When the State Matches

Justifying Demographic Goals in Dating-App Design

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Slides

Aim and Argument

Aim

Assess Beckstein & de Vries's (2025) defense of demographic weighting without explicit user consent.

Claim

The current defense does not adequately assess whether the weighting's additional benefits justify its effects on encounter opportunities.

My Main Argument

(P1) If the current defense adequately justifies demographic weighting, it provides an adequate assessment of the weighting's additional benefits and the burdens of reduced encounter opportunities.

(P2) The current defense, considered as a whole, does not provide that assessment.

(C) Therefore, the current defense does not adequately justify demographic weighting.

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Two Proposals: Public Apps and Demographic Design

Bouke de Vries (2024)

State-Run Dating Apps: Are They Morally Desirable?

Public provision could correct commercial incentives and help users find lasting relationships.

Martin Beckstein and Bouke de Vries (2025)

Dating Apps as Tools for Social Engineering

Matching design could pursue public goals, including fertility.

Disputed step: Can this justify demographic weighting without explicit user consent?

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de Vries (2024): A Public Dating App

Commercial incentives

Continued searching and spending can generate revenue.

Public provision

Successful relationships can count as success even when users leave the app.

Proposals include priority for users seeking long-term relationships, transparency, independent oversight, and commercial alternatives.

de Vries 2024, pp. 2–3, 9, 12.

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Beckstein and de Vries (2025): Two Designs

	Preference-responsive matching	Demographic weighting
Criterion	Compatible reproductive plans	Expected demographic contribution
Mechanism	User-selected filters	Additional changes to visibility
Purpose	Help users pursue their aims	Advance a population goal

Preference-responsive matching follows users' family plans. Demographic weighting adds a state-selected criterion for how profiles are shown.

Beckstein & de Vries 2025, pp. 5–6, 9.

Beckstein and de Vries: Demographic Weighting

Beckstein and de Vries's proposal (2025)

Favor matches expected to support childbirth or stable child-rearing, even without explicit user consent.

Beckstein & de Vries 2025, p. 9.

Their stated permissibility claim

In some circumstances, the benefits can justify the costs.

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Their Defense: An Argument Reconstruction

(D1) If demographic weighting can secure sufficiently important public benefits while imposing only acceptable burdens, it can be permissible without explicit consent.

(D2) Demographic weighting can secure sufficiently important public benefits while imposing only acceptable burdens.

(C) Demographic weighting can be permissible without explicit consent.

Reasons offered for D2

Commercial apps already constrain choices; demographic gains can protect freedom; no relationship is prohibited.

Reconstruction of Beckstein & de Vries 2025, p. 9.

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Three Gaps in the Defense

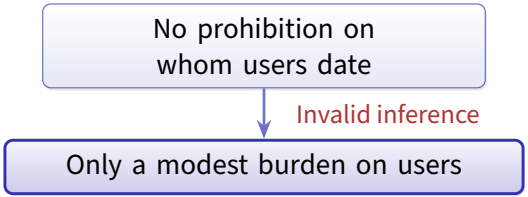
Challenges the support for D2 & supports my P2

Reason offered	Gap in the justification
Commercial constraints	Bundles public provision with demographic weighting
Demographic benefits	Identifies a goal without justifying the matching criterion
No prohibition	Leaves the burden on encounter opportunities unmeasured

Nonprohibition Leaves Encounter Burdens Unmeasured

Challenges D2: the argument for acceptable burdens

Beckstein and de Vries (2025, p. 9):



A widely used public app repeatedly lowers some profiles' visibility for demographic reasons. Users remain legally free to date, but become much less likely to encounter those profiles. The burden depends on this loss of opportunities.

Beckstein & de Vries 2025, p. 9.

Assessing Encounter Burdens

Supports my P1: encounter burdens require an opportunity-based assessment

A consistent standard of freedom

The defense values effective opportunities when assessing demographic benefits. The same standard must govern its assessment of encounter burdens.

- Intensity and duration of visibility reductions
- Users' reliance on the service
- Availability of usable alternatives

Beckstein & de Vries 2025, p. 9; infrastructural perspective: Star & Ruhleder 1996, pp. 112–113.

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Justifying the Policy Criterion

Supports my P1: the state must justify its chosen policy criterion

The requirement behind P1

When the state redistributes important encounter opportunities for a population goal, it must justify the criterion and the burdens imposed on those affected.

- Reasons for pursuing the goal through intimate encounters
- Additional benefits assessed against burdens and feasible alternatives
- Public authority to adopt, challenge, and revise the weighting

Ends, procedures, and authority: Lazar 2024, preprint, §3.4, pp. 22–24; §4, p. 27.

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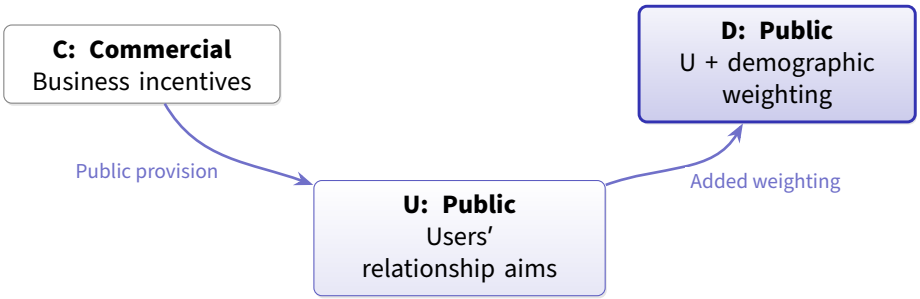
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My Comparison: Public Provision and Weighting

Challenges the commercial support for D2 & supports my P2



Moving from C to D changes both public provision and demographic direction. If public provision creates gains and weighting removes some of them, D can still outperform C. Comparing D with feasible U isolates the additional weighting's effects.

Why the Defense Fails

Supports my P2: the combined defense lacks the assessment required by P1

The assessment required by P1

The weighting's additional benefits must justify the magnitude and distribution of its encounter burdens.

- Nonprohibition leaves those burdens unmeasured.
- The commercial comparison mixes weighting with public provision.
- A population goal supplies no assessment linking the added benefits to those burdens.

The defense as a whole leaves the relation between the added benefits and the encounter burdens unassessed.

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Possible Reply: Public Benefit and Freedom

Defends D2 & challenges my P2: public benefits justify the burdens

The defender's response

Higher fertility can protect freedom by reducing future work and caregiving burdens, including burdens on people who do not intend to have children.

These public benefits could justify the costs of demographic weighting.

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Possible Reply: Oversight and Explanation

Challenges my P2: safeguards can provide the required assessment

The defender's response

Democratic scrutiny, monitoring, and explanation rights can provide the assessment of benefits and burdens that the criticism demands.

These safeguards can identify harmful adjustments and support their revision.

Possible reply drawing on de Vries 2024, p. 12; Beckstein & de Vries 2025, pp. 3, 9; de Vries & González Barman 2026, pp. 320, 330.

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Possible Reply: Voluntary Use and Design

Defends D2 & challenges my P2: informed participation and usable alternatives

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Users can knowingly choose a demographic service while retaining access to usable alternatives. Informed participation can make its burdens acceptable.

U also needs objectives and ranking criteria. Its role as a baseline requires an explanation.

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My Reply: Assessing Benefits and Burdens

Defends my P2 using the assessment requirement in P1

A population benefit must justify this intervention

The importance of the goal does not measure the burden imposed by reducing particular users' visibility.

- Estimate the weighting's additional demographic benefits.
- Assess the size and distribution of encounter burdens.
- Compare the weighting with feasible alternatives.

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My Reply: Explanation and Review

Defends my P2: proposing safeguards does not supply the required assessment

Explanation	Review
Which criterion reduced visibility?	Why is that criterion justified?
What can the user change?	What should the state change?

Accurate explanation is not a sufficient condition for a criterion's justification. Review must assess the objective, the weighting, and the resulting burdens.

The safeguard proposal identifies a way to conduct the assessment; it does not itself supply that assessment.

My Reply: Voluntary Use and the Baseline

Defends my P2: voluntary use does not replace assessment of the weighting

Informed choice requires an acceptable policy

Knowing why visibility is reduced does not establish that the reduction is acceptable. The assessment must address users' reliance and their actual alternatives.

Why compare U with D?

Both provide a public service; D adds the demographic criterion. Where both are feasible, their comparison identifies the effects of that addition.

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Dating Apps: References

- de Vries (2024). *State-Run Dating Apps: Are They Morally Desirable?*
  Philosophy & Technology 37, article 30.
- Beckstein & de Vries (2025). *Dating Apps as Tools for Social Engineering*.
  Ethics and Information Technology 27, article 11.
- de Vries & González Barman (2026). *Dating Apps and the Right to an Explanation*.
  Journal of Applied Philosophy 43(2): 319–338.

Infrastructure and Governance: References

- Star & Ruhleder (1996). *Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces*.

  Information Systems Research 7(1): 111–134.

- Lazar (2024). *Lecture I: Governing the Algorithmic City*.

  Preprint, arXiv:2410.20720v1.