## GENETICS, ROBOTICS AND CRIME PREVENTION

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THIS TALK DEALS WITH THE CURRENT AND POSSIBLE FUTURE EMPLOYMENT OF GENETICS AND ROBOTICS IN CRIME PREVENTION, BROADLY CONSIDERED AS ALL THE MEANS OF ELIMINATION OR REDUCTION OF THE CAUSES OF CRIME (AND THEREFORE OF THE RISK OF CRIME). IN SUCH A WIDE CONCEPTION OF CRIME PREVENTION, WE INCLUDE BOTH THE SO CALLED "POSITIVE MODEL" OF CRIME PREVENTION (WHICH CONSIST OF MEASURES THAT EXPAND, PROMOTE, IMPROVE THE INDIVIDUAL LEGAL SPHERE) AND THE SO CALLED "NEGATIVE MODEL" (WHICH, INSTEAD, CONSIST OF MEASURES COMPRESSING THE INDIVIDUAL LEGAL SPHERE, AND ESPECIALLY INDIVIDUAL LIBERTY, GENERALLY THROUGH THE DIRECT OR INDIRECT USE OF FORCE).

IN THE FIRST PART OF OUR CONTRIBUTION, WE WILL EXPOSE SOME OF THE MOST INTERESTING (AND CURIOUS) EXISTING APPLICATIONS OF GENETICS AND ROBOTICS IN CRIME PREVENTION. AS FOR GENETICS, WE WILL, IN PARTICULAR, CONSIDER THE POSSIBLE PREVENTIVE EFFECTS AND IMPLICATIONS OF THE EMPLOYMENT OF GENETIC EVIDENCE IN CRIMINAL TRIALS, SO TO EXCLUDE, REDUCE OR MEASURE INDIVIDUAL CRIMINAL RESPONSIBILITY. IN THIS REGARD, WE WILL COMPARE SOME RELEVANT AMERICAN CASE LAW (FULLY CONSIDERED BY PROFESSOR DEBORAH DENNO) WITH SOME RECENT ITALIAN CASE LAW (ALSO POINTED AT BY PROFESSOR FRANCESCA ZANUSO). MOREOVER, WE WILL CONSIDER SOME DEVELOPMENTS IN U.K. LAW CONCERNING THE (INDEFINITE) RETENTION OF DNA MATERIAL FROM ANYBODY ARRESTED. WHETHER INNOCENT OR CONVICTED, WHICH OF COURSE HAVE A STRONG DETERRENT EFFECT. WE WILL CONSIDER, IN THAT REGARD, THE EVOLUTIONS INDUCED BY THE EUROPEAN COURT OF HUMAN RIGHTS. ONE OF THE COURT'S MOST SIGNIFICANT DECISIONS ON THE TOPIC (S. AND MARPER VS. UNITED KINGDOM) BROUGHT THE UNITE KINGDOM TO THE ENACTMENT OF THE PROTECTION OF FREEDOMS ACT 2012, WHICH, IN THE AIM OF STRIKING A BALANCE BETWEEN PROTECTING THE PRIVACY AND HUMAN RIGHTS OF THE PUBLIC, AND PROTECTING THEM FROM CRIME BY KEEPING THE RIGHT PEOPLE ON THE DNA AND FINGERPRINT DATABASES. **INTRODUCES SIGNIFICANT CHANGES** IN THE **PREVIOUS** REGULATIONS OF THE RETENTION OF DNA MATERIAL.

AS FOR ROBOTICS, THE USES OF ROBOT DEVICES IN CRIME PREVENTION ARE PROBABLY MORE VARIOUS, YET PROBABLY MORE NEGLECTED, THAN THOSE OF GENETICS. THE EMPLOYMENT OF ROBOTS FOR PREVENTIVE PURPOSES RANGES FROM AIR/LAND SURVEILLANCE TO PATROLLING SERVICES, TO PREVENTIVE INFORMATION, FORMATION AND EVEN EDUCATION OF MINORS, TO

THE USE OF FORCE AGAINST DANGEROUS SUBJECTS (WHICH IS PARTICULARLY FREQUENT IN THE SO CALLED «EXTRAORDINARY» OR «EMERGENCY MODELS» OF CRIME PREVENTION, AIMED TO DEAL WITH EXCEPTIONAL FORMS OF CRIMINALITY, OFTEN VERY CLOSE TO ACTS OF WAR, SUCH AS TERRORISM). WE WILL OBSERVE AS THE USE OF ROBOTICS MAY BE EASILY DIRECTED TO THE ENHANCEMENT OF INDIVIDUAL PERSONALITY AND LIBERTY (POSITIVE MEASURES) AS WELL AS THE COMPRESSION, IF NOT THE ANNIHILATION OF THE INDIVIDUAL (INCLUDING HIS PHYSICAL ELIMINATION: THINK FOR INSTANCE TO THE USE OF DRONES AS WEAPONS O ROBOT SOLDIERS, CITED ALSO BY PROFESSOR MARIA BEATRICE MAGRO). THE EMPLOYMENT OF ROBOTICS IN CRIME PREVENTION PASSES MORE UNNOTICED THAN THAT OF GENETICS, SINCE IT IS STILL RELEGATED TO THE FIELD OF MERE PRAXIS, LACKING SPECIFIC LEGAL REGULATIONS.

THE SECOND PART OF OUR TALK WILL TRY TO ENVISAGE THE POSSIBLE RISKS OF THE CURRENT AND THE MOST PLAUSIBLE FUTURE USES OF GENETICS AND ROBOTICS (AND ALSO OF THE POSSIBLE COMBINED USE OF BOTH TECHNIQUES) IN CRIME PREVENTION WITH REGARD TO FUNDAMENTAL HUMAN RIGHTS AND LIBERTIES AND TO ASSESS THE OPPORTUNITY THAT SUCH USES ARE ORIENTED TOWARDS POSITIVE, RATHER THAN NEGATIVE PREVENTION (UNLESS STRICTLY NECESSARY TO PREVENT MOST DESTRUCTIVE CRIME FORMS). AMONGST THE ISSUES WE WILL CONSIDER IN THIS PART OF OUR CONTRIBUTION, WE WILL FOCUS IN PARTICULAR ON THE POSSIBLE EMPLOYMENT OF GENETICS AND ROBOTICS (OR BOTH OF THEM IN AN INTEGRATED FASHION) TO DETECT OR PROVE INDIVIDUAL DANGEROUSNESS (WHICH, AS ANYBODY KNOWS, CONSIST PRECISELY IN THE PROBABILITY THAT A SUBJECT ENGAGES IN FUTURE CRIMINAL ACTIVITIES AND IS THE CONDITION FOR THE APPLICATION OF MANY NEGATIVE PREVENTIVE MEASURES). IS A PERSON WHO IS GENETICALLY PREDISPOSED TO CRIME NECESSARILY A DANGEROUS PERSON? IS THE PREDISPOSED SUBJECT ALSO DETERMINED TO CRIME? WOULD IT BE RESPECTFUL OF HUMAN RIGHTS TO ENTRUST ROBOTS WITH THE IDENTIFICATION OF HUMAN FEATURES AND EXPRESSIONS OF DANGEROUSNESS (SUCH AS, FOR INSTANCE, AGGRESSIVE FACIAL EXPRESSIONS, AS DESCRIBED AND CATALOGUED BY PAUL EKMAN)? CAN WE TRUST EVALUATIONS? CAN WE GIVE ROBOTS THE (AUTONOMOUS) POWER TO DECIDE WHETHER TO USE FORCE AGAINST DANGEROUS SUBJECTS?