DNA, fingerprints, voice: a comparison between identification paths.

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A focal point – albeit a non-exclusive one – of an investigation procedure, is the segment dedicated to the attribution of a physical and personal identity of a suspect. There are many scientific and technical tools that this particular stage of an investigation can employ. In some cases, they are just diagnostic paths that have no nullifying value, but rather a purely indicative or confirmative one: think, for example, to the employment of images recorded from video-surveillance systems and to the face morphometric comparison techniques used for the tridimensional redefinition of physiognomic traits; or to the criminal profiling techniques. On the contrary, there are some types of investigations, such as the genetic or the fingerprint comparison ones, that are able to offer results that often appear to be decisive to the purpose of the determination of responsibilities and it is because of this that, despite the irrefutable margin of error innate in any human activity, they are deemed to be suitable to express an identification result considered to be amongst the more reliable ones. A more uncertain ground, instead, is that of vocal investigation, because, despite voice represents an essential biometric characteristic for investigation purposes, tank also to the ample and available quantity of material useful to identification purposes, it remains a bio-indicator of imperfect characterizing ability, not only because, unlike a digital or genetic fingerprint, it is mutable, but also in consideration of the fact that it does not have sufficiently univocal features to always allow a distinction between a person and another.