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**Magnet, Soshana Amielle (2011); *When Biometrics Fail: Gender, Race, and the Technology of Identity*. Durham and London: Duke University Press**

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The promises of digital biometric technologies, such as facial recognition or iris scanners, are manifold. Industry and governments promise to find a person's 'true identity' by scanning bodily traits. They promise, moreover, to provide security and to smoothen logistic processes without human error and without cultural bias about race, gender, class or disability. Such promises raise red flags for many surveillance scholars, however. Scholars from various disciplines have argued that biometrics have far-reaching consequences for privacy, bodily integrity and equal treatment. In addition, these technologies are often used on vulnerable groups, such as immigrants, and therefore intensify the categorization and control that these groups are subject to.

Shoshana Amielle Magnet engages with this debate, taking feminist science studies as her main source of inspiration. In *When Biometrics Fail: Gender, Race, and the Technology of Identity* she passionately argues that biometrics "bring to live" outdated biological notions about race and gender (126). Magnet develops her argument on the basis of archival materials about the use of biometrics by the (privatizing) United States government. The empirical part of the book starts out with a critical review of the science behind biometric technologies. Next, she presents case studies about the use of biometric scanners by prisons, by welfare agencies and by the U.S.-Canada border authorities. In her final empirical chapter she examines representations of biometrics in the U.S. media. Magnet contributes significantly to the literature by explicitly placing biometrics in a tradition of identification practices that claim to produce truth by reducing bodies to code; practices in which biological conceptions about race and gender are once again revived. But her most relevant contribution to surveillance studies, I want to suggest here, is her analysis of failing technologies.

Structural failure is at the core of Magnet's analysis of the consequences of biometrics for inclusiveness and equality. This is a refreshing take on the subject and it instructs surveillance scholars to pay more attention to failure, empirically as well as conceptually. Although there are notable exceptions (see for example, Dubbeld 2005), authors often base their analysis on the assumption that technologies function exactly in accordance with their producers' promises (examples are, but are not limited to, Lyon 2003; Amoore 2008). Failing technologies are therefore implicitly considered as unusual. In some cases, scholars run the risk of adopting corporate representations of technologies that can be fine-tuned to perfection.

The first insight on failure that Magnet offers is that biometric failure is “both endemic and an epidemic” (7). Therefore, we can do away with the notion that error is exceptional. Drawing on Donna Haraway’s concept of ‘corporeal fetishism’, Magnet argues that bodies are produced in biometric discourse as “autonomous things-in-themselves” (4). Industry and governments assert that biometric technologies can reproduce the human body as a flattened map. Because of their supposed truth value, biometric data become valuable commodities. Magnet contends that biometrics are destined to fail, however, since bodies are lively, situated, and enacted in networks of relationships.

Magnet continues to argue that while biometric technologies cannot effectively identify any body, they are especially bad at identifying ‘othered bodies’. That is, bodies that do not fit the profile of a white male without disabilities. The reason is that to create codified bodies, scientists necessarily need to rely on simplified representations. In Chapter 2 about biometric science we learn, for instance, how scientists differentiate gender on the basis of cultured notions about dress (a necktie or a décolleté). With regard to race, Magnet cites a paper in which Chinese facial recognition scientists first assume that the ‘Mongolian race’ characterizes the average Chinese citizen. Next, they draw on anthropometry to define the features of this race. The result is a range of biometric scanners that cannot identify bodies-in-context, she argues. Magnet draws on a variety of sources to show that biometrics fail, among others, when they need to identify tall people, Asian women with fine skin and people with skin diseases.

The second insight I highlight here is that failure needs to be reconceptualized beyond mechanical error. Any notion of failure should therefore be attentive to the inequalities produced in the discourses that biometrics are part of. Discourses produce realities that are racialized and exclusive, Magnet argues. She claims this, among others, for the case of the U.S.-Canada border (Chapter 4). Since September 11<sup>th</sup>, 2001, the U.S. national imaginary of Canadians as “white, middle-class, nonthreatening visitors from the North” changed (92). Canada was re-imagined as a safe-haven for terrorists, owing to its relatively liberal immigration policies. The border was reconstituted as a place for visualizing threat with the help of biometric technologies. This was a process in which the border was racialized, so contends Magnet, as white Canadian bodies were replaced with “brown-skinned threats” (107).

Magnet is convincing when she argues that one of the biggest biometric failures is the intensification of the exclusion of marginalized groups; she demonstrates this, for example, for people with mental health disabilities in her chapter about the use of biometrics by welfare agencies (Chapter 3). She succeeds to a lesser extent, however, in locating racialization in practices outside of the laboratory, and in identifying how biometrics affect these practices. On the basis of her findings about biometric science Magnet argues the following: “Biometric technologies that rely upon erroneous assumptions about the biological nature of race, gender, and sexuality produce unbiometrifiable bodies” (151). But where exactly do we find these bodies and how are they “produced”? None of her case studies fully substantiate this argument. The implicit assumption seems to be that biometric technologies in operation fail in the same ways as technologies on paper and in the laboratory. In operation, however, other dynamics start to play a role. Individuals might resist and operators and employees might apply their own prejudices and norms, to name but a few examples.

The case study about the U.S.-Canada border does explicitly address the issue of racialization. But it is Magnet herself who articulates a category of white Canadians. Yet, what seems to be at stake is a more complex type of discrimination that also involves notions about religion, ethnicity and class. Moreover, the role of biometrics in producing this racialized border remains unclear. At one point in the chapter, the employment of biometric technologies seems to be brought about by a racialized discourse (124), while in the same chapter biometrics are “mobilized” in a discourse (91). My point is not that biometric practices do not involve cultured notions about biological race (that they do is demonstrated in Chapter 2 about biometric science). And clearly racialization is difficult to locate because it is ambiguous and usually not made explicit. Nevertheless, academic scholarship should refrain from mystifying these issues by using verbs, such as “producing” or “bringing to life”, in ways that do not instruct us about where or what these racialized bodies are, and about how biometrics affect them once they leave the laboratory.

Overall, *When Biometrics Fail* offers a valuable contribution to a field that has not yet fully acknowledged the relevance of discussing ‘failure’. She also convincingly shows how biometric technologies draw on cultured concepts of race, gender, class and disability. Magnet has a political mission, however, and the book will not please the reader who expects an impartial account of biometrics. She nonetheless presents an intelligent and no-nonsense study that challenges the myth of biometric success.

## References

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