly the Spanish ones, especially Ibiza in the Balears, where both a part of mass tourism coming from the United Kingdom, and media, design, and music industry professionals were meeting. Through that population, ecstasy and techno were quickly imported to the UK, in discotheques and above all in the alternative background of the raves, which were growing in number thanks to the development of electronic equipment such as synthesizers or samplers. From 1988 onwards, techno and rave parties registered a huge success around the United Kingdom. During the following years, the techno movement reached the Netherlands, Belgium, France, and Germany. Ecstasy showed that same development.

**Recent trends: standardization and generalization of the phenomenon**

- General population use survey

Prevalence use measures of synthetic drugs carried out by general population surveys in different countries must be taken cautiously: the age brackets retained, the collecting methods used, as well as the substance categories may actually differ from one country to the other. However, the data collected make possible an overall interpretation of the phenomenon.

Most of the countries having data during the nineties are concerned by synthetic drug use, although national idiosyncrasies do exist. Concerning the adults (age brackets including the 18-59 year-olds), for amphetamines and ecstasy use, a
prevalence during life time is noticed; it is high in the UK (9 and 3% respectively for the 16-59 year-olds), rather important in ex-West Germany (3% for amphetamines and 2% for ecstasy among the 18-59 year-olds), and in Spain (2,5% for amphetamines and 2% for ecstasy among the 15-65 year-olds), as well as in the Netherlands, particularly in Amsterdam. In France, Greece, Belgium, Finland, and in ex-East Germany, prevalences register a lesser level, never above 1%. In Denmark and Sweden, the amphetamine use alone appear to be high, with 4% from the 18-69 year-olds and 2% from the 15-75 year-olds respectively. The amphetamines use in the recent years seem to be stable according to some surveys which help following up the tendencies (Amsterdam 1987-1997, England and Wales 1994-1998). If the lifetime prevalences of amphetamines are exceeding those of ecstasy in every country, the more recent uses (during the year) conversely refer more often to ecstasy.

The LSD use is more difficult to observe, for it is less often asked in the surveys, and when it is, this substance is often associated with hallucinants considered as a whole (that is the case in France, with 1,5% of users during a lifetime in 1995). In the European countries, the LSD use among the general population stands on a middle level between amphetamines and ecstasy.

Generally speaking, the highest figures can be observed among young adults, especially the 18-25 year-olds. Whatever the substance, the European strongest use levels can be found in the UK, to wit: in 1996, 16% from the 16-29 year-olds having already used amphetamines during their lifetimes, 9% for ecstasy, and 10% for LSD.

*OEDT Data*  
**Flanders**  
**year prevalence (at the age of 15-16, the lifetime and year prevalences are estimated to be sufficiently close to stand comparison with one another)
The use may begin early; among the 15-16 year-olds, the amphetamines use prevalence is notably strong (around 10%) in the UK and the Netherlands, but also in Luxembourg, a country that otherwise shows weak figures for other synthetic drugs. Most of European countries lies between 2 and 4%, Finland and Sweden having close rates of 1% for amphetamines use is concerning upper age brackets. Ireland stands apart with high figures for LSD and ecstasy, but not for amphetamines. The other countries registering strong prevalences for ecstasy among the 15-16 year-olds are the United Kingdom, the Netherlands, and Spain. In France, a distinct increase of ecstasy use can be noticed among the youth during the nineties. Surveys carried out among conscripts have shown a sharp increase of the declared use by 18-23 years-old young men, this figure moving from 0,5% in 1995 to 5,1% in 1996. This rise also appeared in a survey conducted in 1983, 1991, and 1998 in Parisian lycées, and it showed that 3% of lycéens had already tested ecstasy in 1998 versus 0,1% in 1991, as well as 1,7% had tried LSD versus 0,4% in 1991, and 0,5% in 1983. On a national level, thanks to a survey carried out in the school environment in 1997, 3,4% of the 15-19 years-old French lycéens declared having used ecstasy or LSD during the year, and 2,1% having done so with amphetamines.

- Seizures
Data concerning seizures reflect the activities of law-enforcement services as well as those of drug use: they must be interpreted considering both aspects. In that respect, we analyzed the amount of seizures rather than the quantities of substances seized, the first indicator appearing to result more from the request for substances (the second one essentially indicates the range of selective operations, leading to blocking off strong quantities of substances whose ultimate destination remains conjectural).

Generally speaking, the amount of synthetic drugs seizures in the European Union virtually tripled between 1990 and 1995. The number of amphetamines seizures—which stands for two-thirds of seizures registered in 1995 — as well as the one of ecstasy seizures are steadily rising. The amount of LSD seizures, declining from 1994 onwards, remains however high when compared to the eighties.

**Number of registered seizures by countries in 1995**

<table>
<thead>
<tr>
<th>Country</th>
<th>Amphetamines Numb. of seizures</th>
<th>Amphetamines Numb. for 1 000 inhab.</th>
<th>Ecstasy Numb. of seizures</th>
<th>Ecstasy Numb. for 1 000 inhab.</th>
<th>LSD Numb. of seizures</th>
<th>LSD Numb. for 1 000 inhab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>43</td>
<td>5,3</td>
<td>153</td>
<td>18,8</td>
<td>80</td>
<td>9,8</td>
</tr>
<tr>
<td>Belgium</td>
<td>102</td>
<td>10</td>
<td>1 002</td>
<td>95,6</td>
<td>28</td>
<td>27,6</td>
</tr>
<tr>
<td>Denmark</td>
<td>1 167</td>
<td>219</td>
<td>9</td>
<td>1,7</td>
<td>6</td>
<td>1,1</td>
</tr>
<tr>
<td>Finland</td>
<td>696</td>
<td>135</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>France</td>
<td>104</td>
<td>1,77</td>
<td>587</td>
<td>10</td>
<td>158</td>
<td>2,7</td>
</tr>
<tr>
<td>Germany</td>
<td>4 315</td>
<td>52,6</td>
<td>---</td>
<td>---</td>
<td>656</td>
<td>8</td>
</tr>
<tr>
<td>Ireland</td>
<td>89</td>
<td>24,6</td>
<td>571</td>
<td>157,7</td>
<td>62</td>
<td>17,1</td>
</tr>
<tr>
<td>Italy</td>
<td>41</td>
<td>0,72</td>
<td>947</td>
<td>16,7</td>
<td>271</td>
<td>4,8</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>9</td>
<td>21,2</td>
<td>25</td>
<td>58,8</td>
<td>8</td>
<td>18,8</td>
</tr>
<tr>
<td>Spain</td>
<td>3 384</td>
<td>86,5</td>
<td>1 949</td>
<td>49,8</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Sweden</td>
<td>4 386</td>
<td>493,5</td>
<td>26</td>
<td>2,9</td>
<td>28</td>
<td>3,1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>15 443</td>
<td>261,9</td>
<td>5 513</td>
<td>93,5</td>
<td>1 155</td>
<td>19,6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29 779</strong></td>
<td><strong>88,2</strong></td>
<td><strong>10 782</strong></td>
<td><strong>31,9</strong></td>
<td><strong>2 705</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

**OEDT Data**
- last year for which data referring to all countries mainly concerned by the phenomenon are available
- estimate
The United Kingdom stands out from all other countries because of its notably high amount of seizures for the three substances. In 1995, the number of amphetamines and ecstasy seizures carried out there represented two-thirds of the amount of seizures operated in the whole European Union. As for LSD, the United Kingdom concentrates half the number of seizures done in the European Union (three-quarters during the 1992-94 apex).

The amphetamines seizures remain in a much greater number in Northern Europe countries, where consumption historically developed. During 1995, the number of seizures for 1 000 inhabitants amounted to 494 for Sweden, 262 for the United Kingdom, 219 for Denmark, and 135 for Finland, this rate staying under 1000 for all other countries.

The amount of ecstasy seizures is particularly important in Ireland, Belgium, as well as in the United Kingdom. Other indicators seem to show that seizures are as much significant in the Netherlands (with a number of pills seized nearing 1.5 million in 1996), where exploitable data concerning the amount of seizures cannot be available. In 1995, Ireland had the greatest number of seizures for 1 000 inhabitants (more than 150), the United Kingdom and Belgium following with a rate close to 100. To a lesser extent, the amount of seizures was also important in Spain and Luxembourg (with a rate over 50 in 1995). It then appears that the historical consumption area registered a moderate development, and that ecstasy distribution across the European Union rather operated from the United Kingdom to the Benelux.

The LSD seizures are divided up more or less the same way as those of ecstasy around the European Union. Thus, Belgium, the United Kingdom, Luxembourg, and Ireland show the highest numbers of seizures for 1 000 inhabitants (28, 20, 19, and 17 respectively). This rate stands under 10 in all other countries.

Furthermore, other synthetic drugs have been blocked off in Europe: ketamine, DOB (bromolamfetamine), GHB or Gamma OH (gamma-hydroxybutyrate), 2CB (4-bromo-2,5-dimethoxyphenethylamine), 4-MTA (4-methylthioamphe-tamine), etc. However, such seizures have stood out so far.

- Resorting to treatment

Few countries have useful national data in that respect. When the latter exist, for each individual treated in relation to a drug-addiction problem, a distinction is made between the substance whose consumption initiated the treatment (“primary drug”) and the other drugs used (“secondary drugs”). Because of varied collecting modes from one country to the other, when put together, figures provide the outlines of general trends rather than specific quantity levels.

In a majority of European countries, synthetic drugs are seldom (Italy, Denmark) or never (Austria, Belgium, Denmark, France, Greece, Portugal) listed as primary drugs. That could indicate they generate few health troubles.

In the countries where consumption has been established for a long time, there is nevertheless a high level of request for treating an amphetamines primary use: that is the case for Scandinavian countries (Finland: 42,1% of requests in 1995; Sweden: 22,2% of requests in 1995) and to a lesser extent for the United Kingdom (8,7% of requests in 1994-95). Outside theses countries, the percentage of requests for amphetamines-related treatment
was varying from low, as in the Netherlands (2.6% of requests in 1996) or in Germany (1.8% of “incentives” in 1996), to very low. In France, the rate stood around 0.5% in 1997.

The share of ecstasy and LSD is very low among the substances generating requests for treatment. Data collected in 1994 and 1996 showed that ecstasy was only initiating 1 to 2% of treatments in Finland, Germany, Luxembourg, the Netherlands, the United Kingdom, and France; as for LSD, it was significantly yet only stated in Germany, where its use concerned 5% of the requests for treatment (0.5% in France in 1997).

These low rates may be due to the fact that ecstasy use and the revival of LSD are comparatively recent in Europe, but also to the attitude quickly adopted by the public authorities of the countries at stake, to wit: promoting a policy of risk reduction, which favours — particularly in techno and raves environments — a preventive follow-up for risky behaviours. Such a theory could also explain the low rates referring to amphetamines-related treatment outside Scandinavia and the United Kingdom. Furthermore, there may be questions asked about a possible discrepancy between the specialized treatment systems, rather focusing on heroin addiction, and synthetic drugs new uses. However, too few elements can invalidate or confirm that theory for the time being.

As for synthetic substances listed as secondary drugs, the available data came from four countries only in 1995: Greece, Ireland, Luxembourg, and the United Kingdom. The synthetic substances were registered in not insignificant proportions as secondary drugs in two of these countries (Luxembourg and the United Kingdom), especially in the latter, where amphetamines were registered as secondary drugs for 18% of the treatments. In France, the available figures for 1997 remained low: the ecstasy use was signalled as initiating 1.8% of treatments (alone or associated with one or two other substances), the amphetamines use only concerning 1.2% of treatments, and that of LSD 1%. As much as fragmented as these rates can be, they tend to confirm the observations issued from most of the quantitative surveys alluding to multiple use, to wit: the synthetic drugs use in Europe is developing nearby the consumption of a variety of other psychoactive substances.

Conclusion

The synthetic drugs level of consumption has been increasing in the European Union during the nineties; at the same time, the phenomenon registered a geographical expansion. As there are presently two few qualitative or quantitative data available, it is then difficult to foresee what its evolution and consequences will be in the future. Two emerging tendencies seem however to become apparent for the time being:

• Synthetic drugs uses remain high when long-established: in Sweden and in the United Kingdom for amphetamines; in the latter and in Spain for ecstasy; in the UK for LSD.

• Synthetic drugs use tends to generalize and standardize in the European Union, notably among the youth. Data vailable show a general increase in the use of different substances.

Thierry Delprat
• For more information
  - OEDT, *Nouvelles tendances en matière de drogues synthétiques dans l'Union européenne : épidémiologie et réponses à la réduction de la demande*, *Insights n°1*, OFDT, à paraître.

**Tendances**

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