Focus: It's a Match!

Introduction: Epistemologies of the Match

Hansun Hsiung, *Durham University*
Elena Serrano, *University of Valencia*

Abstract: Algorithmically driven online dating platforms today promise the ability to sort through relevant data and identify one's ideal amorous matches effectively. Yet the appeal of technological and scientific solutions to the messy problem of finding partners is hardly new. This introduction to the Focus section "It's a Match!" argues that the history of amorous matching has long been part and parcel of the history of science, in particular the social sciences. Taking matching as an "applied science of social harmony," the authors argue that concern over more reliable techniques for determining the suitability of partners has formed an essential part of both the maintenance of social order and the shaping of subjectivities, enabling discourses of informed choice and the rational management of the passions, while also reinforcing and subverting structures of age, gender, race, and sexuality.

"IT'S A MATCH!"

According to the *Guardian*'s 2015 estimates, the phones and in-boxes of over ninety-one million persons have buzzed with these or similar words—the opening salvos of courtship in the world of online dating. Available in 196 countries, Tinder now boasts users as far afield as North Korea—a state where, in contrast, Facebook remains banned. Chinese-market apps

such as Momo, aggressively emulating Tinder's success, reported over 100 million active accounts in 2020.[1]

Behind today's multi-billion-dollar online dating industry stands a justification couched in technoscientific vocabulary. In rhetoric if not in reality, we are told that larger statistical data sets and better-programmed algorithms for mining them will, at last, find the right match for you. Writing in his 2014 book *Dataclysm*, OkCupid founder Christian Rudder describes dating apps as bringing "mathematically-minded . . . analysis and rigor to what had historically been the domain of love 'experts' and grinning warlocks like Dr. Phil." The result, for Rudder, should be nothing short of a revolution in our grasp of society itself. Instead of narrating amorous relationships through the idiosyncrasies of individual biographies, dating apps move us "away from narratives and toward numbers, or, rather, to think in such a way that numbers *are* the narrative." Gone are the days of "asking people survey questions or conducting small-scale experiments." Dating apps driven by big data will offer us better models of "what brings us together," "what pulls us apart," and "what makes us who we are."[2]

The recent prominence of matching may at first appear a result of specific contemporary stakes. We live not only in an age of big data but in an age when the dangers of personal isolation are of increasingly prominent mainstream concern. Never mind the pandemic and its regime of social distancing: in 2017, the U.S. Surgeon General had already warned of an "epidemic of loneliness"; in 2018, citing "one of the great public health challenges of our time," the British government created its first Minister of Loneliness.[3] Yet as longer histories of "information," "reproduction," and "big data" have recently shown, measured anachronism proves analytically powerful, unifying scattered themes into a new critical framework.[4] Similarly, the essays gathered here demonstrate that promises of scientific means for determining one's amorous "match" have a much more protracted legacy than we would perhaps expect.[5] Renaissance astrologers pored over birth horoscopes to determine the fitness of matrimonial partners, while antebellum phrenologists consulted as spousal brokers. Enlightenment natural philosophers examined the nervous system to explain attraction, while utopian socialists proposed centralized bureaus of information to allot ideal partners to each member of society. The underlying motivations in all these cases were diverse and even conflicting. The quest for the perfect match was simultaneously a matter of elite families assuring the moral and physical qualities of marriage partners; the creation of greater

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[1] Stuart Dredge, "Nearly Two Thirds of Mobile Dating App Users Are Men," *Guardian*, 17 Feb. 2015, http://bit.ly/2G60cbP (accessed 8 Feb. 2018); Tinder Twitter post, 11 Aug. 2015, https://twitter.com/tinder/status/631249453630910464; and Tanner Brown, "China's Online Dating Apps Are Big Business," *Barron's*, 11 Nov. 2020, https://www.barrons.com/articles/chinas-online -dating-apps-are-big-business-and-one-matchmaker-is-grabbing-a-piece-of-it-51605085200 (accessed 12 Feb. 2021).

[2] Christian Rudder, *Dataclysm: Who We Are (When We Think No One's Looking)* (New York: Crown, 2014), pp. 9–10, 12.

[3] Jill Lepore, "The History of Loneliness," *New Yorker*, 30 Mar. 2020, https://www.newyorker.com/magazine/2020/04/06/the-history -of-loneliness.

[4] Ann Blair, Paul Duguid, Anja-Silvia Goeing, and Anthony Grafton, eds., *Information: A Historical Companion* (Princeton, N.J.: Princeton Univ. Press, 2021); Nick Hopwood, Rebecca Flemming, and Lauren Kassell, eds., *Reproduction: Antiquity to the Present Day* (Cambridge: Cambridge Univ. Press, 2018); Staffan Müller-Wille and Hans-Jörg Rheinberger, *A Cultural History of Heredity* (Chicago: Univ. Chicago Press, 2012); Elena Aronova, Christine von Oertzen, and David Sepkoski, eds., *Data Histories*, *Osiris*, 2017, N.S., 32; and Fernando Vidal, *The Sciences of the Soul: The Early Modern Origins of Psychology*, trans. Saskia Brown (Chicago: Univ. Chicago Press, 2011). On the question of anachronism and prehistories see Nick Jardine, "Uses and Abuses of Anachronism in the History of the Sciences," *History of Science*, 2000, 38:251–270.

[5] Cf. existing histories that tend to situate matching specifically within the emergence of modern dating: Noga Arikha, "Up Close and Personal: The Evolution of Personal Ads, from the Newspaper to the Social Network," *Lapham's Quarterly*, 2009, 2(1), https://www.laphamsquarterly.org/eros/close-and-personal; Francesca Beauman, *Matrimony, Inc.: From Personal Ads to Swiping Right: A Story of America Looking for Love* (New York: Simon & Schuster, 2020); Moira Weigel, *Labor of Love: The Invention of Dating* (New York: Farrar, Straus & Giroux, 2012); and Marcia A. Zug, *Buying a Bride: An Engaging History of Mail-Order Matches* (New York: NYU Press, 2016).

equality between the sexes; the expression of reformist middling-class sensibilities; and a call for social justice vis-à-vis a laissez-faire sexual marketplace. This diversity found itself reflected in language, from talk of "fruitful" marriages emphasizing reproductive aims to aspirations for "harmonious" partnerships built on the rational agreement of faculties. What remained constant throughout these shifting concerns was the hope, however elusive, that a more certain and systematic array of concepts, tools, and practices from the sciences would allow one to know better which individuals should come together. It is these epistemologies of the match, in their complex plurality, that our essays aim to explore.

In doing so, we propose that histories of amorous matching can yield an alternative perspective on the history of the social sciences. Neither strictly an art of governing, nor a political mathematics, nor a theory of political economy, amorous matching was nonetheless a social technique par excellence, forming the basis of what one might call an applied science of social harmony. Mobilizing, at different times and places, astrology, physiology, political economy, psychology, and even mathematics, knowledge of one's ideal match was a means toward the maintenance of social order: guaranteeing the right kinship alliances; guarding against disruptions of infidelity and premarital dalliances; eliminating competitive strife for partners; reinforcing sexual normativity; patrolling racial, caste, and class boundaries; and promoting "healthy" populations. From these macro-level structures came frameworks for micro-level decision making. The promise that criteria existed for making an informed—even reasoned—choice about amorous partners furnished actors with a semblance of control over a realm of interpersonal relationships otherwise so messy, enabling subjects who thus might rationally intervene in their own lives.

Specifically, within the history of the social sciences, epistemologies of the match carve out a space related to but distinct from epistemologies of sorting and classification central to studies of statistics and personal data.[6] Insofar as these latter have spoken of matching, they have primarily concerned themselves with the process of fitting persons to information systems in order to create "data doubles"—simulacra of selves in the form of database inscriptions: the censuses that defined members of populations, the customer surveys that defined consumers in capitalist societies.[7] Many of the epistemologies of the match considered here were certainly also concerned with data doubles. Their ultimate goal, however, was not simply the fitting of persons to information systems. Instead, entities such as data doubles were one intermediary step toward the lasting fitting of one slippery and changing self to an equally slippery and changing other. If personae are constructed as "categories of people" rather than "individual biographies with all their idiosyncratic particularity," then amorous matches are born of the interplay between irreducible idiosyncrasies and social categories: connecting, combining, and juxtaposing the ingredients of particular persons to forge a new union.[8] To put it differently: epistemologies of the match trouble and probe the limits of epistemologies of sorting and classification that shape individual identities and subjectivities. Their history is one of repeated attempts to find techniques for navigating the treacherous intersubjective passage between questions of "Who am I?" and "Who is the right one for me?"

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[6] Dan Bouk, "The History and Political Economy of Personal Data over the Last Two Centuries in Three Acts," *Osiris*, 2017, N.S., 32:85–106; Bouk, *How Our Days Became Numbered: Risk and the Rise of the Statistical Individual* (Chicago: Univ. Chicago Press, 2015); Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and Its Consequences* (Cambridge, Mass.: MIT Press, 1999); and Alain Desrosières, *The Politics of Large Numbers: A History of Statistical Reasoning*, trans. Camille Naish (Cambridge, Mass.: Harvard Univ. Press, 1998), esp. pp. 236–278.

[7] On "data doubles" see Bouk, "History and Political Economy of Personal Data," p. 86; and Kevin D. Haggerty and Richard V. Ericson, "The Surveillant Assemblage," *British Journal of Sociology*, 2000, 51:605–622.

[8] Lorraine Daston and H. Otto Sibum, "Introduction: Scientific Personae and Their Histories," *Science in Context*, 2003, 16 (1/2): 1–8, on p. 3.

The complexities of that passage can be witnessed in three lines of inquiry running across our essays: the strategies employed for collecting, coordinating, and managing forms of evidence for a match; the different societal roles of the passions presumed by systems of matching; and the normative social structures that matches might reify or subvert. Histories of medicine and psychology have already outlined the mental and physical categories that could be observed, measured, compared, and quantified in order to constitute selves and others as stable epistemic objects, with Roy Porter highlighting the late eighteenth-century "physiognomic gaze" as a principal method for "managing social intercourse amid the faceless crowd."[9] Matching drew on these criteria of personal identity but as an applied science of social harmony negotiated more extensively with practical dilemmas of implementation. Consider the case of Francesco Sforza's firstborn son and Dorotea Gonzaga, explored in Monica Azzolini's contribution. A comprehensive medical examination of a potential bride-to-be proving intrusive and indecent, the Sforza turned not to their physicians but to their astrologers, scrutinizing natal charts and planetary inclinations to determine the spiritual virtues and vices, as well as the future bodily health, of marriage partners. Or consider the case of Benito Jerónimo Feijoo, treated by Elena Serrano. Skeptical of the enterprise of predictive matching, Feijoo believed that attraction was rooted in complex physiological factors differing by individual. A match could only be discerned through direct physical proximity, which would permit the close observation of a potential partner's subtle facial, gestural, and ocular movements. In other contexts, such as those covered by Carla Bittel and Hansun Hsiung, matching entailed the creation of dedicated mechanisms of information collection and exchange. Bittel's actors took advantage of print media, using serial publications to share the profiles and photographs that might serve as "material and observational proof" of a match.[10] The Fourierist utopia described by Hsiung administered elaborate rituals of "confession" to elicit the true passional type of each member of society, documenting these on cards, copies of which were both stored centrally and given to every individual.

These matching practices were admittedly often limited in their ambit—the province of certain noble elites in Azzolini's essay and specific phrenological coteries in Bittel's. In instances like that of Charles Fourier, discussion remained purely speculative. Professed mastery over matching also met with resistance. Contemporary Spanish still uses the term "Celestina" to refer to matchmakers, referencing the 1499 comedy in which the eponymous character, a broker of relationships between young noblewomen and noblemen, emerges as a "false sorceress." Underlying the drama was a view of the amorous sphere as aleatory, governed by "blind Cupid."[11] Any claim otherwise, it follows, should be dismissed as exploitation robed in the language of science: those alleging a knowledge of how best to make matches were little more than procuresses and procurers seeking profit.

We would argue, however, that the simultaneous existence of efforts to devise more reliable techniques of matching and strong resistance against such efforts presents an opportunity. For it

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[9] Roy Porter, *Flesh in the Age of Reason* (London: Lane, 2003), pp. 254–256. More generally see Joseph Dumit, *Picturing Personhood: Brain Scans and Biomedical Identity* (Princeton, N.J.: Princeton Univ. Press, 2004); Ludmilla Jordanova, "The Art and Science of Seeing in Medicine: Physiognomy, 1780–1820," in *Medicine and the Five Senses*, ed. W. F. Bynum and Porter (Cambridge: Cambridge Univ. Press, 1993), pp. 122–133; Sharrona Pearl, *About Faces: Physiognomy in Nineteenth-Century Britain* (Cambridge, Mass.: Harvard Univ. Press, 2010); Porter, ed., *Rewriting the Self: Histories from the Renaissance to the Present* (London: Routledge, 1997); Nikolas Rose, *Inventing Our Selves: Psychology, Power, and Personhood* (Cambridge: Cambridge Univ. Press, 1996); David Harris Sacks, "'The Confusion of Faces': The Politics of Physiognomy, Concealed Hearts, and Public Visibility," in *Making Publics in Early Modern Europe: People, Things, Forms of Knowledge*, ed. Bronwen Wilson and Paul Yachnin (London: Routledge, 2011), pp. 159–176; Vidal, *Sciences of the Soul* (cit. n. 4); and Kathryn Woods, "Facing Identity in a 'Faceless' Society: Physiognomy, Facial Appearance, and Identity Perception in Eighteenth-Century London," *Cultural and Social History*, 2017, *14*:137–153.

[10] See Carla Bittel, "Cranial Compatibility: Phrenology, Measurement, and Marriage Assessment," in this Focus section.

[11] Erwin Panofsky, *Studies in Iconology: Humanistic Themes in the Art of the Renaissance* (1939; Oxford: Westview, 1972), pp. 95–128, on p. 114.

is the very tenacity of attempts to claim better matches through the authority of science that appears as the historian's puzzle: as much as love is not, or not merely, a matter of knowledge, recurring demands indicate that we wish it were. A growing body of work at the intersection of the history of science and the history of emotions has called for closer studies of science's role within the "affective logic of societies."[12] Asking why epistemologies of the match, critiqued though they were, asserted and continue to assert themselves among certain groups can therefore reveal contrasting social ideals concerning the rational management of affects and emotions. The monthly marriage columns of phrenologists were premised on the view that marriage should be neither a matter of family arrangements, nor of financial convenience, nor even of the passions, but of "reasoned choice." Fourier argued that the matching of passions was essential to a perfected socialist order—one where an equitable distribution of amorous possibilities would eliminate the antagonisms, jealousies, and suffering involved in the search for partners.

An examination of these social ideals—plural, variable, and contested—in turn illustrates how differing epistemologies of the match were capable of reinforcing, but also challenging, structures of power. Most obviously, in the majority of cases considered in the essays collected here matching presumed monogamy and heterosexuality.[13] Fundamental to Sforza matching was the conservation of allies through marriage: astrological assurance of fertility cemented the reproduction of political order. Meanwhile, racial prejudices ran across the phrenological matching practiced by certain members of an emerging white middle class in the antebellum United States, part and parcel of those "sciences of physical appearance" employed in the subjugation of nonwhite others.[14] Their concerns, as Bittel notes, also foreshadowed a turning point in understandings of heredity that would lead to what has arguably been the dominant manifestation of scientific matching in the modern period: eugenics.[15]

At the same time, matching could disturb established orders. Outlining his physiology of attraction, Feijoo was adamant about the symmetry between male and female nervous systems. Serrano interprets his physiology of a "congenial union" as an argument for the radical equality of the sexes, articulated against the backdrop of a growing discourse of "companionship marriages" and their ideal of mutual sentiment "as a harmonious concord of musical instruments."[16] A century later, Fourier's insistence on the necessity of matching frequently invoked as its symbols aged widows, lesbians, and fetishists. Existing society, favoring young, able-bodied heterosexuals, had excluded

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[12] Otniel E. Dror, Bettina Hitzer, Anja Laukötter, and Pilar Léon-Sanz, "Introduction to *History of Science and the Emotions*," *Osiris*, 2016, N.S., 31:1–18, on p. 11. See also Fay Bound Alberti, "Introduction: Medical History and Emotion Theory," in *Medicine, Emotion, and Disease, 1700–1950*, ed. Bound Alberti (Basingstoke: Palgrave Macmillan, 2006), pp. xiii–l; Dror, "The Affect of Experiment: The Turn to Emotions in Anglo-American Physiology, 1900–1940," *Isis*, 1999, 90:205–237; and Paul White, ed., "Focus: The Emotional Economy of Science," *ibid.*, 2009, 100:792–851.

[13] On heteronormativity in early computerized dating see Mar Hicks, "Computer Love: Replicating Social Order through Early Computer Dating Systems," *Ada: A Journal of Gender, New Media, and Technology*, 2016, no. 10, https://adanewmedia.org/2016/10/issue10-hicks/.

[14] Porter, *Flesh in the Age of Reason* (cit. n. 9), p. 256; Ann Fabian, *The Skull Collectors: Race, Science, and America's Unburied Dead* (Chicago: Univ. Chicago Press, 2010); Nihad Farooq, *Undisciplined: Science, Ethnography, and Personhood in the Americas, 1830–1940* (New York: NYU Press, 2016); and James Poskett, *Materials of the Mind: Phrenology, Race, and the Global History of Science, 1815–1920* (Chicago: Univ. Chicago Press, 2019).

[15] John Lidwell-Durnin, "William Benjamin Carpenter and the Emerging Science of Heredity," *Journal of the History of Biology*, 2020, 53:81–103; Angelique Richardson, *Love and Eugenics in the Late Nineteenth Century: Rational Reproduction and the New Woman* (Oxford: Oxford Univ. Press, 2003); and Damon Salesa, *Racial Crossings: Race, Intermarriage, and the Victorian British Empire* (Oxford: Oxford Univ. Press, 2011).

[16] Mónica Bolufer Peruga, "Reasonable Sentiments: Sensibility and Balance in Eighteenth-Century Spain," in *Engaging the Emotions in Spanish Culture and History*, ed. Luisa Elena Delgado, Pura Fernández, and Jo Labanyi (Nashville, Tenn.: Vanderbilt Univ. Press, 2016), pp. 21–38, on p. 28; and Julie Peakman, *Amatory Pleasures: Explorations in Eighteenth-Century Sexual Culture* (London: Bloomsbury Academic, 2016), pp. 3–16.

these others, consigning them to loneliness. But they too deserved amorous attention. Far from reinscribing accepted norms, epistemologies of the match in these cases propelled oppositional politics of gender and sexuality.[17]

Indeed, to return whence we began, this subversive potential perhaps marks the critical point of divergence between our epistemologies of the match and those of classification and sorting. "Classification systems," Geoffrey Bowker and Susan Leigh Star tell us, function to "craft people's identities, aspirations, and dignity."[18] Amorous matching, as we have seen, partly participated in the stabilization of classifications. A response to real demands for techniques that would maintain social harmony, it promised a nondisruptive solution to the problem of reproducing order, placing each person where he or she belonged. Yet as we have also argued, matching persisted partly through the appeal of personal agency over an unruly realm of interpersonal relationships. As Azzolini tells us in her contribution, astrology preserved "our free will to choose while also providing us with tentative techniques that [could] help us make that crucial choice."[19] In this capacity, matching promised individuals not only a knowledge of where they already belonged but a means to rethink with whom else—elsewhere—they could belong. It offered the possibility that an assigned identity, aspiration, and dignity might be forged anew in conjunction with others and that suppressed identities and aspirations might still have a means to find their match.[20]

Our essays, to be sure, only begin to explore these avenues, concentrating narrowly on a European and North American context from the Renaissance to the mid-nineteenth century.[21] A better understanding of, in particular, the reinforcement or subversion of normative structures would require not only a wider geographical and temporal scope but an attentive eye toward the intersection of sexuality and race in colonial contexts during the very centuries covered here. Nevertheless, we hope that this Focus section will entice fellow historians of science to join us in asking what might be gained by investigating the history of amorous matching. "What brings us together?"; "What pulls us apart?"; "What makes us who we are?": these are the questions that, according to Christian Rudder, online dating's data analytics might permit us to answer. In a way, we would suggest that he is right. An applied science of social harmony, amorous matching formed a practical field wherein knowledge was marshaled from across disciplines to manage society and authorize decisions in everyday life, often in its most intimate quarters. The categories of self and other it employed, the methods it used to gather and interpret evidence, the societal ideals of the passions it articulated, and the social structures it entrenched and challenged together position amorous matching as a field at the nexus of histories of data and classification, gender and sexuality, affects and emotions. To take this observation seriously is to trace another lineage of the history of the social sciences—a lineage that begins with attempts to answer a beguilingly quotidian question: Who is the right one for me?

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[17] For a contemporary argument regarding online dating and female empowerment see Jon Birger, *Make Your Move: The New Science of Dating and Why Women Are in Charge* (Dallas: BenBella, 2021).

[18] Bowker and Star, *Sorting Things Out* (cit. n. 6), p. 4.

[19] Monica Azzolini, "Are the Stars Aligned? Matchmaking and Astrology in Early Modern Italy," in this Focus section.

[20] Rudder himself, for instance, discusses the benefits of users working beyond, or outside of, the information categories on OkCupid profiles. See Rudder, *Dataclysm* (cit. n. 2), pp. 85–92.

[21] An additional contribution treating late twentieth-century evolutionary biology, focused on the study of same-sex behavior in primates and the contested naturalization of heterosexual courtship norms, formed part of our original concept. See Erika Milam, "Animals as Evolutionary Models of Human Sexuality in the Late Twentieth Century," paper presented at the History of Science Society annual meeting, Utrecht, 23–27 July 2019.