
Richard H. Pildes  
*University of Michigan Law School*

Richard G. Niemi  
*University of Rochester*

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EXPRESSIVE HARMs, "BIZARRE DISTRICTS," AND VOTING RIGHTS:
EVALUATING ELECTION-DISTRICT APPEARANCES AFTER SHAW
v. RENO†

Richard H. Pildes*
and
Richard G. Niemi**

With technical assistance provided by Kimball Brace and Doug Chapin

Voting-rights controversies today arise from two alternative conceptions of representative government colliding like tectonic plates. On one side is the long-standing Anglo-American commitment to organizing political representation around geography. As embodied in election districts, physical territory is the basis on which we ascribe linked identities to citizens and on which we forge ties between representatives and constituents. On the other side is the increasing power of the Voting Rights Act of 1965 (VRA), which organizes political representation around the concept of interest. The Act prohibits the dilution of minority voting power and thereby necessarily ascribes linked identities to citizens on the basis of group political interests. Whenever these two plates of territory and interest collide, surface disturbances in voting-rights policy erupt.

Shaw v. Reno2 is the most recent manifestation of these opposing forces. In Shaw, a deeply fractured Supreme Court addressed the conflict between territory and interest by concluding that, for purposes of...
the Fourteenth Amendment, the geography of election districts "is one area in which appearances do matter." Against the pressure of interest-oriented alternatives that the Voting Rights Act exerts, the decision reaffirms the continuing centrality of physical territory to legitimate political representation. In line with this reaffirmation, the Court endorsed a new kind of equal protection challenge to legislative redistricting. This new, geography-based challenge might be called a district appearance claim.

As the Court defined this claim, "a reapportionment scheme [may be] so irrational on its face that it can be understood only as an effort to segregate voters ... because of their race ... ." In this passage, "on its face" is to be read literally: only election-district configurations that convey a dramatic visual impression of this sort implicate the principles of Shaw. The specific holding of Shaw is that the Constitution permits such an election district only when sufficiently justified under the exacting standards of strict scrutiny.5

No other decision from any court has held that, in some circumstances, a district might violate the U.S. Constitution when its shape becomes too "bizarre." When physical geography is stretched too thin, when it is twisted, turned, and tortured — all in the apparent pursuit of fair and effective minority representation — at some point, too much becomes too much. That appears to be the judicial impulse that accounts for Shaw: in the conflict of territory and interest, the Constitution requires policymakers somehow to hold the line and accommodate both.

But judicial impulses are one thing, legal doctrine another. That most people, judges included, recoil instinctively from willfully misshapen districts is understandable enough. Yet defining the values and purposes that might translate this impulse into an articulate, justifiable set of legal principles is no easy task. Leading academic experts in redistricting have long argued that this impulse reflects untutored intuition, an instinctive response that careful analysis reveals to be unwarranted. Shaw translates this impulse into constitutional doctrine

3. 113 S. Ct. at 2827.
4. 113 S. Ct. at 2832.
5. See 113 S. Ct. at 2832.
6. This constraint is found in numerous state constitutions and statutes, although it is not judicially enforced with a great deal of frequency. See infra text accompanying notes 146-52 (discussing state compactness requirements and their enforcement).
but does little to explain or justify the principles that might lie behind it. Moreover, the judicial impulse that too much is too much will degenerate into either a manipulable tool or a meaningless gesture unless transformed into legal principles that courts and redistricting bodies can apply with at least some consistency and certainty. Yet, beyond casting doubt on “highly irregular” districts, Shaw provides no criteria to guide reapportionment bodies or courts in judging when this line has been crossed. As Justice White, writing for four dissenters, said: “[H]ow [the Court] intends to manage this standard, I do not know.”

Working out the theory and implications of Shaw is particularly urgent because the decision is significant for voting-rights law in not one, but two, ways. Shaw directly addresses only constitutional constraints that will now function at the outer boundaries of the districting process. At the core of that process, however, the conflict between territory and interest must be resolved in nearly every context in which the Voting Rights Act applies. The Act imposes a duty to avoid minority-vote dilution, but the scope of that duty depends, in part, upon how much the claims of interest can take precedence over those of territory. Thus, Shaw will not only constrain the districting process constitutionally but, through its radiating effects on statutory interpretation, may reshape the districting process at its core.

This article attempts to define the constitutional principles that characterize Shaw and to suggest how those principles might be applied in a consistent, meaningful way. Part I, in which we argue that Shaw must be understood to rest on a distinctive conception of the kinds of harms against which the Constitution protects, is the theoretical heart of the article. We call these expressive harms, as opposed to more familiar, material harms. In Part II, we briefly survey the history of previous, largely unsuccessful, efforts in other legal contexts to give principled content to these kinds of harms in redistricting. Parts III and IV then provide an alternative for evaluating district “appearance” by developing a quantitative approach for measuring district shapes that is most consistent with the theory of Shaw. These Parts are the empirical and social-scientific heart of the article. We apply our quantitative approach to congressional districts throughout the country, enabling meaningful comparisons between the congressional district at issue in Shaw and other districts. We also compare the shapes of congressional districts historically to test whether the district in Shaw is a distinctly recent phenomenon. In doing so, we identify

Have Been Right If He Had Said: “When It Comes to Redistricting, Race Isn’t Everything, It’s the Only Thing”, 14 CARDOZO L. REV. 1237 (1993) [hereinafter Grofman, Vince Lombardi].

8. Shaw, 113 S. Ct. at 2842 (White, J., dissenting).
the kind of districts most constitutionally vulnerable after Shaw. In Part V, we describe the further questions that lower courts must answer in deciding whether particular vulnerable districts ultimately fail the constitutional standard outlined in Shaw.

Shaw will undoubtedly be a controversial and confusing decision. We write not to praise Shaw, nor to bury it, but to seek to understand it on its own terms. What follows is an effort to tease out the principles underlying Shaw and to suggest one approach to implementing its seemingly intractable mandate.

I. DECIPHERING THE HOLDING OF SHAW

Shaw is challenging intellectually precisely because it is so puzzling legally. Untangling its reasoning requires considerable effort. We begin with the Voting Rights Act, which provides the backdrop against which the facts in Shaw arise.

A. Background of the Voting Rights Act

The VRA not only permits, but requires policymakers, in certain specific circumstances, to be race conscious when they draw electoral district lines.\(^9\) In 1982, Congress amended section 2 of the Act to clarify that discriminatory intent was not a necessary element of a minority-vote dilution claim; proof of discriminatory result is now sufficient.\(^10\) Four years later, in Thornburg v. Gingles,\(^11\) the Court focused the standard for proving such results around three factors that conjoin social conditions and voting structures. First, the minority community\(^12\) must be "sufficiently large and geographically compact" to constitute a minority-dominated election district.\(^13\) Second, the mi-

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9. Section 2, for example, explicitly speaks in racially conscious terms: "The extent to which members of a protected class have been elected to office . . . is one circumstance which may be considered" in assessing a dilution claim. 42 U.S.C. § 1973(b) (1988). There is no reason to assume, of course, that redistricters were not race conscious before the VRA.


13. 478 U.S. at 50-51. A major question the Court continues to leave open is whether plaintiffs can bring claims seeking "influence districts" — that is, districts in which the plaintiffs' group is not large enough to control election outcomes in a district, but large enough so that an alternative to the current system would give it significant enough influence, in conjunction with supportive coalition members, to control outcomes. See Voinovich v. Quilter, 113 S. Ct. 1149, 1155 (1993) (assuming, without deciding, viability of such claims); Growe v. Emison, 113 S. Ct. 1075, 1084 n.5 (1993) (leaving question open); Gingles, 478 U.S. at 46-47 n.12 (leaving question open); see also Prosser v. Elections Bd., 793 F. Supp. 859, 870 (W.D. Wis. 1992) (three-judge court; per curiam) ("The creation of a stronger 'influence' district, however, is a modest plus from the Act's standpoint."). For discussion of influence-district claims, see BERNARD
nority community must be “politically cohesive” — that is, it must demonstrate common voting preferences for candidates. Finally, the majority must be engaged in racially polarized voting behavior that over time “usually” defeats the preferred candidates of the minority community. When these conditions are met, the combination of the existing voting structure and the political dynamics of race can be said to cause minority-vote dilution. The remedy for such a violation requires the governmental unit to create an alternative voting structure that will enable fair and effective minority representation.

The Court, however, specifically designed the three Gingles criteria to define vote dilution only in the context of one particular type of electoral structure: multimember or at-large electoral districts. As in Gingles, most VRA litigation at the time challenged such districts. These electoral structures, then common throughout the country, dated from turn-of-the-century Progressive era reforms. In these reforms, northern Progressives and southern Redeemers sought to undermine community-based politics — portrayed as the province of corrupt local bosses — and instead to concentrate power in more centralized, “expertly” administered political bodies. In many places, the specific aim of these reforms was to diminish the political influence of freed blacks. In these Gingles-era challenges to multimember


14. 478 U.S. at 51.
15. 478 U.S. at 56.
17. More precisely, Gingles holds that vote dilution is shown only if, “under the totality of the circumstances,” the challenged electoral mechanisms “result in unequal access to the electoral process.” 478 U.S. at 46.
18. When multiple candidates are elected from a single jurisdiction, a cohesive minority population might constitute a significant fraction of the district and yet elect no members. That is, the majority population would always outvote them. See Lani Guinier, The Triumph of Tokenism, 89 Mich. L. Rev. 1077, 1094 (1991); Issacharoff, supra note 16, at 1839-40.
election units, plaintiffs typically sought a remedy that would divide the unit into several single-member ones, including an appropriate number of minority-dominated districts.

Since *Gingles*, however, a second type of challenge has emerged and become central. This newer challenge was the catalyst for the North Carolina districting scheme at issue in *Shaw*. As states in many parts of the country dismantled multimember districts, the focus of litigation began to shift toward the precise design of single-member districts. These cases are winding through the courts; as yet only a few reported decisions address VRA challenges to single-member district plans. Indeed, not until this Term did the Supreme Court definitively hold that the *Gingles* criteria also control VRA challenges to single-member district plans. Though *Gingles* now clearly applies, the precise way in which courts must adapt its criteria for single-member districts raises a battery of complex questions. As challenges to single-member districts come to dominate VRA litigation in the 1990s, the need for judicial resolution of these questions has become increasingly urgent.

In applying *Gingles* to single-member districts, the most conceptually difficult issues for courts arise from the requirement that a minority group be "sufficiently large and geographically compact." At

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22. *See Grofman et al., supra* note 13, at 109 ("Indeed, since *Gingles* was decided in 1986, as of mid-1991 only a handful of Section 2 cases involving challenges to single-member districts had been decided, and only four of these had been reviewed at the appellate level.") (citations omitted).


   *Thornburg* and *Smith* cannot be automatically applied to the single-member context. . . . But the basic principle is the same. If lines are drawn that limit the number of majority-black single-member districts, and reasonably compact and contiguous majority-black districts could have been drawn, and if racial cohesiveness in voting is so great that, as a practical matter, black voters' preferences for black candidates are frustrated by this system of apportionment, the outlines of a Section 2 theory are made out.

730 F. Supp. at 205.

24. As one example, this Term the Court will address challenges to the redistricting of Florida's single-member house and senate districts. 62 U.S.L.W. 3261 (Oct. 12, 1993) (summarizing the dispute in *Johnson v. De Grandy*, No. 92-519, *prob. juris. noted, 113 S. Ct. 1249* (1993)). A principal issue in that case is precisely how *Gingles* should be applied to single-member districts. The State of Florida argues that proof of the *Gingles* preconditions is necessary, but not sufficient, in single-member district challenges. As the reply brief notes: "[P]roof of the *Gingles* preconditions simply does not make out a *prima facie* case of vote dilution in the single-member context. The *Gingles* preconditions are plainly relevant in the single-member context because they establish causation, but they cannot play the same role they do in multimember district cases." Reply Brief for Appellant at 3, *Johnson v. De Grandy*, No. 92-519, *prob. juris. noted, 113 S. Ct. 1249* (1993).

25. *Thornburg v. Gingles*, 478 U.S. 30, 50 (1986); *see also Grofman et al., supra* note 13, at 115-16 ("[T]wo of the *Gingles* prongs can probably be applied with little or no modification. . . . The first prong, however, is more difficult to modify in a suitable way.").
this point the tension between territory and interest becomes most acute. In the multimember context, the conflict is more diminished because the existing district boundary lines define the limited geographic territory within which to locate replacement single-member districts. One must still define compactness, but within a relatively small, predefined physical territory. In contrast, in challenges to existing single-member districting plans for congressional or state legislative seats, the only fixed boundary lines are those of the state itself. Within those boundaries, an unlimited number of districting plans and individual district shapes are possible. Defining "geographically compact" in this context is more necessary and more difficult.

Such was the legal context in which North Carolina undertook the redrawing of its congressional districts in the wake of the 1990 Census. As a result of this census, the state was entitled to one additional U.S. congressional seat, bringing its delegation up to twelve. The effort to carve the state into twelve districts generated a mix of partisan and racial considerations increasingly common to redistricting. In North Carolina, the General Assembly controls redistricting, with the Governor having no veto power or other entitlement to participate. During the redistricting of the 1990s, Democrats controlled both houses of the General Assembly, while the Governor was Republican, and partisan interests had unusually free rein. In addition, in part as a direct result of Gingles itself, the power of the black legislative coalition in the General Assembly had grown.

North Carolina's voting-age population is presently seventy-eight percent white and twenty percent black. But the state's black population is relatively dispersed, with black residents a majority in only five of the state's one hundred counties. Because numerous counties in North Carolina have a history of discrimination with respect to voting, the VRA requires that the state submit any change in its voting practices or structures to the Attorney General for federal preclearance. This process is the section 5 preclearance review.

27. 809 F. Supp. at 394.
28. Compare Gingles, 478 U.S. at 40, noting that no more than four percent of North Carolina's legislators were black in 1982 with JOINT CENTER FOR POL. & ECON. STUD., BLACK ELECTED OFFICIALS: A NATIONAL ROSTER, 1991, at xxiii tbl. 3 (20th ed. 1992), finding that the number of black North Carolina state legislators as of January, 1991 was 19, which is 11% of 170, the total number of legislators. 478 U.S. at 40.
30. Section 5 of the VRA prohibits the implementation of any changes affecting voting in certain jurisdictions that the Act covers without the approval of the Attorney General or a special three-judge federal district court in the District of Columbia. To receive preclearance, a
The state's initial redistricting plan included one "convoluted" district with a black majority; the unusual shape was necessary to protect the political base of white Democrat incumbents in adjoining districts. When the state submitted this plan to the Justice Department, the Attorney General entered a formal objection and refused clearance. He offered several reasons for doing so, including the state's failure to create a second majority-black district "in the south central to southeastern part of the state," where creating such a district appeared feasible. The Attorney General also commented that several alternative districting plans had been submitted to the Justice Department — at least one of which had been presented to the North Carolina General Assembly — that included a second majority-minority district in the southern part of the state. Noting that the state had been aware of the minority community's "significant interest" in creating a second majority-minority district, the Attorney General concluded that the state's failure to do so in its initial redistricting plan rested on what appeared to be "'pretextual reasons.' "

Rather than challenge this finding judicially, the North Carolina General Assembly adopted a new redistricting plan. This plan included a second majority-black district, with a total population of 56.63% black and a voting-age population of 53.34% black. The new district, however, was not in the south-central to southeastern part of the state. Instead, the state created a 160-mile long district,
winding through ten counties, often in a corridor no wider than Interstate Highway 85, which links the urban areas of Durham, Greensboro, Winston-Salem, and Charlotte. 36 This area became Congressional District 12 (District 12 or CD12), the focus of Shaw. The record suggests that the General Assembly drew the district this way to minimize the risk to incumbent congressmen from the creation of a second majority-black district. 37 On resubmission, the Attorney General precleared the new redistricting plan. 38 Figure 1, on the next page, provides a map of District 12.

Two significant consequences followed once the plan went into effect. First, in the 1992 congressional elections, North Carolina elected its first black representatives since Reconstruction. They were elected from the two majority-black districts in the plan, including District 12. Second, editorial writers feasted on District 12. In a label that was frequently repeated, the Wall Street Journal tagged it “political pornography.” 39 The Raleigh News and Observer complained that it “plays hell with common sense and community.” 40 In another editorial it argued: “The maps . . . don’t make any sense to people who

36. Indeed, 80% of the district’s residents live in cities with populations of 20,000 or more. In contrast, the other majority-black district, District 1, is predominantly rural. More than 80% of the residents in that district live outside cities with populations of 20,000 or more. Brief for Federal Appellees at 5 n.2.

37. See Shaw, 113 S. Ct. at 2841-42 n.10 (White, J., dissenting); see also text accompanying notes 116-32.

38. As long as states comply with their obligation to avoid minority-vote dilution, they generally retain policymaking discretion to draw their districts in accordance with their own assessment of state policy. States have no duty to “follow” the Attorney General’s recommendations for the design of districts; in fact, the Attorney General does not make such recommendations. Although the Attorney General must determine that a majority-minority district is generally feasible to deny preclearance under § 5, this geographic determination is general and does not define any specific district design or location. See Drew S. Days, III & Lani Guinier, Enforcement of Section 5 of the Voting Rights Act, in MINORITY VOTE DILUTION, supra note 21, at 167, 171 (“[T]he department objective has not been to dictate any particular result.”).

The Justice Department has consistently maintained that the VRA does not require extremely contorted and convoluted districts. As Drew Days, now Solicitor General, and Lani Guinier wrote in 1984, faced with a “set of facts in which it can be shown that no fairly drawn redistricting plan will result in minority control of one district because of dispersed minority residential patterns,” the Justice Department’s “response would not be to demand that the jurisdiction adopt a crazy-quilt, gerrymandered districting plan to ensure proportional minority representation.” Id. At the same time, the § 5 preclearance review is limited to determining whether minority-vote dilution is taking place. If it is not, the Justice Department does not believe it has the authority to reject a plan merely because it employs contorted districts. See, e.g., Letter from John R. Dunne, Assistant Attorney General, Civil Rights Division, U.S. Department of Justice (Nov. 18, 1991) (preclearing Texas congressional redistricting plan at issue in Terrazas v. Slagle, 789 F. Supp. 828 (W.D. Tex. 1991), aff’d, 112 S. Ct. 3019 (1992)), quoted in Brief Amicus Curiae of the Republican National Committee in Support of Appellants at 9-10 n.6, Shaw v. Reno, 113 S. Ct. 2816 (1993) (No. 92-357); see also John R. Dunne, Remarks of John R. Dunne, 14 CARDOZO L. REV. 1127 (1993).


have any sense."\(^{41}\) Even some leading defenders of the VRA, clearly taken aback by the shape of District 12, suggested that it might violate the Constitution.\(^ {42}\)

**B. The Holding in Shaw: Vote-Dilution and District- Appearance Claims**

In *Shaw*, the Court concluded that District 12 did indeed raise serious enough constitutional concerns as to require justification under the exacting standards of strict scrutiny. To do so, the Court endorsed a distinction between two radically different kinds of voting-rights claims, each of which the Equal Protection Clause now recognizes.\(^ {43}\)

The first is a traditional "vote-dilution" claim. To establish such a claim under the Fourteenth Amendment, plaintiffs must prove the fa-

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42. See Grofman, *Vince Lombardi, supra* note 7, at 1261 (leading expert witness in voting-rights cases describing his own affidavit in which he characterized North Carolina District 12 as a "crazy-quilt" lacking "rational state purpose").
43. A third kind of voting-rights claim, which was the first to arise historically, is a less frequent litigation subject today. This is the claim of a direct and outright deprivation of the individual right to vote, as in cases that challenged poll taxes and literary tests. *See, e.g.*, Guinn v. United States, 238 U.S. 347 (1915).
miliar requirements of discriminatory purpose and effect. Most im­
portant for our purposes, the relevant discriminatory effects must
involve actual, material harm to the voting strength of an identifi­
able (and constitutionally protected) group. In the context of race, the
Equal Protection Clause is violated only when an election structure
"affects the political strength" of a racial group by unduly diminishing
its influence on the political process. This material injury — diminu­
tion of relative group political power — is the sine qua non of a
vote-dilution claim.

Before Shaw, this claim might have been thought to exhaust the
constitutional guarantees securing the voting rights of protected
groups. Vote dilution was not merely one "type" of claim; it de­
defined the very meaning of constitutionally protected voting rights and the
nature of voting-related harms under the Constitution. Shaw now rec­
ognizes a distinct type of claim. This new claim entails a distinct con­
ception of constitutional harms as well as a distinct, implicit theory of
political representation.

We call this claim a district appearance claim. As we will ex­
plain, the kind of injury it validates involves what we call expressive,
rather than material, harms. The theory of voting rights it endorses
centers on the perceived legitimacy of structures of political represen­
tation, rather than on the distribution of actual political power be­
tween racial or political groups. Vote-dilution and district-appearance
claims share no common conceptual elements. They recognize dis­
tinct kinds of injuries, implicate different constitutional values, and re­
fect differing conceptions of the relationship between law and politics.
These two claims cannot be assimilated into a single, unitary approach
to the Fourteenth Amendment.

45. See infra text accompanying notes 90-96.
46. At several points, the Court directly signals its awareness that it is defining two distinct
types of claims. The clearest example arises in the Court's discussion of United Jewish Orgs.,
Inc. v. Carey, 430 U.S. 144 (1977) [hereinafter UJO], the leading equal protection vote-dilution
precedent.

In that case, New York, in response to Voting Rights Act violations, had adopted a 1974
reapportionment plan that redesigned state senate and assembly districts in Kings County. The
new plan did not change the number of districts with nonwhite majorities, but the new districts
redistributed minority voters in ways likely to enhance the effectiveness of their voting power.
One result, however, was that the 30,000-member Hasidic Jewish community in Williamsburgh,
which the previous plan had located entirely in one assembly and one senate district, was frag­
mented into two assembly and senate districts. On behalf of these voters, plaintiffs brought a
complaint charging New York with violating the Constitution by deliberately revising its reap­
portionment plan along racial lines.

Writing for the plurality, Justice White rejected this claim on the ground that states can
engage in race-conscious districting as long as they do not unfairly dilute the voting power of any
racial group. See 430 U.S. at 165 ("[T]here was no fencing out of the white population from
participation in the political processes of the county, and the plan did not minimize or unfairly
1. **Explaining District-Appearance Claims**

To begin to understand *Shaw*, one must first note that vote dilution is not involved in the case. The plaintiffs could not prove — and the Court acknowledged that they did not allege — vote dilution.\footnote{47} This conclusion is understandable, for no racial group in North Carolina could plausibly claim any material deprivation of its relative voting strength. Certainly white residents, who constitute seventy-six percent of the population in North Carolina\footnote{48} and approximately seventy-eight percent of its voting-age population,\footnote{49} could not claim impermissible dilution of their voting power. Under the statewide redistricting plan, white voters still constituted a majority in ten, or eighty-three percent, of the twelve congressional districts.\footnote{50} With effective control of more than a proportionate share of seats, white voters in North Carolina could not prove, and did not try to prove, that the redistricting plan diluted their relative voting power in intent or effect.

Second, *Shaw* does not express constitutional concern with the shape of election districts per se. The Court is clear that, no matter how bizarre or contorted, district appearances standing alone do not implicate the U.S. Constitution.\footnote{51} Colorful references to the shape of District 12 do permeate the opinion: "highly irregular,"\footnote{52} "tortured [and] dramatically irregular,"\footnote{53} "bizarre,"\footnote{54} and "irrational on its face."\footnote{55} Nevertheless, it is the conjunction of these features with race-cancel out white voting strength."). Treating the Hasidic Jewish community as part of the white community for constitutional purposes, the plurality noted that the county's population was 65% white and that the new reapportionment plan left white majorities in control of 70% of the assembly and senate districts in the county. In the absence of vote dilution, the intentional use of race was not discriminatory and hence not a constitutional violation. 430 U.S. at 166 ("[A]s long as whites in Kings County, as a group, were provided with fair representation, we cannot conclude that there was a cognizable discrimination against whites or an abridgment of their right to vote on grounds of race.").

*Shaw* distinguishes *UJO* by categorizing it as a vote-dilution case and by recognizing an altogether different kind of claim: "*UJO*'s framework simply does not apply where, as here, a reapportionment plan is alleged to be so irrational on its face that it immediately offends principles of racial equality." *Shaw* v. Reno, 113 S. Ct. 2816, 2829 (1993). Unlike *UJO*, here the allegation is "that the plan, on its face, was so highly irregular that it rationally could be understood only as an effort to segregate voters by race." 113 S. Ct. at 2829. Hence, even in the absence of vote dilution, *Shaw* holds that the deliberate use of race can constitute unconstitutional discrimination with respect to voting rights.

\footnotesize{47. *Shaw*, 113 S. Ct. at 2824.}
\footnotesize{49. Brief for Federal Appellees at 16a app., *Shaw* (No. 92-357).}
\footnotesize{50. 113 S. Ct. at 2838 (White, J., dissenting).}
\footnotesize{51. 113 S. Ct. at 2826-27.}
\footnotesize{52. 113 S. Ct. at 2826, 2829.}
\footnotesize{53. 113 S. Ct. at 2820, 2827.}
\footnotesize{54. 113 S. Ct. at 2818, 2825-26, 2831, 2843, 2845, 2848.}
\footnotesize{55. 113 S. Ct. at 2818, 2829, 2832, 2842.}
conscientious districting that the Court condemned, not oddly shaped districts per se. Any other result would revolutionize the districting process because it would suddenly subordinate discretionary state policy choices to a general constitutional imperative concerning district shapes. Far from suggesting a principle of such broad sweep, the decision explicitly reaffirms that the Constitution does not impose on state reapportionment bodies any general requirement of compactness or contiguity.\footnote{56}  

Third, Shaw also does not appear to condemn race-conscious districting per se.\footnote{57} This point is more ambiguous, both because much more hinges on this holding and because the opinion refrains from endorsing it explicitly. Moreover, when this question is confronted directly, the majority in Shaw might well divide over this question. Justice Kennedy, for example, has gone out of his way to reserve judgment on the constitutionality of section 2 of the Act.\footnote{58} Nonetheless, we believe Shaw is best read as an exceptional doctrine for aberrational contexts rather than as a prelude to a sweeping constitutional condemnation of race-conscious redistricting. In their contribution to this symposium, Professors Alex Aleinikoff and Samuel Issacharoff address this question in detail and reach the same conclusion.\footnote{59} We, however, can only briefly justify this view here.

First, if race-conscious districting per se were the constitutional problem, it is difficult to rationalize the architecture of the decision. The keystone in Shaw is the "highly irregular" shape of District 12. The negative pregnant, then, is that "regular" districts designed for race-conscious reasons do not raise similar constitutional concerns. Second, the Court's analysis builds on major precedents establishing that intentional race-conscious districting is not inherently unconstitutional. The Court finds constraints that apply in Shaw within these precedents or concludes that these cases address a distinct kind of claim and hence do not apply; it does not, however, call these deci-

\footnote{56}{113 S. Ct. at 2827.}

\footnote{57}{Our use of the term condemn is meant to focus on the ultimate question of whether race-conscious intent invalidates such districts under the Constitution. Analytically, there are two stages to such an inquiry: whether Shaw requires strict scrutiny for such districts, and, if so, what kinds of justifications might suffice. Whichever way these formal questions are resolved, we believe Shaw does not stand for, or portend a sweeping proscription on, intentional race-conscious districting that does not involve actual vote dilution.}

\footnote{58}{See, e.g., Chisom v. Roemer, 111 S. Ct. 2354, 2376 (1991) (Kennedy, J., dissenting) (writing separately solely to reserve question of the constitutionality of § 2).}

\footnote{59}{See T. Alexander Aleinikoff & Samuel Issacharoff, Race and Redistricting: Drawing Constitutional Lines After Shaw v. Reno, 92 Mich. L. Rev. 588, 644 (1993) ("The Court's focus on a district's shape rather than the State's use of a racial classification will make the turn toward Bakke in the voting-rights field possible.")}
sions into question. Third, at several points, the Court suggests that race-conscious redistricting is neither problematic nor a trigger for strict judicial scrutiny. In addition, compliance with the VRA and Gingles necessarily requires race-conscious districting; Shaw does not suggest, at least directly, that the Court was questioning the restructuring of the political process that has resulted from reliance on the VRA and Gingles. At least to the extent race consciousness arises in connection with VRA compliance, Shaw appears to accept it.

The Court's decision in Voinovich v. Quilter, also decided last Term, further supports the conclusion that Shaw is not a broad attack on race-conscious districting per se. In Quilter, the Republican-dominated Ohio apportionment board had redistricted the Ohio legislature and, in the process, intentionally created several minority-dominated election districts. Plaintiffs claimed that these districts illegally

60. The most significant example is the Court's discussion of the plurality opinion in United Jewish Orgs., Inc. v. Carey, 430 U.S. 144 (1977). The UJO plurality held that "neither the Fourteenth nor the Fifteenth Amendment mandates any per se rule against using racial factors in districting and apportionment," 430 U.S. at 161; that "the permissible use of racial criteria is not confined to eliminating the effects of past discriminatory districting or apportionment," 430 U.S. at 161; that "a reapportionment cannot violate the Fourteenth or Fifteenth Amendment merely because a State uses specific numerical quotas in establishing a certain number of black majority districts," 460 U.S. at 162, and that, in the absence of vote dilution, the deliberate use of race to enhance underrepresented minority groups casts "no racial slur or stigma with respect to whites or any other race . . . ." 430 U.S. at 165. Shaw does not directly take issue with any of these principles, distance itself from them, or suggest UJO is no longer authoritative. Instead, Shaw concludes that UJO reached a certain holding, conditioned on particular principles, and Shaw then applies these conditions to evaluate the North Carolina districting plan. Thus, the Court quotes a passage in which the UJO plurality had held that a state, employing sound districting principles, might deliberately draw districts in a race-conscious way for the purpose of ensuring fair minority representation. Shaw simply concludes that North Carolina appeared not to have adhered to sound districting principles. Shaw, 113 S. Ct. at 2832. For further discussion of the Court's treatment of UJO, see supra note 46.

61. For example, the Court states:

[R]edistricting differs from other kinds of state decisionmaking in that the legislature always is aware of race when it draws district lines, just as it is aware of age, economic status, religious and political persuasion, and a variety of other demographic factors. That sort of race consciousness does not lead inevitably to impermissible race discrimination.

113 S. Ct. at 2826 (emphasis added). The Court also affirms that "[t]he States certainly have a very strong interest in complying with federal antidiscrimination laws that are constitutionally valid as interpreted and as applied." 113 S. Ct. at 2830.

The Court does, however, obscure its position a bit in other passages that explicitly reserve judgment on one aspect of race-conscious districting: the intentional creation of majority-minority districts. 113 S. Ct. at 2828 ("Thus, we express no view as to whether 'the intentional creation of majority-minority districts, without more' always gives rise to an equal protection claim.") (quoting 113 S. Ct. at 2839 (White, J., dissenting)). One might read the Court's reservation of this question as casting doubt on this practice, even for reasonably compact districts. Any such reading, however, would be inconsistent with much else in the opinion as well as a direct attack on Gingles. That there is some ambiguity here might well reflect the divisions within the Shaw majority on these questions.


63. It should be disclosed that Professor Pildes was a legal consultant to the court-appointed special master in Quilter.
"packed" minority voters into a handful of districts, thereby diluting their potential power in other districts. The three-judge federal trial court agreed; it held that the VRA permits the intentional creation of minority-dominated districts only when such districts are necessary to remedy what would otherwise be a violation of the VRA. 64

*Quilter* thus presented an inversion of the routine voting-rights case. Rather than claiming that Ohio had been insufficiently attentive to race, the plaintiffs argued that the state had been too attentive. The state had created too many minority districts that were too "safe"—presumably to pursue an underlying partisan agenda of enhancing Republican influence in other districts. Thus, the plaintiffs argued that race-conscious districting over and above what the VRA requires violates the Act and the Constitution.

The Supreme Court unanimously rejected this argument. In doing so, the Court directly contradicted the three-judge court's view that the VRA establishes both a floor and a ceiling on race-conscious districting. 65 As the Court held, "federal courts may not order the creation of majority-minority districts unless necessary to remedy a violation of federal law. But that does not mean that the State's powers are similarly limited. Quite the opposite is true . . . ." 66 The VRA therefore does not limit state redistricters only to remedial uses of race. As long as no illegal vote dilution occurs, states do not violate the Act, no matter how race conscious they might be in designing election districts. 67 Under the VRA, states need not first confess or prove past discrimination in election practices to justify their race-conscious creation of districts—indeed, they need not justify these districts to federal courts at all.

If this were all there were to *Quilter*, the meaning of *Shaw* would be clear: in the absence of vote dilution, race-conscious districting, in and of itself, would pose no legal problems. Only when carried to particular kinds of extremes, as in *Shaw*, would distinctive constitutional issues arise. But *Quilter* is not quite this transparent. The Court expressly reserved the question of whether race-conscious redistricting per se might violate the Fourteenth or Fifteenth Amendments. 68 Conceivably, then, the Court could hold that, while Ohio's

64. 113 S. Ct. at 1153.
65. 113 S. Ct. at 1156.
66. 113 S. Ct. at 1156 (citations omitted).
67. In *Quilter*, the district court had found no racially polarized voting in the relevant areas of Ohio. In the absence of polarized voting, the Court recognized that black and white voters are essentially fungible; race-conscious districting cannot have a dilutive effect when voting patterns are not structured along racial lines. 113 S. Ct. at 1158.
68. 113 S. Ct. at 1157-59.
redistricting efforts do not violate the VRA, they do violate the Constitution.

Yet, while legally possible, this result seems unlikely. The sitting Ohio legislature is now composed through the electoral scheme Quilter upholds. If the Court believed there were serious constitutional questions with the fundamental structure of this scheme, the Court had numerous means to avoid permitting an unconstitutionally composed legislature to assume power. Indeed, the parties expressly asked the Court to decide the broad Fifteenth Amendment issue, but the Court found extremely narrow grounds on which to resolve that claim. The Court could have asked the parties to address or reargue the Fourteenth Amendment issue. We view the Court's reservation of the constitutional issues as expressing the caution and tentativeness that characterizes the current Court's approach to race, as well as the divisions within the Court itself. But we take the tenor of Quilter as further evidence that a majority of the Court is not prepared to find a general ban on race-conscious districting in the Constitution.

Thus, Shaw does not appear to erect a general constitutional barrier to intentionally race-conscious districting that has no dilutive effect. To be sure, many more subtle questions remain regarding the precise circumstances under which redistricting bodies and courts may take race into account — remedially or affirmatively — when designing districts. We address these more nuanced questions in Part V. But, at this stage, the important point is that Shaw does not appear to rest on any general principle condemning race-conscious districting. Although many initial reactions have neglected this side of Shaw, it is one of the decision's most significant aspects. Given that several members of the current Court are resistant to state departures from the color-blindness ideal in other contexts and that Justices Marshall and Brennan have retired, one might have thought the Court would

69. Thus, the Court held that the district court had been clearly erroneous in finding a race-conscious intent behind the districting plan and then stated, "we express no view on the relationship between the Fifteenth Amendment and race-conscious redistricting." 113 S. Ct. at 1159.

70. As might be expected, the immediate reaction in the popular press tended to portray the decision in Shaw as a broad attack on race consciousness in districting, indeed on the fundamental principles of the Voting Rights Act itself. See, e.g., Max Boot, Supreme Court Rules that "Bizarre" Districts May Be Gerrymanders, CHRISTIAN SCI. MONITOR, June 30, 1993, at 7 (Shaw "throws into doubt the way the Justice Department has been enforcing the 1965 Voting Rights Act, designed to guarantee minorities political representation."); Linda Greenhouse, The Supreme Court: Reapportionment; Court Questions Districts Drawn To Aid Minorities, N.Y. TIMES, June 29, 1993, at A1 ("A sharply divided Supreme Court ruled today that designing legislative districts to increase black representation can violate the constitutional rights of white voters."); Dick Lehr, Court Casts Doubts over Race-Based Redistricting, BOSTON GLOBE, June 29, 1993, at 1 ("The US Supreme Court . . . ruled yesterday that congressional districts designed to give minorities a voting majority may be unconstitutional . . . .").

71. See, e.g., Metro Broadcasting Inc. v. FCC, 497 U.S. 547, 602-31 (1991) (O'Connor, J.,
revisit the constitutionality of the race-conscious districting process that forms the core of the VRA. After *Shaw*, however, five Justices do not appear to be prepared to do so.

Instead, only those irregular districts that convey one particular impression — or that are chosen on the grounds of one particular set of reasons or motivations — implicate *Shaw*. The districting plan must be “so extremely irregular on its face that it rationally can be viewed only as an effort to segregate the races for purposes of voting”; *Shaw* it must be “so bizarre on its face that it is ‘unexplainable on grounds other than race.’” Rather than standing for any simple prohibition of “racial gerrymandering,” *Shaw* distinguishes two types of “racial gerrymanders.” Some districts — highly irregular ones — trigger the extreme demands of strict scrutiny; others raise no special constitutional problem. In dissent, Justice White perfectly captured, we believe, the decision’s internal logic: *Shaw* holds that “race-conscious redistricting that ‘segregates’ by drawing oddly shaped lines is qualitatively different from race-conscious redistricting that affects groups in some other way.”

Justice White means this description to be an ironic commentary on *Shaw*’s analysis, the exposure of a “logic” the mere expression of which immediately indicts itself as incoherent. Those who must work with *Shaw*, however, will have to find the principles the Court intended to drive this logic. What precisely about these particular kinds of election districts poses unique constitutional problems? What distinct injury do such districts cause?

2. *Justifying District- Appearance Claims: The Relevance of Value Pluralism*

Policymaking processes can be constitutionally flawed in at least three different ways. They might reflect an unconstitutional purpose or, equivalently, take a constitutionally impermissible factor into account. This danger is addressed through constitutional doctrines focused on the search for legislative motivation and purpose. Second, policymaking might take only legitimate factors into account but give too little weight to constitutional rights or too much weight to insubstantial governmental justifications for regulation. Balancing tests re-

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74. 113 S. Ct. at 2838 (White, J., dissenting).
fleet concern for the effects of these kinds of policy; such tests typically evaluate whether the governmental justifications for regulation are sufficiently appropriate and significant to justify the degree to which a policy restrains a right. Because the first set of doctrines focuses on purposes, while the second focuses on effects, these might be thought to exhaust the basic modes through which constitutional law can appraise governmental action. Yet there is a third, less familiar type of constitutional problem that policies might raise; in some ways this problem shares concern for both purposes and effects, but it arguably has a distinct logic of its own.

One might call this the problem of *value reductionism* in public policy. The concern is not that policymakers have taken illegitimate factors into account, nor is it precisely that a policy's effects on rights are too restrictive or not sufficiently justified. Instead, the constitutional problem is better described as the apparent corruption of a decisionmaking process. More broadly, it is the apparent corruption of the public institutions that make their decisions in such a way. When decisions reflect value reductionism, policymakers have transformed a decision process that ought to involve multiple values — as a matter of constitutional law — and reduced it to a one-dimensional problem. They have permitted one value to subordinate all other relevant values. As a result, the decisionmaking process appears tainted because it has become compromised through unconstitutional oversimplification. Interestingly, the concern for public perceptions ultimately seems central to constitutional doctrines that resist value-reductionist public policy. The focus of these doctrines is not impermissible purposes, for they need not be present, nor whether the effect of policy is too great an intrusion on individual rights, but rather whether the process of decisionmaking itself is constitutionally legitimate.

*Shaw* is best understood, we believe, as an opinion condemning value reductionism. In the Court's view, the process of designing election districts violates the Constitution not when race-conscious lines are drawn, but when race consciousness dominates the process too extensively. Traditionally, redistricting seeks to realize a plurality of values: to ensure effective representation for communities of interest, to reflect the political boundaries of existing jurisdictions, and to provide a district whose geography facilitates efficient campaigning and tolerably close connections between officeholders and citizens.\(^\text{75}\) The inten-

\(^\text{75}\) Redistricting is, of course, among the most intensely partisan of all policymaking, and those who control the process typically pursue the more directly partisan values of trying to maximize their party's influence. In addition, redistricters, including nonpartisan bodies, also frequently try to protect incumbent officeholders. When the redistricting is partisan, one party's incumbents may receive differential protection.
tional use of race in this process, in conjunction with continuing respect for these other values, does not pose a constitutional problem. Under Shaw, race is not an impermissible factor that corrupts the districting process — as long as it is one among many factors that policymakers use.

When race becomes the single dominant value to which the process subordinates all others, however, it triggers Shaw. For the Court, what distinguishes “bizarre” race-conscious districts is the signal they send out that, to government officials, race has become paramount and dwarfed all other, traditionally relevant criteria. This view is the foundation of the qualitative distinction central to Shaw: at a certain point, the use of race can amount to value reductionism that creates the social impression that one legitimate value has come to dominate all others.

In resisting the use of race in this specific way, Shaw requires that redistricting continue to be understood — and, perhaps more importantly, perceived — as implicating multiple values. Public officials must maintain this commitment to value pluralism, even when they legitimately and intentionally take race into account.

What precisely are the relevant public understandings concerning democratic institutions that “bizarre” race-conscious districts might violate? Critically, we might say Shaw elevates trivial concerns for “pretty” districts over substantive values of effective minority representation. There are no “naturally shaped” districts, so why should there suddenly be constitutional obstacles at the extremes of the districting process?

One answer might be that the values extreme districts inappropriately compromise are those of political community and political accountability. A principal aim of territorial districting is to facilitate the representation and interests of political communities. Compact districting is at best a proxy for this goal, but to abandon compactness completely might be thought to denigrate the importance of political community as a public value. In addition, because compact districting is thought, at least traditionally, to enhance political ties between representatives and constituents, abandoning compactness might be thought to undermine the value of representation.

76. See infra notes 91-95 and accompanying text.
77. For one of the most extensive case law discussions of the values compact districting serves, see Prosser v. Elections Bd., 793 F. Supp. 859, 863 (W.D. Wis. 1992) (three-judge court; per curiam):

The objections to bizarre-looking reapportionment maps are not aesthetic (except for those who prefer Mondrian to Pollock). They are based on a recognition that representative democracy cannot be achieved merely by assuring population equality across districts. To be
But this answer seems strained in the context of Shaw. If the question is whether the oddly shaped District 12 undermines a sense of political connectedness, unduly burdens those running for office, or weakens representative-constituent ties, we might think state political institutions are best positioned to answer it. Framed in these terms, the Court's concern might seem paternalistic. Moreover, given that District 12 resulted in the election of one of two of North Carolina's first black congressional representatives since Reconstruction, concerns for political community and identifiable representation might seem misplaced.

Perhaps a better answer would start with the view that, in the Court's eyes, oddly shaped race-conscious districts compromise the values of political integrity and legitimacy. While there may be no "natural district shapes," baseline expectations emerge from developed customs and practices. Social understandings, including those concerning the legitimacy of political institutions, are formed with reference to these developed practices. Except in revolutionary moments, political legitimacy is, in part, a matter of compliance with the internal standards of these developed practices. When political bodies devise extremely contorted districting schemes, the violation of these standards suggests politicians are engaged in manipulation of public institutions for their own ends.

When race is added, the mix becomes more combustible and, in the Court's view, the Constitution enters the picture. The concern seems to be that extreme distortions in the (socially constructed) nature of territorial districting, which result from race dominating all other districting values, pose the kind of threat to political legitimacy that the Constitution recognizes. Democratic theory might accommodate either proportional representation or territorial districting. But, as Professors Daniel Polsby and Robert Popper's contribution to this symposium suggests, trying to force the kinds of concerns a proportional-representation system addresses into a territorial system eventually stretches the latter to the breaking point. 78

Short of opting for an interest-based system of representation, public understandings about an effective representative, a legislator must represent a district that has a reasonable homogeneity of needs and interests; otherwise the policies he supports will not represent the preferences of most of his constituents. There is some although of course not a complete correlation between geographical propinquity and community of interests, and therefore compactness and contiguity are desirable features in a redistricting plan. Compactness and contiguity also reduce travel time and costs, and therefore make it easier for candidates for the legislature to campaign for office and once elected to maintain close and continuing contact with the people they represent.

78. Daniel D. Polsby & Robert D. Popper, Ugly: An Inquiry into the Problem of Racial Gerrymandering Under the Voting Rights Act, 92 Mich. L. Rev. 652, 670-71, 676-78 (1993). This can be viewed as one of the central themes of Lani Guinier's scholarship. See, e.g. Lani...
political legitimacy will reflect the nature of territorial districting, as
that form is understood. On this view, the failure to respect value
pluralism in territorial redistricting compromises the integrity and le-
gitimacy of the resulting institutions.

This account of Shaw's principles will no doubt leave the decision
controversial. In today's culture, we often cannot talk about "the"
political legitimacy of institutions, for legitimacy is frequently differen-
tial — institutions legitimate from some groups' perspectives might
not be from others'. If the "highly irregular" District 12 was actually
necessary to ensure a second representative of the black community in
North Carolina, that community might well view the districting plan
that included District 12 as more legitimate than alternatives. Polit­
ical legitimacy is also a nebulous concept, into which it is all too easy
to read one's own views. Nonetheless, the legitimacy of representative
institutions at least seems the kind of question that is properly the
concern of the Court — this concern is, after all, at the foundation of
the reapportionment revolution itself. Shaw requires respect for
value pluralism as a means, it seems, of ensuring that constitutional
concerns for political legitimacy are not ignored or undermined in the
process of enhancing minority representation.

Understood in this way, Justice O'Connor's opinion in Shaw reso­
nates with Justice Powell's opinion in Regents of the University of
California v. Bakke. The preference-quota distinction similarly per­
mits noninvidious uses of race, as long as policymakers do not allow
race to become — or appear to be — paramount to all other relevant
values. When Bakke was decided, some praised this approach as "an
act of judicial statesmanship" and "a very civilized ruling." Others
asserted that the preference-quota distinction was at best symbolic and
at worst hypocritical — a distinction that reflected no principled theo­
retical line and that had no functional significance for the way in
which academic institutions actually would make admissions deci-

Guinier, Groups, Representation, and Race-Conscious Districting: A Case of the Emperor's

Reapportionment Revolution: Representation, Political Power, and the
Supreme Court (1966).


81. See Jerold K. Footlick et al., The Landmark Bakke Ruling, Newsweek, July 10, 1978,
at 19, 20, 25 (quoting Alan Dershowitz as stating that Bakke was "an act of judicial statesman­
ship"; A.E. (Dick) Howard as terming Bakke "a 'Solomonic' compromise"; Benno Schmidt, Jr.,
as calling the decision "just about right"; and Charles Alan Wright terming Bakke "a very civi­
lized ruling"); Bakke Wins, Quotas Lose, Time, July 10, 1978, at 8, 9 (quoting Paul Freund as
believing the fuzziness of the decision was "a good thing").
sions. 82 Whatever the merits of these views, the distinction has had enough enduring power so that, fifteen years later, it remains an important element in public discourse about race. Virtually no public official endorses racial quotas, even when advocating the preferential use of race. Perhaps Bakke is the sole cause of this way of structuring public discourse; but, if the legal distinction had indeed failed to capture something powerful among public perceptions, at least in some quarters, perhaps it would not have had such a long life. 83

Methodologically, one can view both Shaw and Bakke as rejecting a categorical, rule-oriented form of legal decision for a more contextualized, standard-based approach. 84 Neither decision establishes a categorical rule prohibiting intentional race consciousness. The relevant questions are ones of degree: race can be used, but how much weight it is given in relation to other values remains subject to searching judicial inquiry. This contextual approach to constitutional adjudication that links Shaw and Bakke — this commitment to viewing the Fourteenth Amendment as standing against value reductionism — can be understood as an effort to seize and defend a legal middle ground between logically coherent alternatives. At one pole is the principle of color blindness. At the other is the principle of the preferential use of race to enhance the political or economic position of previously disadvantaged minorities. Each alternative rests on its own moral, sociological, and ideological convictions, and many people believe law and policy must come to one clear choice between those alternatives. Yet Shaw, like Bakke, opts for neither option; rather, it sustains the tension between the two. The principle of Shaw is that districters may intentionally take race into account, but only up to the point at which they subordinate all other relevant values to it. Geography and interest are both permissible grounds for constructing election districts, as


83. Despite the rhetoric of public officials, some recent polling data suggest that individuals may not find a significant distinction between preferences and quotas. At the time of the legislative debates over the Civil Rights Act of 1991, Pub. L. No. 102-166, 105 Stat. 1071, 1075-76 (1991) (codified at 42 U.S.C. §§ 2000e to 2000e-16 (Supp. III 1991)), one poll reported that 88% of whites were opposed to "racial preferences," even in the absence of "rigid quotas." Tom Kenworthy & Thomas B. Edsall, Whites See Jobs on Line in Debate: Some Chicagoans Fear Reverse Bias, WASH. POST, June 4, 1991, at A1. Public opinion polls on affirmative action, however, are notoriously sensitive to the precise phrasing of questions and the context in which they are posed.

long as the districting process is not reduced to a single-dimensional process in which interest appears to dominate overwhelmingly.

In considering whether the Court is right to be concerned about value reductionism in public policy, in Shaw or elsewhere, it might be helpful to recall the analysis of complex value choices that Professors Guido Calabresi and Philip Bobbitt offer in *Tragic Choices*. In their analysis, societies that endorse a plurality of values, all of them fundamental, must necessarily confront situations of profound value conflict. Faced with such a conflict, society may simply choose to adopt policies that endorse one value over the others at stake. This approach, however, entails rejecting decisively some values that are, and ought to be, considered fundamental. As an alternative, therefore, societies might seek institutions and methods of reaching decisions that preserve the social and political understandings through which they recognize all the values in conflict as fundamental and enduring. One possibility is that public decisions can cycle between preferences for the different values at stake. Alternatively, policymakers might accommodate certain values up to a point, but stop short of following them to their logical conclusion, as a way of signaling respect for countervailing values.

From a certain perspective, these decisions will look inconsistent, or unprincipled, or like compromises having little logical foundation. Indeed, more formal or analytic evaluations of policymaking often generate just such criticisms. But this kind of fuzzy logic in the public sphere may be a healthy means through which societies embracing

85. Even if this concern is appropriate in evaluating policy for some purposes, whether courts should interpret particular provisions of the Constitution to embody such concerns is a distinct question. The analysis of that question requires close attention to the text, history, purposes, and prior interpretations of particular provisions — a task this article does not undertake.

86. GUIDO CALABRESI & PHILIP BOBBITT, TRAGIC CHOICES (1978).

87. Calabresi and Bobbitt term these a "strategy of successive moves," id. at 195, but the language of strategy might suggest a greater role for conscious intent and choice than is warranted. In healthy societies, the effect of the complex mix of public institutions and actors involved in policymaking may be to mediate these fundamental value conflicts through producing outcomes that oscillate between the relevant values, even when no particular actor intends such a result and when institutions are not specifically designed to produce this pattern of outcomes.

88. For example, Arrow's Theorem reveals that, in theory, public decisionmaking processes cannot be designed in ways that are fair and that preclude the possibility that decisions will cycle among various options (at least under conditions of significant social conflict). Based on this discovery, some scholars indict collective decisionmaking institutions for being unable to guarantee consistent policy outcomes. In contrast, one of us has argued that this kind of cycling might be a healthy means of sustaining the tension between fundamental values, rather than a weakness of democratic institutions. See Richard H. Pildes & Elizabeth S. Anderson, Slinging Arrows at Democracy: Social Choice Theory, Value Pluralism, and Democratic Politics, 90 COLUM. L. REV. 2121, 2171-75 (1990). As Calabresi and Bobbitt put it, "a society may limit the destructive impact of tragic choices by choosing to mix approaches over time." CALABRESI & BOBBITT, supra note 86, at 196.
pluralistic values of fundamental significance address tragic choices — they sustain the tension between conflicting values, rather than allowing circumstances to force them finally to endorse one fundamental value over another. By avoiding value-reductionist approaches when such values clash, public decisions can help, in the words of Calabresi and Bobbitt, “preserve the moral foundations of social collaboration.”

If Shaw is to be justified, we believe the justification must proceed along these lines. On any other terms, Shaw’s effort to distinguish race-conscious districting that produces bizarrely shaped districts from that which produces more familiar districts is difficult to comprehend. As the dissenters persuasively argue, one does not involve a more invidious use of race than the other, nor does one differ meaningfully from the other in its effect on individuals’ voting rights. Carrying legal analysis to its logical extreme, however, may not be the most important task of the Supreme Court — at least as judges such as Justices O’Connor and Powell understand the functions of the Court and, perhaps, of law itself. Shaw rests on the view that, in certain areas, the Court’s role in construing the Constitution should be to require policymakers to accommodate and sustain the tension between conflicting values, rather than to permit one important value to subordinate all others.

3. Expressive Harms as Constitutional Injuries

To appreciate this interpretation of Shaw, however, is not yet to grasp the precise harm that the Shaw Court believes this value reductionism causes. Allan Bakke could allege the harm of being denied the right to compete on equal terms for medical school admission — an alleged harm that is concrete, individualized, and material. But, because no North Carolina voters had their voting power diluted, one cannot say a similar injury occurred. Even a districting process that involves the kind of value reductionism we have described does not result in tangible, individualized harm, the kind of harm traditionally considered necessary to create standing. To understand and apply Shaw, then, we must link the Court’s evident concern with value reductionism to a different conception of harm.

One can only understand Shaw, we believe, in terms of a view that what we call expressive harms are constitutionally cognizable. An expressive harm is one that results from the ideas or attitudes expressed

89. Id. at 18.
90. See infra note 105 and accompanying text (discussing “irreducible minimum” in the standing context).
through a governmental action, rather than from the more tangible or material consequences the action brings about. On this view, the meaning of a governmental action is just as important as what that action does. Public policies can violate the Constitution not only because they bring about concrete costs, but because the very meaning they convey demonstrates inappropriate respect for relevant public values. On this unusual conception of constitutional harm, when a governmental action expresses disrespect for such values, it can violate the Constitution.

Concern for expressive harms focuses on the interpretive dimension of public action. This is the dimension along which such injuries lie, for expressive harms are violations of public understandings and norms. In the language of Robert Cover, "[w]e inhabit a nomos — a normative universe." Judicial validation of expressive harms reflects concern for the way in which public action can cause injury precisely by distorting or undermining this nomos. The harm is not concrete to particular individuals, singled out for distinct burdens. The harm instead lies in the disruption to constitutionally underwritten public understandings about the appropriate structure of values in some arena of public action.

Expressive harms are therefore, in general, social rather than individual. Their primary effect is not as much the tangible burdens they impose on particular individuals, but the way in which they undermine collective understandings. Governmental action might be thought to implicate these understandings in two ways. When government acts, it must interpret relevant collective understandings insofar as they constrain or guide policymakers. But public action and collective understandings exert a mutually reciprocal influence. Government action does not merely reflect such understandings; it also shapes and reconstitutes them. Governmental actions can express — and therefore perhaps sustain — a reaffirmation or a rejection of these norms. A concern for expressive harms under the Constitution is a concern for precisely these less material, less individualized effects of state action.

If courts grant expressive harms constitutional recognition, they must then engage in exquisitely difficult acts of interpretation. For the material to be interpreted is not a legal text, but the expressive significance or social meaning that a particular governmental action has in the specific historical, political, and social context in which it takes place.
place. The quest is not for the intent or purpose behind legislation, at least as those concepts have traditionally been understood; the issue is not what policymakers might subjectively have had in mind or desired. What matters is the social message their action conveys or, less positivistically, the message courts perceive the action to convey. This approach requires courts to attribute a likely social meaning to the action, rather than to discover the subjective intent behind it. Such exercises of judicial judgment are fraught with complexity and unlikely to yield determinate, single right answers. But courts have not found these potential problems to be reason enough to abandon all judicial concern for expressive harms.

This analysis might sound unfamiliar and obscure. Shaw, however, becomes intelligible only if one recognizes that it rests on just this concern for expressive harms. Shaw validates such harms as constitutionally cognizable, along with more familiar, concrete, material injuries. Indeed, close attention to the language of Justice O'Connor's opinion reveals a constant struggle to articulate exactly these sorts of expressive harms. Thus, the opinion is laden with references to the social perceptions, the messages, and the governmental reinforcement of values that the Court believes North Carolina's districting scheme conveys. There is simply no way to make sense of these references, which give the opinion its character and are central to its holding.

92. Actual intent, to the extent knowable, might be relevant evidence, but it is not the ultimate question at issue.

93. Among the passages in which the Court emphasizes social perceptions, the messages the districting plan conveys, and the way in which the plan is likely to affect collective understandings are the following:

1. "The message that such districting sends to elected representatives is equally pernicious."

2. "When a district obviously is created solely to effectuate the perceived common interests of one racial group, elected officials are more likely to believe that their primary obligation is to represent only the members of that group, rather than their constituency as a whole."

3. "[The plan is] so highly irregular that, on its face, it rationally cannot be understood as anything other than an effort to 'segregat[e] ... voters' on the basis of race."


Note also the frequent references to "reinforcing perceptions," or "reinforcing beliefs," as in the following:

4. "[The plan] reinforces racial stereotypes and threatens to undermine our system of representative democracy by signaling to elected officials that they represent a particular racial group rather than their constituency as a whole."

Shaw v. Reno, 113 S. Ct. at 2828.

Similarly, notice the Court's use of the language of "offense," which is commonly associated with expressive concerns:

5. "[The reapportionment plan is alleged to be so irrational on its face that it immediately offends principles of racial equality."

Shaw v. Reno, 113 S. Ct. at 2829.

These passages and others, central to the opinion, are most convincingly explained only by recognizing that it is expressive harms that concern the Court in Shaw.
without recognizing that the decision is grounded in concern for expressive harms. This conception of constitutionally cognizable harms explains why the Court is adamant that "reapportionment is one area in which appearances do matter." If they do, it must be because, even apart from any concrete harm to individual voters, such appearances themselves express a value structure that offends constitutional principles.

*Shaw* therefore rests on the principle that, when government appears to use race in the redistricting context in a way that subordinates all other relevant values, the state has impermissibly endorsed too dominant a role for race. The constitutional harm must lie in this endorsement itself: the very expression of this kind of value reductionism becomes the constitutional violation. The justification for this result might rest on the intrinsic ground that the endorsement is wrong, in and of itself; alternatively, the justification might rest on the instrumental ground that this state endorsement threatens to reshape social perceptions along similar lines.

In either case, *Shaw* depends crucially on judicial recognition of expressive harms under the Fourteenth Amendment. This concep-

94. 113 S. Ct. at 2827.

95. Vincent Blasi suggests that a similar, expressively oriented rationale provides the best explanation for Justice Powell's opinion in *Bakke*, although Blasi focuses primarily on the instrumental, rather than the intrinsic, justifications for such a rationale. Blasi, supra note 82, at 59 ("Perhaps Powell is saying that appearances are what matter most because the critical value is the longrun diminution of racial prejudice throughout the society and, depending on how they are perceived by the public, different race-conscious programs may have quite different effects on the racial attitudes of the populace."). Blasi then criticizes such an approach to constitutional doctrine on the familiar grounds that purported social perceptions are too uncertain a basis for constitutional doctrine. *Id.* at 60. In addition, he argues that responding to these perceptions by purporting to distinguish between race-as-one-factor and race-as-a-dominant-factor entails public hypocrisy, which Blasi views as "inevitably ... corrupting." *Id.*

96. A similar idea underlies Charles Lawrence's revisionist account of *Brown v. Board of Educ.*, 347 U.S. 483 (1954), an account that Lawrence then uses to argue for the constitutionality of regulating racist speech. See Charles R. Lawrence III, *If He Hollers Let Him Go: Regulating Racist Speech on Campus*, 1990 DUKE L.J. 431. Lawrence argues that school segregation was unconstitutional precisely because of its expressive dimension or its cultural meaning. "*Brown* held that segregated schools were unconstitutional primarily because of the message segregation conveys — the message that black children are an untouchable caste, unfit to be educated with white children." *Id.* at 439. In Lawrence's view, *Brown* therefore stands for the principle that "the systematic group defamation of segregation be disestablished," *id.* at 441, and that "*Brown* is a case about group defamation." *Id.* at 463. To reach this conclusion, he argues that the "non-speech elements [of school segregation were] by-products of the main message rather than the message simply a by-product of unlawful conduct." *Id.* at 441.

This emphasis on cultural meanings as legally cognizable harms captures an important and neglected aspect of *Brown* and constitutional doctrine more generally. At the same time, *Brown* might exemplify this point less sharply than other examples. In *Brown*, the Court accepted lower court findings that " 'tangible' factors were equal between the white and black schools at issue but relied on inequalities in "intangible considerations." 347 U.S. at 492-93. Moreover, the Court cannot have been unaware of the process by which states scrambled to bring particular black schools up to equivalent standards as they became subject to litigation. *Brown* might well be justified as a means of ensuring, without the need for case-by-case litigation, that state re-
tion of constitutional harm is intriguing and undoubtedly controversial. To describe and evaluate it in detail would require considerable space. For present purposes, we merely note three brief features of this conception.

a. Legal recognition of expressive harms. Though this conception of harm might at first appear unfamiliar and vague, it is implicitly recognized in many areas of law and public policy. The general distinction between intentional and accidental harms is the most routine example. In torts and criminal law, an intentional and a negligent battery might cause the same quantum of physical injury. Yet common and criminal law understandably treat the former as far more serious. Even if they cause the same objective level of physical injury, the law considers these to be two distinct actions; the distinction rests in the different attitude that an intentional harm expresses toward social norms of individual integrity. Conceivably, the more serious sanctions for intentional harms might be justified as necessary to create optimal deterrence of such actions. But, even apart from incentive-altering calculations, the attitudes expressed through conduct intentionally designed to injure pose a greater challenge to the normative structure underlying social order. The greater challenge such conduct expresses requires a commensurately greater response in the legal sanctions applied — independent of deterrence rationales for greater sanctions. Intentional harms are morally more offensive than accidental ones, and the law reflects this difference in moral evaluation.

For a more interesting and complex example of the difference between expressive and consequential conceptions of harm, consider sentencing enhancements for bias-motivated crimes, at issue last Term in *Wisconsin v. Mitchell*. From a consequentialist perspective, we

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sources for education would not be discriminatorily allocated. See GEOFFREY R. STONE ET AL., CONSTITUTIONAL LAW 503 (2d ed. 1991) (asking whether pre-*Brown* doctrine, “by requiring the courts to evaluate the level of ‘equality’ in thousands of segregated school systems throughout the country, [might] have produced an even more serious judicial intrusion on the political branches than *Brown*”).

As a more elemental illustration, consider instead segregation in public accommodations, such as movie theaters. In this case there can be little claim of comparatively disadvantageous allocation of material benefits between white and black viewers; both groups see the identical movie, albeit from different physical locations. Even if we imagine a situation in which the seating locations did not reflect a social hierarchy (as they do when whites sit in front, blacks in the back or the balcony), such a state-mandated seating distribution along racial lines would surely violate the Constitution. In these contexts, the only reason that the seating segregation is illegal and immoral must be because of its expressive significance or, in Lawrence's words, its cultural meaning.

Lawrence goes on to argue that, if the only reason for regulating conduct is its expressive dimension, then the expression itself can be directly regulated. This is a far more controversial step. For Lawrence's response to criticisms that this move fails to respect the basic First Amendment distinction between conduct and speech, see Lawrence, supra, at 440-44.

might argue that greater penalties are required to provide greater deterrence. Perhaps these crimes are more common, or perhaps they are more likely to incite retaliatory responses. But, on an expressivist logic, we might argue greater penalties are required because a different, and more threatening, social meaning attaches to the assault. From this perspective, beating up a black man because he is black is a different action, with a different social meaning, than an ordinary assault. The difference between these two forms of justification — consequential and expressive — reflects and shapes collective understandings of why we adopt such measures. In addition, some might believe the constitutionality of such measures, under the First Amendment, depends on whether they are justified on one or the other type of logic. The most important point, though, is that much conduct, like hate crimes, has both an expressive and a consequential dimension; action reveals certain attitudes as well as causing more tangible injuries.

This point can be generalized. Actions of all sorts — public and private, collective and individual — express certain values as well as bring about certain consequences. Actions both “do” something and “mean” something; at the same time that they bring about certain consequences, they also express some set of values and normative attitudes. Although we do not ordinarily articulate legal harms in these ways, law and policy often, if implicitly, respond to this meaning-making or expressive dimension of actions.

In trying to find the right language to capture this legal concern for expressive harms, we might say that intentional and accidental batteries, or hate crimes and ordinary assaults, are two different actions. Or we might say they are the same action in their material dimension, but distinct in their expressive dimension. Nothing of substance, however, ought to turn on the formal way in which we classify the relationship between an action and its meaning. For action, meaning, and aim are mutually defining, both in social fact and, often, in law and policy.

b. Expressive harms in other areas of constitutional doctrine. Second, the Court has recognized constitutionally cognizable expressive harms in other doctrinal areas, though without using these specific terms. The most striking example is the emergence in recent years of
the "endorsement test" under the Establishment Clause.99 The idea that the First Amendment bans state "endorsement" of religion rests, like Shaw, on a concern for social perceptions; on the perceived meaning of government policies; and on the view that the Constitution reaches not just material harms, but expressive ones. The explicit language with which courts have framed the "endorsement test" is grounded on the same concerns as those central to Shaw. Thus, Justice O'Connor has argued that the problem with a state endorsement of religion, for example, is that it "sends a message to nonadherents that they are outsiders, not full members of the political community, and an accompanying message to adherents that they are insiders . . . "100 In her analysis, the "endorsement test" invalidates government practices that create a perception that the government is endorsing or disapproving of religion.101 These concerns for social perceptions, messages, and governmental endorsements of values are central whenever expressive harms are at issue.

That Justice O'Connor is both the author of Shaw and the originator of the "endorsement test" lends credence to the view that one cannot understand Shaw except in terms of concern for expressive values in the area of race and redistricting. To be sure, some commentators have embraced the Establishment Clause "endorsement test" with enthusiasm,102 while others have found it vague, empty, or unadministrable.103 Any effort to recognize expressive harms through constitutional doctrine must address these kinds of concerns. Despite

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100. Lynch, 465 U.S. at 688 (O'Connor, J., concurring) (emphasis added).

101. 465 U.S. at 688-93 (O'Connor, J., concurring). In Wallace v. Jaffree, 472 U.S. 38 (1985), Justice O'Connor elaborated on two questions that are difficult for all constitutional doctrines focused on expressive harms: how courts might determine "the" social perception of a policy, and from what perspective courts ought to make this interpretive judgment when, as is often likely, no unitary perception exists. 472 U.S. at 73-76 (O'Connor, J., concurring). Thus, she argued that the relevant perceptions are those of an "objective observer" familiar with the text, legislative history, and implementation of the law in question, as well as the values recognized in the religion clauses of the Constitution. 472 U.S. at 76, 83 (O'Connor, J., concurring); see also Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter-Day Saints v. Amos, 483 U.S. 327, 346-49 (1987) (O'Connor, J., concurring) (elaborating upon the "objective observer" perspective); Estate of Thorntons v. Caldor, Inc., 472 U.S. 703, 711-12 (1985) (O'Connor, J., concurring) (same).

102. For an exhaustive summary of favorable commentary on the "endorsement test," see Smith, supra note 99, at 274 n.45.

these problems, however, judicial concern for expressive harms is de-
mestrably a pervasive and long-enduring feature of constitutional
doctrine and disagreements.104

c. Standing and expressive harms. In much of constitutional law,
both substantive and procedural doctrines require that harms be indi-
viduated before they become judicially actionable.105 Indeed, the cur-
rent Court has reinvigorated these requirements in recent years,
requiring that plaintiffs distinguish their claims from "a generally
available grievance about government — claiming only harm to [their]
and every citizen's interest in proper application of the Constitution
and laws, and seeking relief that no more directly and tangibly benefits
[them] than it does the public at large."106 As a result, the Court has
rejected claims that "abstract stigmatic injuries" can be judicially

cognizable.107

Yet, when courts recognize expressive harms, this traditional re-
quirement of individualized harm comes under considerable pressure.
Expressive harms focus on social perceptions, public understandings,
and messages; they involve the government's symbolic endorsement of
certain values in ways not obviously tied to any discrete, individual-
ized harm. A significant tension, therefore, exists between recognition

104. For an effort to show that much constitutional doctrine and disagreement turns on
whether one understands substantive constitutional provisions as recognizing expressive harms,
in addition to more material ones, see Richard H. Pildes, Competing Conceptions of Value in
Constitutional Law: Expressive and Consequential Harms (Dec. 1, 1992) (unpublished manu-
script, on file with author).

105. The law of standing is a notable example of this type of procedural doctrine. The Court
recently restated the "irreducible minimum" that is required for standing under Article III:
[A] party seeking to invoke a federal court's jurisdiction must demonstrate three things: (1)
"injury in fact," by which we mean an invasion of a legally protected interest that is "(a)
concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical,"
(2) a causal relationship between the injury and the challenged conduct, by which we mean
that the injury "fairly can be traced to the challenged action of the defendant," and has not
resulted "from the independent action of some third party not before the court," and (3) a
likelihood that the injury will be redressed by a favorable decision, by which we mean that
the "prospect of obtaining relief from the injury as a result of a favorable ruling" is not "too
speculative."

737, 752 (1984), respectively); see Cass R. Sunstein, What's Standing After Lujan?
jurisprudence); see also Harold J. Krent & Ethan G. Shenkman, Of Citizen Suits and Citizen


harm to a racially defined group gives an individual member of that group standing); see also
Antonin Scalia, The Doctrine of Standing as an Essential Element of the Separation of Powers, 17
SUFFOLK U. L. REV. 881, 881-82 (1983) ("[C]ourts need to accord greater weight than they have
in recent times to the traditional requirement that the plaintiff's alleged injury be a particularized
one, which sets him apart from the citizenry at large.").
of expressive harms and traditional requirements of individualized wrongs.108

In Shaw, the Court avoided confronting the tension between these traditional requirements and its conception of expressive harm. Given the "special harms"109 Shaw recognizes, perhaps any voter in North Carolina — not just those in District 12 and not just those who are white — can legitimately claim to suffer these harms and hence to have standing. In other contexts involving race-conscious policy, blacks do not have legal standing to challenge policies that purportedly benefit them as a group; the fact that some blacks might view an affirmative action policy, for example, as stigmatizing or as essentializing black identity is not the kind of harm that grounds legal standing. Only those disadvantaged in more material and particularized ways suffer the kind of injury necessary for judicial assessment of their claims. Hence, the plaintiffs in affirmative action cases are white individuals or white-owned businesses. Yet the very theory on which Shaw was litigated and decided appears to embrace a much broader conception of legal injury. The complaint, for example, refused to state the race of the plaintiffs and refused to allege the concrete and particularized injury of vote dilution. Instead, the plaintiffs pleaded a right to participate in a color-blind electoral process.110 If this is the right at stake, all North Carolina voters might be thought to be injured in the same way and to the same extent.

To bring this claim closer to traditionally recognized ones of individualized harm, the district court rewrote the complaint by taking

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108. For example, in the electoral context, the more traditional conception of standing recently led to dismissal of the constitutional challenge to the seating of Alcee Hastings as representative of Florida's 23d congressional district. Waggoner v. Hastings, 816 F. Supp. 716 (S.D. Fla. 1993). Hastings, a federal district judge who had been impeached, convicted, and removed from office, was subsequently elected to Congress. A plaintiff challenged his seating on the ground that the Constitution's impeachment provisions disqualified Hastings from holding any office under the United States. U.S. Const. art. I, § 3, cl. 7 reads:

Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and enjoy any Office of honor, Trust or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

The plaintiff, however, was registered to vote not in the 23d district, but in an adjoining one. He nonetheless asserted a generalized interest in having only constitutionally qualified officials representing Florida. Although the court found "an appeal to the logic of the plaintiff's argument about an interest of a citizen in having lawfully qualified representatives," the court dismissed the complaint for lack of standing. 816 F. Supp. at 718. The standing holding appears to be an alternative holding because the court also went on to find the claim nonjusticiable on other grounds. 816 F. Supp. at 720. This result reflects not only the traditional requirement of concrete and particularized injury, but the narrowness with which courts have conceptualized legal injury in the electoral context.


110. 113 S. Ct. at 2824.
judicial notice that the plaintiffs were white voters. The Supreme Court then reinterpreted the plaintiffs' legal theory before endorsing it: the claim became a challenge to "legislation so extremely irregular on its face that it can rationally only be viewed as an effort to segregate the races for purposes of voting, without regard for traditional districting principles and without sufficiently compelling justification." Even so, if the way the legislation is "viewed" is the harm, any North Carolina voter might be similarly positioned and hence equally entitled to standing.

Justice Souter indirectly pressed this issue by arguing that, absent vote dilution, race-conscious districting involves no constitutional harm. The Court's response revealed just how nonindividualized is the expressive harm central to Shaw:

As we have explained, however, reapportionment legislation that cannot be understood as anything other than an effort to classify and separate voters by race injures voters in other ways. It reinforces racial stereotypes and threatens to undermine our system of representative democracy by signaling to elected officials that they represent a particular racial group rather than their constituency as a whole. Justice Souter does not adequately explain why these harms are not cognizable under the Fourteenth Amendment.

The Court, however, does not adequately explain why these harms are not generalized ones, the kinds of harms for which generalized standing to sue would be appropriate. Indeed, although the conceptions of cognizable harm and standing are directly linked — and standing is both a jurisdictional question and, in part, a constitutional one — the Court leaves issues of standing unaddressed. The point

111. 113 S. Ct. at 2822.
112. 113 S. Ct. at 2824.
113. 113 S. Ct. at 2847 (Souter, J., dissenting).
114. 113 S. Ct. at 2828 (citations omitted).
115. The closest the Court comes to resolving the tension between traditional standing principles and the expressive harms Shaw recognizes is when the Court intimates that the voters in a particular "bizarre" district experience these harms distinctly: "When a district obviously is created solely to effectuate the perceived common interests of one racial group, elected officials are more likely to believe that their primary obligation is to represent only the members of that group, rather than their constituency as a whole." 113 S. Ct. at 2827. The notion here appears to be that seemingly single-valued redistricting runs the danger of constructing an inappropriate, or antiliberal, conception of the relationship between representation and community in a particular district. In many other passages, however, the Court describes the harms in ways that are not district specific. See, e.g., 113 S. Ct. at 2830 ("Nothing in the [Court's precedents] precludes white voters (or voters of any other race) from bringing the analytically distinct claim that a reapportionment plan rationally cannot be understood as anything other than an effort to segregate citizens into separate voting districts on the basis of race without sufficient justification.") (emphasis added). Even on the narrowest reading, passages like these seem to imply a standing principle broad enough at least to permit any voter in a "bizarre" district to sue. Nevertheless, the question remains whether this kind of geographic standing limitation is consistent with the logic of the expressive harms the Court recognizes.
here is that tension exists between the underlying but implicit theory of Shaw and established legal principles, such as those reflected in standing doctrine. There may be principled ways of resolving this tension, but the Court does not confront the conflict or acknowledge it.

4. Social Perceptions Versus the "Actual Facts"

Thus far, we have assumed that the North Carolina General Assembly's purpose in designing District 12 was to create a second majority-black district in the state. On this view, the aim of creating a minority district was "the" cause of the "bizarre" district shape. The social perception of this "fact" seems, at bottom, to be the foundation on which the decision rests.

The central concern of Shaw is this social perception. Seen in this way, Shaw offers a story about the corruption of politics by race consciousness, at least when the latter is carried to extremes. On this view, politicians use civil rights policy, through the pressure the VRA puts on the redistricting process, to manipulate and distort political institutions — or, more precisely, the VRA is being used in ways that create the social perception that this manipulation is taking place.

When the facts are examined from another vantage point, however, Shaw might expose a quite different story. As in many redistricting battles, with their boiling cauldrons of partisan, personal, interest-group, fair representation, and other motivations, reconstructing the reasons behind North Carolina's actions at each stage is no easy task. The record suggests both a "stronger" and a "weaker" view of the actual facts, and, on either account, Shaw is yet more complex.

a. The strong view of the facts. Recall that the Attorney General objected to North Carolina's initial redistricting plan on the ground that the VRA required creation of a second minority district, which he suggested could be in the southeastern part of the state. The "strong" interpretation of the facts takes this assessment as correct and assumes that such a district, reasonably compact, could indeed have been created. The Court appeared to assume this view, although it did not address the question directly, and the lower court made no formal finding to this effect. Yet, if this is the assumption on which Shaw is

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116. We do not explore in detail more subtle causation questions, such as whether the impermissible cause with which Shaw is concerned must be merely a contributing cause, the dominant cause, or the exclusive cause for a particular district's design. For further discussion, see infra text accompanying notes 251-52.

117. Citizens exposed to the plan will find it "so irrational on its face that it immediately offends principles of racial equality." 113 S. Ct. at 2829.

118. There is no way to prove that this assumption underlies the Court's approach to the case, for the Court made no formal finding or statement to this effect, but the atmosphere of the
decided, what Shaw would reveal is not the manipulation of politics by race, but the manipulation of race by politics.

On this strong reading of the facts, North Carolina could have complied by drawing a reasonably compact minority-dominated district, but it made a deliberate choice not to do so. Yet, on this view, the reasons behind the design of District 12 would have nothing to do with race — and everything to do with protecting incumbent congressmen and seeking partisan political advantage. Faced with a range of choices for creating a second minority district, including a reasonably compact one, the General Assembly made the choice it did for its own reasons. As several Justices appear to have assumed, those reasons were incumbent protection and partisan advantage. On this assumption, however, political reasons, not concerns involving race, would be the cause or purpose behind the design of District 12.

At this point, notice that the case would then actually present a conflict between social perceptions and political realities. To restate, the actual reason District 12 appears "bizarre" is that it was designed to protect incumbents and enhance Democratic control of the state's congressional delegation. Once the Justice Department's objection was lodged, North Carolina was obliged to create a second majority-minority district; but the final shape and location of that district traces to political, not racial, factors. Analytically, we might say two governmental decisions are involved. The first, from the Justice Department, was that North Carolina had to create a second majority-minority district (Decision A); the second, from the North Carolina General Assembly, was where to locate this district (Decision B). Race was a motivating or dominant factor for Decision A, but not Decision B.

opinion strongly suggests that the Court believed North Carolina had defiantly rejected the Justice Department's suggestion in order to pursue state political agendas. For example, the Court referred twice to the fact that "the Attorney General suggested that North Carolina could have created a reasonably compact second majority-minority district in the south-central to southeastern part of the State," 113 S. Ct. at 2832, including in the very last paragraph of the opinion, when the Court is recapping the most important elements of the case to define the decision's basic principles. 113 S. Ct. at 2820, 2832. In addition, one of the dissenting opinions explicitly rests on the assumption that the state could have drawn a reasonably compact minority-dominated district, most likely in the southeastern part of the state, as the Attorney General had suggested. See 113 S. Ct. at 2841 n.10 (White, J., dissenting). Thus, the "strong" version of the facts most likely informed the Court's internal discussions and the Justices' individual deliberations.

119. See supra note 118.

120. See supra note 118. In other litigation, plaintiffs did allege that North Carolina's rejection of a majority-black district in the southern region of the state in favor of District 12 was the result of political gerrymandering motivated by the desire to protect Democratic incumbents. A three-judge court dismissed that suit, Pope v. Blue, 809 F. Supp. 392 (W.D.N.C. 1992), and the Supreme Court summarily affirmed. Pope v. Blue, 113 S. Ct. 30 (1992).
From the set of possible majority-minority districts, North Carolina selected District 12 on political, not racial, grounds.

If this "strong" version of the facts is true, two important points follow. First, the North Carolina districting story would reveal the way in which politicians have come to use civil rights and the VRA as a screen; while going to Machiavellian lengths to protect their seats and pursue their partisan agendas, politicians claim "the Voting Rights Act made me do it." This is self-interest masquerading as race consciousness. Political actors thus encourage social perceptions that government has been captured by extremism in the name of race. The backlash, which should be directed at self-interested politicians, instead focuses on the Voting Rights Act, the Justice Department, and race-conscious policymaking. Whether intended this way or not, Shaw might thus be seen as a blow against the cynical manipulation of the VRA.

The second point is related. If the design of District 12 reflects political purposes, any potential equal protection violation would therefore have to reside in the earlier decision — that of the Justice Department to require a second majority-minority district. In legal terms, however, finding such a violation at the first stage of this process would be difficult, at least if the routine application of the VRA remains constitutional, as the opinion suggests it does. For the use of race in Decision A is routine, rather than extreme. Indeed, the decision appears to be a typical application of the VRA; the Attorney General found a violation in the failure to create a second majority-minority district where — applying the Justice Department's traditional criteria, which take geographic compactness into account — such a district could be created. Yet nothing in that decision violates the Fourteenth Amendment under the reasoning of Shaw; it is not a decision to ignore all traditionally relevant districting criteria in the name of race.

To see this more clearly, suppose North Carolina had created a relatively compact second district. By definition, this would not trigger the special "district appearance" claim recognized in Shaw. This means that, on Shaw's own reasoning, Decision A, which does employ race, does not violate the Constitution. But if Decision B reflects partisan and incumbency purposes, it too does not involve the use of race at all. Thus, Decision B cannot violate the Constitution either.

What does all this establish? That if constitutional principles must assess state action on the basis of "the actual facts," and if we accept the "strong" version of those facts — as the Court appears to do — Shaw is difficult to explain or rationalize coherently. From that, we
might conclude that Shaw is simply wrong. Alternatively, we might conclude that the seemingly noncontroversial first premise is wrong: perhaps the mistake is in assuming that constitutional principles must be applied to "the actual facts." Yet what could the alternative possibly be? The best answer would have to be that constitutional principles can properly apply to the social perceptions the facts generate, rather than be confined to the actual facts themselves.

This extraordinary conception of constitutional adjudication would have to underlie Shaw if the Court is assuming the "strong" version of the facts. Shaw would then rest on social perceptions in a much deeper way than our initial description suggests. That is, when the Court says, "we believe that reapportionment is one area in which appearances do matter," that belief would have to be operating at two levels. For it is the appearance — not the fact — that a district's appearance reflects value reductionism in the name of race that lies behind Shaw.

If District 12 were indeed drawn for incumbency and partisan reasons, Shaw would ultimately involve a conflict between social perceptions and the actual facts of politically self-interested districting. Once the Court assumed this kind of conflict, which it appears to have done, the Court had three options. First, it might have rejected the equal protection claim in an opinion that exposed the politically self-interested manipulation of race. For those who believe the Court can play a significant educative role, this might have been the preferred course: let the citizens of North Carolina know that their politicians, not the VRA, are to blame.

Second, the Court might have focused only on the actual facts, rather than attempt to assess the social perceptions they created. If no constitutional principle prohibits bizarrely shaped districts when designed for the purpose of protecting incumbents, then no constitutional violation would exist. Many will believe this to have been the better course. After all, legal principles that turn on social perceptions, rather than "the actual facts," will not make judicial decision-making any more consistent or predictable.

The third option would be to apply constitutional principles in a way that gives social perceptions priority over the actual facts. To the extent the Court's opinion assumes the "strong" version of the facts,

121. Shaw, 113 S. Ct. at 2827.
122. On remand or in future applications of Shaw, a crucial question is likely to be whether governments can legitimately assert that partisan advantage or protection of incumbents provides a compelling end under strict scrutiny to justify extremely contorted election districts. For discussion, see infra text accompany notes 254-69.
this rather remarkable option is the one the Court chose in remanding the case for strict scrutiny assessment. Before dismissing this choice as confused or unworkable, we ought to consider whether social perceptions should be excluded from the proper concerns of constitutional law. For many purposes social perceptions are no less "real" than actual facts; these perceptions play a critical role in defining and shaping the prevailing political culture. Perhaps constitutional law is properly concerned with the character of this public culture. Indeed a surprising number of constitutional doctrines or Supreme Court decisions are difficult to rationalize in functional terms; for example, some decisions preclude legislatures from using certain means to achieve a particular end but permit other means to achieve exactly the same end. The best justification for these doctrines and decisions is that they are geared toward cultivating certain collective understandings in the political culture, rather than toward prohibiting certain end states from being achieved. That is, these doctrines require public officials to understand the relationship between certain values in a particular way. \textit{Shaw} rests precisely on this kind of concern for appropriate public understandings regarding the relationship of race to redistricting. Thus, on the strong view of the facts, \textit{Shaw} must stand for the view that extremely contorted minority districts convey the social impression that race has dominated public decisionmaking — that the appearance that race has played such a role violates the Fourteenth Amendment. More concisely, appearance is part of the reality the Constitution addresses.

\textit{b. The weak view of the facts.} If this interpretation of \textit{Shaw} is incorrect, it must be because a different set of facts lies behind the North Carolina districting scheme. The alternative, "weaker" view of the facts would be that North Carolina could not have created a significant

\hspace{1cm} 123. This article is not the place to provide a lengthy catalogue of such doctrines or decisions, but, as one example, consider the recent decision in New York v. United States, 112 S. Ct. 2408 (1992). There Congress had ratified a state-led effort to develop a comprehensive mechanism for fairly distributing the burdens of low-level nuclear waste disposal. The Court held that Congress could enforce this scheme constitutionally through monetary and other incentives, but it could not do so by requiring states to assume ownership of nuclear waste if they failed in their other obligations. 112 S. Ct. at 2412. In functional terms, the decision is easy to criticize, for Congress can enforce the statute through other, perhaps equally effective means — means just as "coercive" in effect as mandatory ownership. Yet the Court might be understood as concluding that Congress expresses a distinct — and constitutionally impermissible — attitude toward the states when it directly mandates their action. Even if vulnerable on functional or doctrinal grounds, the decision might be thought to assert the principle that Congress cannot understand its relationship to states in this way. Interestingly, Justice O'Connor is the author of \textit{New York}. Thus, we might see a general theme emerging in Justice O'Connor's conception of constitutional law and the Court's role: a general attentiveness to the expressive dimensions of public action. For further examples of decisions that might be difficult to rationalize on functional grounds, but are best understood in more expressive terms, see the provocative account in Philip Bobbitt, \textit{Constitutional Fate} 196-223 (1982).
icantly more compact second minority district than CD12. On this view, the Justice Department erred in concluding that the state could have created such a district. In light of the difficulty of reaching firm conclusions from the record, this possibility cannot be dismissed. If the Justice Department were mistaken, then the “bizarre” shape of CD12 would reflect good-faith efforts of the North Carolina General Assembly to comply, not self-serving political ends. Perhaps when the General Assembly attempted to design a second minority-controlled district, the only possibilities turned out to be districts as odd in shape as the one the Assembly eventually chose.

If this account is accurate, the reasons behind the design of CD12 would be more purely race-conscious ones. No manipulation of the VRA or racial symbolism for narrow partisan advantage or protection of incumbents would have been involved. Instead, the state was primarily motivated by the goal of creating a second minority-controlled district; this motivation, not others, would account for the peculiar shape of CD12. To some, this version of the facts might make the design of the district less troubling. On this view, it is far worse for politicians to manipulate social perceptions and pursue political agendas under the guise of complying with federal law and ensuring fair minority representation. When the only means of ensuring fair and effective minority representation is through oddly shaped districts, the direct and exclusive pursuit of this goal should, on this view, be accepted. To others, the weaker interpretation of the facts would make the case even more troubling, for race would then be the dominant purpose behind CD12. Now the actual facts (not the social perceptions) would be that concerns for race had dominated all other redistricting values.

The judicial opinions in Shaw and the record evidence we have reviewed do not permit us to make a convincing choice between the “strong” and “weak” views of the facts. Certainly the Court comes

124. See infra note 126.

125. If this were so, the state perhaps could have submitted its second districting plan for preclearance and tried to demonstrate to the Justice Department that a reasonably compact second minority district could not have been created. Of course, the state might have faced considerable costs, financial and political, from further delaying implementation of the post-1990 congressional redistricting.

126. Trying to resolve which version of the facts — the “strong” or the “weak” version — is more accurate brings to the surface the complexities of current VRA theory and practice. First, when the North Carolina General Assembly came up with its first redistricting plan, which included only one black-dominated district, the General Assembly expressly concluded that “[i]t is apparent that it is only possible to create one majority black district that is reasonably compact, and that is what Chapter 601 does.” Lacy Thornburg, Attorney General of North Carolina, Other Material Concerning the Purpose of the Plan, in Section 5 Submission for North Carolina Congressional Redistricting, Chapter 601 (Aug. 28, 1991) (unpublished document submitted to
closest to having assumed the strong version.\textsuperscript{127} Moreover, the very terms in which the Court chose to confront the formal legal question to be decided assumes this strong version of the facts. Thus, the appellants initially filed a broad jurisdictional statement that directly challenged the state’s power to draw majority-black districts.\textsuperscript{128} But in noting probable jurisdiction of the case, the Court directed the parties to brief a different and narrower question:

Whether a state legislature’s intent to comply with the Voting Rights Act and the Attorney General’s interpretation thereof precludes a finding that the legislature’s congressional redistricting plan was adopted with invidious discriminatory intent where the legislature did not accede to the plan suggested by the Attorney General but instead developed its

\textsuperscript{127} See supra text accompanying note 118.

This way of framing the issue assumes the state could have complied, but deliberately chose its own alternative.

The factual ambiguity behind *Shaw v. Reno* suggests two quite different interpretations of the decision's reach. Because the Court seemingly decided the case after assuming the strong version of the facts, *Shaw* might be read as addressing only similar factual contexts. That is, *Shaw* might stand for the more narrow proposition that a state must justify "highly irregular" minority districts under strict scrutiny when — and only when — the state could have created a reasonably compact minority district instead. If this reading is right, *Shaw* would turn out to be a case of minimal significance addressing only exceptional circumstances; it would have no impact on actual minority representation. States would have to choose more compact districts over extreme ones, but the number of minority districts in a state or nationwide would not be affected. This interpretation of the decision is consistent with the actual question the Court purported to decide and assumes, as the Court seemingly did, the strong view of the facts.

Alternatively, *Shaw* might stand for the broader proposition that, even when a state has no other way of creating a minority district, it cannot resort to "highly irregular" shapes to do so without other compelling justifications. This reading, of course, would have far greater effect on minority districts throughout the country; precisely how great depends on the meaning courts give to "highly irregular," a question on which we offer guidance in Parts III and IV. Conceivably this question might be addressed on remand, for the state might seek to defend its district on the ground, in part, that no more significantly compact minority district could have been created.

The facts the Court apparently assumed and the precise legal question presented provide support for reading *Shaw* narrowly. But, as a predictive matter, we think it more likely the broader reading will prevail. Particular factual contexts often influence the atmosphere in which the Court approaches major legal issues, but those precise facts are sometimes left behind as courts seize upon the broad legal principles the Court has seemingly laid down. In *City of Richmond v. J.A. Croson Co.*, for example, the atmosphere surrounding the Court's review of state affirmative action set-aside programs was certainly influenced by the fact, which the Court stressed, that black officials controlled Richmond's city council. Yet the racial composition of the

131. 488 U.S. at 495-96.
enacting body has become irrelevant as lower courts have taken Croson to establish broad constitutional principles for local set-aside programs.  

In the redistricting context, it seems unlikely that courts will read Shaw to distinguish between "bizarre" minority districts that are the only way to enhance minority representation and "bizarre" districts created where reapportionment bodies could have designed more compact ones. Shaw emphasizes its own specific facts, but the decision is simultaneously written in broad rhetorical and legal terms. To the extent the decision is primarily focused on the social perceptions about politics and race that the Court views irregular race-conscious districts as generating, it seems yet more implausible that courts will distinguish necessarily irregular districts from more superfluous ones. Thus, we think it most likely courts will emphasize the broad themes of Shaw and apply it as a general constraint on "highly irregular" race-conscious districts.

5. Does Shaw Apply to White Districts?

In order to test this analysis, consider whether Shaw applies to districts whose general or voting-age population is overwhelmingly white. Formally, and doctrinally, this might be viewed as an easy question: equal protection cannot apply differently to white-dominated and black-dominated districts. Indeed, a defining trait of the current Court is its emerging commitment to the principle that the Equal Protection Clause cannot apply differently depending on the specific racial group that legislation benefits, burdens, or singles out. This vision informs the strict scrutiny standard adopted in City of Richmond v. J.A. Croson Co.  

Yet, in the redistricting context, this kind of formal equality seems particularly odd as well as inconsistent with any purposive, rather than formal, interpretation of Shaw. To begin with, Shaw does not recognize a general constitutional barrier to "highly irregular" districts. Strict scrutiny is not required for districting that is "bizarre on its face," but only for districting that is "so bizarre on its face that it is 'unexplainable on grounds other than race.' "

If we ask how best to give meaning to these principles when ap-

134. See supra text accompanying notes 51-57.
plied to white-controlled districts, the social and political contexts in which such districts are likely to arise suggest that *Shaw* might rarely, if at all, apply. Highly irregular, white-controlled districts might be created in three general contexts. First, they might be located in a state, like Iowa, that is overwhelmingly white. Conceivably, such a district might involve contorted boundaries for a number of reasons, including partisan advantage, incumbency protection, or enhancement of one local economic interest at the expense of others. Yet, by definition, the strange appearance of such a district could not be understood in racial terms, let alone *only* in racial terms. Thus, on its own terms, *Shaw* would not apply.

Next, consider a similar district in a state with a significant black population, but where the oddly shaped white district is located in a region of the state far removed from where most black residents live. Congressional District 4, in Tennessee, appears to be such a district; it cuts a swath through the middle of the state and, as our quantitative analysis will show later, it is one of the most diffused districts in the country.136 Tennessee's voting-age population is 14.6% black, but largely concentrated in the southwestern part of the state, around Memphis. Thus, no plausible basis appears to exist for concluding that race explains this "highly irregular" district. Any district that might reasonably take its place, no matter how compact, would likely include a similar percentage of white voters. Under this scenario, the district might be odd, but not because it is "segregating" races. Again, on its own terms *Shaw* presumably would not apply; Tennessee would not have to defend this district under strict scrutiny.

The third, more complicated, scenario would involve a highly irregular district in a state with a significant black population or in a region in which such a population lives. If the state designs the district with a racially discriminatory intent or if the district results in minority-vote dilution, it would be unlawful without regard to *Shaw*. But, if it is not unlawful on those grounds, could such a district plausibly generate the perception that it has been designed for racial reasons? In the absence of illegal minority-vote dilution, this scenario is factually unlikely because numerous nonracial reasons might account for the district's irregular shape. However base or noble the motivations of partisan manipulation, incumbency protection, and the like might be, they are not racial motivations. Nor are whites likely to benefit, as whites, from contorted district shapes that do not have the effect of diluting minority votes. In other words, when people see "bi-

136. See *infra* Table 3.
zarrely shaped,” white-dominated districts — and no illegal vote dilu-
tion is taking place — are they likely to perceive those districts as
e extremist creations in the name of race, at least as \textit{Shaw} understands
that concept?

The important general point here is that \textit{many} reasons might ex-
plain oddly shaped white-dominated districts. Yet similar black-domi-
nated districts are more likely to reflect a single, recurring aim: to
enhance effective minority representation. This asymmetry is a func-
tion of the social realities of race in this country and of the existence of
the VRA. Whites do not need to be concentrated into districts to as-
sure their effective political participation; in contrast, as the VRA rec-
ognizes, minorities might need effective control over some “safe”
districts to avoid their submergence in a hostile majority.

In terms of applying \textit{Shaw}, this means that, in principle or in ac-
tual fact, \textit{Shaw} is unlikely to affect white districts. Only in the third
scenario is \textit{Shaw} potentially relevant, and, even there, it seems unlikely
that courts will find race to be the basis for contorted majority-domi-
nated districts (in the absence of actual vote dilution). This result
might seem an obvious corollary of the “similarly situated” require-
ment of equal protection: given social realities, black and white dis-
tricts rarely, if ever, arise in similar circumstances. But courts,
including the Supreme Court, might find it difficult to embrace this
conclusion directly. To announce that \textit{Shaw} constrains only the
choices of policymakers designing minority-controlled districts is, at
the least, awkward, particularly for a Court committed to formal
equality. Yet the logic of \textit{Shaw} itself would seem to dictate such a
conclusion.

\* \* \*

We are now in a position to summarize the purposes and principles
that underlie \textit{Shaw}. Government cannot redistrict in a way that con-
veys the social impression that race consciousness has overridden all
other, traditionally relevant redistricting values. In the Court's view,
certain districts whose appearance is exceptionally “bizarre” and “ir-
regular” suggest that impression. Plaintiffs need not establish that
they suffer material harm, in the sense of vote dilution, from such a
district. \textit{Shaw} is fundamentally concerned with expressive harms: the

\footnote{137. Conceivably, there might be situations in which boundaries were intentionally manipu-
lated to deny blacks potential influence that would still not amount to illegal vote dilution. If
there are ever such circumstances that do not violate the VRA itself, \textit{Shaw}'s logic would sensibly
extend to these contexts.}
social messages government conveys when race concerns appear to submerge all other legitimate redistricting values.

Identifying these principles is one task; giving meaningful content to them is another. The "special harms" which concern the Shaw Court arise only when some threshold of distorted district "appearance" has been crossed. But how is that threshold to be recognized? If Shaw is fundamentally concerned with social perceptions, can legal criteria be developed to discipline the inquiry — of courts and reapportionment bodies — into these perceptions? Alternatively, are these expressive harms so inarticulable and unquantifiable that courts must be left to apply their intuitive judgments in an ad hoc, case-by-case fashion?

In Part II, we describe previous efforts of courts to give content to similar requirements governing election-district shape. The unpromising history of these efforts suggests the need for an alternative approach. In Part III, we develop quantitative standards for judging district appearance and thereby giving content to Shaw's principles.

II. COMPACTNESS UNDER STATE LAW AND THE VOTING RIGHTS ACT

Shaw raises the issue of district compactness in an unusual — indeed, singular — legal context: the constraints the U.S. Constitution imposes on the appearance of legislative districts. As noted earlier, Shaw is the first case to suggest such a constraint as a matter of federal constitutional law.138 Issues of district compactness139 have arisen in

138. See supra text accompanying note 6.
139. Nothing in the Constitution itself requires the states to create congressional districts. See U.S. CONST. art. I, § 2. Indeed, in the first elections after ratification, the majority of new states held at-large congressional elections. Only Massachusetts, New York, Maryland, Virginia, and South Carolina were organized into representative districts. There is evidence that at least some of the Framers expected the states to create districts and intended the Time, Place, and Manner Clause of Article I, Section 4 to act as a brake against factional districting by state legislatures. Andrew Hacker, Congressional Districting: The Issue of Equal Representation 8-10 (1963). For example, James Madison approvingly asserted in The Federalist No. 56, at 379-80 (James Madison) (Jacob E. Cooke ed., 1961): "Divide the largest state into ten or twelve districts, and it will be found that there will be no peculiar local interest . . . which will not be within the knowledge of the representative of the district." Similarly, Alexander Hamilton stated at the New York ratifying convention: "The natural and proper mode of holding elections will be to divide the state into districts in proportion to the number to be elected." Alexander Hamilton, First Speech of June 21 in the New York Ratifying Convention, in Selected Writings and Speeches of Alexander Hamilton (Morton J. Frisch ed., 1985), quoted in Congressional Quarterly Inc., Jigsaw Politics: Shaping the House After the 1990 Census 6 (1990) (alteration in original).

As of 1840, nine of the 31 states continued to elect representatives at large. In response to the frequent occurrence of a majority party's sweeping an entire state delegation in at-large states, Congress invoked the Time, Place, and Manner Clause to pass the Reapportionment Act of 1842, ch. 47, 5 Stat. 491. That Act required, for the first time, that representatives "shall be elected by districts composed of contiguous territory equal in number to the number of Representatives" for
two other legal contexts, however, and judicial experience from these other settings provides a starting point for considering the ways courts might implement Shaw.

First, twenty-five states, through state constitutions or statutes, require compact legislative districts.\(^{140}\) In practice, these requirements have been largely ineffective.\(^{141}\) Second, the VRA itself, as interpreted in Thornburg v. Gingles,\(^ {142}\) requires proof that a reasonably compact minority district could be created in order to establish substantive liability.\(^ {143}\) Although only a few decisions have addressed this aspect of Gingles, the VRA cases provide useful additional information concerning judicial implementation of compactness standards. This experience also suggests that, absent quantitative guidelines, judicial efforts to give content to compactness requirements are likely to be inconsistent, ad hoc, and unpredictable.

Neither of these experiences suggests that easy solutions will be forthcoming to Justice White's concern that Shaw is unworkable.\(^ {144}\) Recent developments in both technology and the social sciences, however, offer a principled and judicially administrable way out of this new redistricting "thicket."\(^ {145}\) That path involves embracing quanti-
tative measures of "district appearance" that social scientists and statisticians have developed in recent years.

A. State Compactness Requirements

Nearly all of the twenty-five states that require compact districts express this requirement in qualitative terms. Many provisions simply require that districts be "compact," often in a ritualistic trilogy like the following from the Illinois Constitution: districts must be "compact, contiguous and substantially equal in population." In other states, this language is modified by provisions requiring that districts be as "compact as possible," as "compact as practicable," or "reasonably compact." Just two states, Iowa and Colorado, express compactness requirements in specific quantitative formulas.

With respect to both reapportionment practice and judicial decisionmaking, these requirements have been ineffective. The requirements seem to be infrequently litigated; when they are, state courts have been reluctant to enforce them, expressing extreme deference to political bodies. To be sure, a few courts have overturned redistricting plans on state law compactness grounds. Not surprisingly, perhaps,

U.S. 549, 556 (1946), and it has continued to accompany virtually all judicial entries into new issues surrounding redistricting. See generally Peter H. Schuck, The Thickest Thicket: Partisan Gerrymandering and Judicial Regulation of Politics, 87 COLUM. L. REV. 1325 (1987).

146. ILL. CONST. art. IV, § 3(a).

147. See, e.g., MICH. CONST. art. IV, § 2 (requiring state senatorial districts to be drawn "as rectangular in shape as possible"); MO. CONST. art. III, § 5 (mandating that state senate districts be "of contiguous territory, as compact and nearly equal in population as may be"); N.Y. CONST. art. III, § 5 (requiring assembly districts to be drawn "in as compact form as practicable"). For a full survey of state compactness requirements, see Grofman, Criteria for Districting, supra note 7, at 177 tbl. 3.

148. One of the two compactness standards that the Iowa legislature adopted in 1980 is expressed as "the ratio of the dispersion of population about the population center of the district to the dispersion of population about the geographic center of the district." IOWA CODE ANN. § 42.4(1)(a) (West 1991). Colorado's Constitution provides a compactness measure based on the sum of the perimeters of district boundaries. COLO. CONST. art. V, § 47.

149. The leading recent state case is probably Schrage v. State Bd. of Elections, 430 N.E.2d 483 (Ill. 1981). The case is particularly significant because the court found a compactness violation with respect to the design of a single state district. More commonly, state courts that strike down redistricting plans do so on the ground that the plan as a whole, rather than an isolated district, violates state law requirements. Schrage was the first case in Illinois history to strike down a districting plan for violating the state constitution's compactness requirement. A year later, the court in Martin v. Soucie, 441 N.E.2d 131 (III. App. Ct. 1982), relied upon Schrage to defeat an apportionment plan for county board elections.

For other state cases finding violations of state law compactness requirements, see Preisler v. Doherty, 284 S.W.2d 427 (Mo. 1955) (invalidating state senatorial redistricting of the City of St. Louis); State ex rel. Barrett v. Hitchcock, 146 S.W. 40 (Mo. 1912) (invalidating entire Missouri state senatorial apportionment on constitutional compactness and population equality failings); In re Sherill, 81 N.E. 124 (N.Y. 1907) (invalidating entire 51-district New York state senatorial apportionment on grounds that two districts failed to meet constitutional compactness and population equality requirements); In re Livingston, 160 N.Y.S. 462 (Sup. Ct. 1916) (voiding apportionment of assembly districts within a senate district).
the state courts in the two states, Iowa and Colorado, that embody compactness standards quantitatively are among the few courts to have found compactness violations. Generally, however, state courts purport to enforce these requirements while signaling that they will seriously scrutinize only dramatic departures from the requirements. Often, courts will not invalidate individually noncompact districts unless they find the entire districting plan to be insufficiently compact. In addition, when state courts do confront challenges to district compactness, they typically rely on their own intuitive visual assessments — even when the parties have presented expert testimony analyzing districts through quantitative measures.

This article provides quantitative information that bolsters the sense one gets from reading the caselaw that qualitative compactness standards have little practical effect. Using social-scientific methods that we describe and justify later in this article, we have compared the compactness of U.S. House of Representatives districts in the 1980s and 1990s in those states that legally require compact congressional districts with those that do not. Table 1 presents these results.


151. See, e.g., Preisler v. Kirkpatrick, 528 S.W.2d 422, 426-27 (Mo. 1975) (finding all but two districts to be within compactness requirements and holding that “considering the overall, state-wide plan developed ... the districts established substantially comply with the compactness requirement” of the Missouri Constitution); Opinion to the Governor, 221 A.2d 799 (R.I. 1966) (finding districting plan valid absent “a complete departure from the requirement for compactness”) (advisory opinion). See generally Grofman, Criteria for Districting, supra note 7, at 86.

152. A typical example is the recent decision of the Virginia Supreme Court in Jamerson v. Womack, 423 S.E.2d 180 (Va. 1992). There the plaintiffs challenged, on compactness grounds, two state senate districts, at least one of which was designed to be a majority-black district. The court acknowledged that one of the districts was longer than any other in the state and that the enacted plan split more counties than other plans the legislature had considered. At trial, each side offered expert testimony on the compactness of the districts and plan. On appeal, the Virginia Supreme Court did not evaluate this testimony or engage in any analysis of the quantitative measures presented. Instead, the court found it sufficient that the expert testimony was in conflict and that the trier of fact had accepted one side's testimony. 423 S.E.2d at 186.

Similarly, in Schrage v. State Bd. of Elections, 430 N.E.2d 483 (Ill. 1981), the Illinois Supreme Court chose to “rely on a visual examination of the questioned district as other courts have done,” finding that “a more precise measurement is unnecessary.” 430 N.E.2d at 487; cf. In re Legislative Districting of the State, 475 A.2d 428, 437 (Md. 1984) (“With the possible exception of Colorado ... no jurisdiction has defined or applied the compactness requirement in geometric terms. On the contrary, most jurisdictions have concluded that the constitutional compactness requirement, in a state legislative redistricting context, is a relative rather than an absolute standard.”) (citation omitted).
TABLE 1
COMPACTNESS OF U.S. HOUSE DISTRICTS IN 1980s AND 1990s BY
PRESENCE OF COMPACTNESS REQUIREMENTS153

<table>
<thead>
<tr>
<th></th>
<th>Dispersion Scores</th>
<th>Perimeter Scores</th>
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<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
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<tr>
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<td></td>
</tr>
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<td>Compactness Required</td>
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<td>.39</td>
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<tr>
<td>N=33</td>
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<td></td>
</tr>
<tr>
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<td>.06-.71</td>
<td>.37</td>
</tr>
<tr>
<td>N=396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990s</td>
<td></td>
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</tr>
<tr>
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<td>.05-.58</td>
<td>.36</td>
</tr>
<tr>
<td>N=30</td>
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<td></td>
</tr>
<tr>
<td>Compactness Not Required</td>
<td>.03-.64</td>
<td>.36</td>
</tr>
<tr>
<td>N=398</td>
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</tr>
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Note: States with only one congressional representative are excluded. Hawaii, Iowa, Missouri, Montana, Virginia, West Virginia and Wyoming require compactness for congressional districts. Montana in the 1990s and Wyoming in both decades are excluded as single-district states.

For present purposes, it is sufficient to know that the quantitative measures of district compactness in Table 1 vary from 0.0 to 1.0, with more compact districts scoring higher on this scale. As Table 1 reveals, there appears to be no meaningful difference, either in the 1980s or the 1990s, between the compactness of congressional districts in states that legally require it and those that do not.154 This result suggests that redistricting bodies do not take compactness into account any more when it is legally required, and that courts have not been willing to enforce such requirements in ways that affect outcomes.

The number of states that require compactness of congressional districts is small; hence, conclusions based on these data must be tentative.155 Nevertheless, the best inference from the available information is that, as presently enforced, qualitative state compactness requirements do little to stimulate greater regularity in congressional district shapes.

153. Information provided by Election Data Services, Inc.

154. Only the perimeter measure in the 1980s shows enough of a difference to be possibly meaningful. We discuss this measure infra at text accompanying notes 202-04.

155. With so few states requiring compactness, individual cases could greatly influence the results. Hawaii's districts are relatively noncompact because they are artifacts of the unusual geography (island composition); balancing this extreme, perhaps, are Iowa's relatively compact districts based, in part, on its rather square shape.
B. Compactness Requirements Under the Voting Rights Act

Legal requirements that districts be compact also arise under the VRA.\(^{156}\) The Court has yet to give this requirement much specific content. Last Term, however, in another significant voting-rights case, *Grawe v. Emison*,\(^{157}\) the Court intimated that state and local jurisdictions, as well as lower courts, were paying insufficient attention to compactness. *Grawe* might suggest that the Court is likely to return soon to the requirement of compactness under the VRA.\(^{158}\)

Even before the Supreme Court's focus on compactness last Term, questions of appropriate district shape were becoming increasingly important in the lower courts.\(^{159}\) Under the VRA, compactness arises both as an element of plaintiffs' claims and as a defense put forward by jurisdictions. Compactness concerns can also arise at both the liability and remedial stages of litigation. To date, only a handful of federal courts have addressed these issues; like the state courts, those that have done so have relied on intuitive, eyeball assessments rather than quantitative standards. The decisions display considerable inconsistency.\(^{160}\)

At one pole, some courts have viewed the governmental interest in enhancing minority representation as sufficient in and of itself to justify contorted district shapes. The leading example is *Dillard v.*

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158. In *Grawe*, a federal district court, after having appointed a special master, had crafted a redistricting plan for Minnesota's state senate. In overturning that decision, the Supreme Court described the one state senate district, which the district court had believed the VRA required, as an "oddly shaped creation." The Court also characterized as "dubious" the district court's assumption that this district was "geographically compact" under *Gingles*. 113 S. Ct. at 1085. The Court described this district, Senate District 59, as "stretching from south Minneapolis, around the downtown area, and then into the northern part of the city in order to link minority populations." 113 S. Ct. at 1083. In total population figures, the district was 43% black and 60% minority. 113 S. Ct. at 1083. Because the Court overturned the district court's judgment on other grounds, these comments are dicta, but they might nonetheless be suggestive.
159. See generally Pamela S. Karlan, *Maps and Misreadings: The Role of Geographic Compactness in Racial Vote Dilution Litigation*, 24 HARV. C.R.-C.L. L. REV. 173, 199 (1989) ("Geographic concerns played only a minor role in the legislative history of amended Section 2. In the past two years, however, geographic compactness has moved to the forefront of vote dilution litigation . . . .") (footnote omitted).
160. In these cases, the courts sometimes discuss compactness in isolation and sometimes in terms of the appropriate trade-offs between it and other values. When courts treat compactness as the sole variable, they frame the judicial inquiry as whether districts are "sufficiently compact." When courts consider the appropriate trade-offs between shape and other relevant redistricting values — for example, avoidance of vote dilution, compactness, preservation of communities of interest — the question is what degree of compactness is consistent with other legitimate redistricting policies.

Although the way the question is framed initially may have some effect on shifting burdens of evidentiary production, ultimately these two approaches amount to the same inquiry. Whether a district is "sufficiently" compact, for example, is largely a function of how one weighs the value of compactness against competing districting values.
Baldwin County Board of Education,\textsuperscript{161} in which the court rejected the county's argument that a proposed majority-minority school board district would be "too elongated and curvaceous."\textsuperscript{162} The court explained that compactness "does not mean that a proposed district must meet, or attempt to achieve, some aesthetic absolute, such as symmetry or attractiveness."\textsuperscript{163} Thus, the court accepted plaintiffs' proposed districting plan for the county board of education, even though it included this narrow, elongated district.\textsuperscript{164} Other courts have taken a comparative approach. They hold minority-controlled districts that "look rather strange" to be nonetheless sufficiently compact when they "are not materially stranger in shape than at least some of the districts contained" in a jurisdiction's current districting plan.\textsuperscript{165}

At the other extreme, some courts decline to find substantive VRA liability when the only possible minority-controlled districts are, in the court's view, insufficiently compact. Thus, one federal court recently rejected a proposed district as "an odd contortion" that "reaches down to get a pocket of white voters in the south-east-central part of the county and then curves around to the west and then back to the north-east corner of the county . . . ."\textsuperscript{166} Rhetorically asking, "does a legislative body have to draw lines in a distorted way?" the court answered "no."\textsuperscript{167} Similarly, another federal court recently rejected a VRA challenge to a county supervisory district in which the plaintiffs' proposed plan joined black residents from three distinct municipalities into a single district. The court concluded that "[t]his exercise results in extreme gerrymandering," with the district being "drawn in an unusual or illogical manner."\textsuperscript{168}

Courts also merge the definition of compactness into other relevant districting criteria, such as whether the district preserves a "commu-

\begin{itemize}
  \item \textsuperscript{161} 686 F. Supp. 1459 (M.D. Ala. 1988).
  \item \textsuperscript{162} 686 F. Supp. at 1466.
  \item \textsuperscript{163} 686 F. Supp. at 1465. Not anticipating Shaw, the court went on to add that "[a]n aesthetic norm" would be "an unworkable concept, resulting in arbitrary and capricious results, because it offers no guidance as to when it is met." 686 F. Supp. at 1465-66.
  \item \textsuperscript{164} The court also noted that the county's proposed plan contained a similarly shaped district, and that the board's superintendent had testified that the district posed no administrative or other problems. 686 F. Supp. at 1466.
  \item \textsuperscript{165} Jeffers v. Clinton, 730 F. Supp. 196, 207 (E.D. Ark. 1989); see also Neal v. Coleburn, 689 F. Supp. 1426, 1437 (E.D. Va. 1988) (stating that asymmetrical districts are acceptable when "in line with the configurations of electoral districts that have been approved in other cases").
  \item \textsuperscript{166} Bryant v. Lawrence County, 814 F. Supp. 1346, 1350 (S.D. Miss. 1993). The court also concluded that the plaintiffs drew the proposed districts "without regard to natural geographic boundaries, [or] splitting of precincts." 814 F. Supp. at 1350.
  \item \textsuperscript{167} 814 F. Supp. at 1351.
  \item \textsuperscript{168} Clark v. Calhoun County, 813 F. Supp. 1189, 1198 (N.D. Miss. 1993).
\end{itemize}
nity of interest” or enables “effective representation.” Yet, even when courts merge these inquiries, the decisions continue to conflict. For example, the *Dillard* court said “a district would not be sufficiently compact if it [were] so spread out that there was no sense of community”\(^{169}\) and then went on to accept a narrow district that stretched most of a county’s length. In contrast, the court in *East Jefferson Coalition for Leadership and Development v. Jefferson Parish*\(^{170}\) adopted a similar “recognizable community” definition of compactness,\(^{171}\) but, in applying the standard, it held that a thirty-five-sided district that crossed the Mississippi River failed to meet the standard. The failure to create this district, therefore, did not constitute a VRA violation.\(^{172}\)

Different federal courts have also interpreted compactness requirements inconsistently with respect to the same geographic features. A recurring issue is whether minority areas in different regions can be joined through corridorlike connections. One court rejected a districting plan that connected two black populations by a “long, narrow corridor.” The court labeled this “unacceptable ‘gerrymandering’” that “arbitrarily cuts diagonally through the center of the county.”\(^{173}\) But another court explicitly approved a “corridor” between black populations, concluding that it was “not unreasonably irregular in shape,

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169. *Dillard v. Baldwin County Bd. of Educ.*, 686 F. Supp. 1459, 1466 (M.D. Ala. 1988) (noting that a district would have “no sense of community . . . if its members and its representatives could not effectively and efficiently stay in touch with each other; or . . . if its members and its representatives could not easily tell who actually lived within the district”).


171. “A proposed district is sufficiently compact if it retains a natural sense of community. To retain that sense of community, a district should not be so convoluted that its representative could not easily tell who actually lives in the district.” 691 F. Supp. at 1007.

This principle appears similar to one that Bernard Grofman has recently advanced under the label of “cognizability”:

I wish to argue that districts can be so far from cognizable that they violate what we might think of as a due process component of equal protection by damaging the potential for “fair and effective representation.” By “cognizability,” I mean the ability to characterize the district boundaries in a manner that can be readily communicated to ordinary citizens of the district in commonsense terms based on geographical referents. . . .

. . . .

Egregious violations of the cognizability principle can be identified by making use of standard criteria of districting, such as violation of natural geographic boundaries, grossly unnecessary splittings of local subunit boundaries (such as city and county lines), and sunderrings of proximate and contiguous natural communities of interests. Grofman, *Vince Lombardi*, supra note 7, at 1262-63 (footnotes omitted). Grofman acknowledges that he does not yet have a clear operational test for noncognizability, which he recognizes is especially problematic because cognizability is best thought of as a continuum. *Id.* at 1262.

172. 691 F. Supp. at 1007. The court nonetheless did invalidate Jefferson Parish’s unusual council-election scheme, which was not used anywhere else in Louisiana, on other grounds. 691 F. Supp. at 994 n.2, 1008.

given the population dispersal within the County."\(^{174}\)

Whether any of these federal court decisions merely appear to be in tension with each other, or directly conflict, cannot be determined without an intensely local appraisal of each geographic context. At the least, however, these decisions, and others like them,\(^{175}\) reveal considerable uncertainty as to how courts and other bodies interpret and weigh compactness against other relevant redistricting values. This is not surprising: compactness is the conceptual point at which the tension between the traditional American commitment to territorial districting and the VRA concern for fair representation of group interests must be resolved.\(^{176}\)

The appropriate trade-off between enhancing minority representation and respecting the interests reflected in a territorial-based districting system is both elusive and an issue of considerable political and


\(^{176}\) See, e.g., DeGrandy v. Wetherell, 794 F. Supp. 1076, 1085 (N.D. Fla. 1992) ("[W]e conclude that 'the law supports the drawing of a minority district where, in light of minority concentrations and community of interests, such a district can reasonably be drawn.' ") (quoting Report of the Special Master at 14 (May 18, 1992)), \textit{cert. granted sub nom.} Johnson v. De Grandy, 113 S. Ct. 2437 (1993); Jeffers v. Clinton, 730 F. Supp. 196, 205 (E.D. Ark. 1989) ("If . . . reasonably compact and contiguous majority-black districts could have been drawn, and if racial cohesiveness in voting is so great that . . . black voters' preferences for black candidates are frustrated . . . the outlines of a Section 2 theory are made out.")., \textit{affd.}, 498 U.S. 1019 (1991).


According to a former Assistant Attorney General, Civil Rights Division, "[t]here is one thing the Civil Rights Division does not do: It does not require, because the law does not require, the maximization of minority representation." Dunne, \textit{supra} note 38, at 1128.
philosophical conflict. In the absence of some guidelines for making this trade-off, the likely result will be increasingly inconsistent judicial decisions and manipulative uses of the VRA by districting bodies. One alternative is to develop quantitative approaches for evaluating district appearance. In Part III, we turn to that task.

III. DEFINING DISTRICT APPEARANCE CONSISTENTLY

Recent developments in both theory and technology now make it possible to evaluate district "appearances" in a systematic and consistent way. Quantitative information can now be generated concerning different aspects of an election district's shape, including how much its borders meander and how much the area it covers is concentrated or diffused. In this Part, we show how such quantitative measures provide a better alternative to judging district "compactness" than the intuitive approaches courts used before Shaw. In addition, Shaw elevates the stakes considerably in the search for a workable means of defining "irregular" districts, for, with a constraint of this sort constitutionally enshrined, judicial power over the politics of redistricting is potentially expansive, undisciplined, and explosive. Quantitative measures for assessing election-district shapes provide perhaps the most promising approach to turning Shaw into a set of relatively clear and principled guidelines.

The theory of Shaw makes social perceptions about district appearance central. This might suggest that these social perceptions are what we should seek to quantify. Nonetheless, for several reasons, we focus instead on district appearance itself. Although we believe the impulse behind Shaw ultimately rests on judicial concerns for social perceptions, we believe those concerns must necessarily operate at a general level, rather than forming the basis for concrete decisions regarding particular districts. That is, Shaw is not likely to become a transmission belt through which social perceptions are directly relayed, case by case, into constitutional doctrine. The spectre of legal decisions turning on public opinion surveys is no more appealing here than in other areas in which legal doctrine is nonetheless responsive, in a general sense, to social perceptions. The problem is not just the unadministrability of any legal standard grounded on such vaporous foundations. More importantly, the relevant social perceptions would have to be ones the legal system could legitimately credit; only perceptions that are properly informed, for example, and generated under normatively appropriate conditions could plausibly be relevant. Thus, the relevant social perceptions would have to reflect acceptance of governing law, such as the VRA itself, as well as awareness of relevant
general facts, such as, perhaps, the way in which redistricting routinely operates.

As a result, courts implementing Shaw cannot treat social perceptions as a brute fact on which to ground decisions, even if we could measure those perceptions accurately. Courts must inevitably play the more active role of attributing normativity to certain perceptions; in the mediating legal language typically used in such contexts, courts must decide which social perceptions to deem "reasonable." Ordinary observers, for example, might recoil at the shape of many or most congressional districts today, but Shaw does not penetrate this deeply into the foundations of current politics. Shaw is designed to deal with aberrational contexts, not routine ones — with "highly irregular" and "bizarre" districts, not common ones. Courts will have to determine legitimately and consistently when this line can be said to have been crossed.

Shaw thus sets into motion constitutional doctrine ultimately concerned with social perceptions and collective understandings, but a doctrine that courts must necessarily implement with some critical perspective on these perceptions. At the moment, there appear to be two alternative methods by which courts might take on this role. The first is for courts to evolve, on a case-by-case basis, a series of qualitative judgments concerning when districts are sufficiently "irregular" to trigger strict scrutiny. In the context of redistricting, this common law evolutive approach poses multiple dangers. Individual judges do not confront enough redistricting cases to be likely to develop sufficiently informed intuitions about the broader pattern of district shapes. If left to their untutored qualitative assessments, judges are likely to render inconsistent and unpredictable decisions, as has occurred with previous efforts to enforce compactness standards. Yet the costs of uncertainty in this area are particularly high. Redistricting forces on all sides will struggle to exploit any uncertainties for political gain. Fomenting yet more litigation and further delaying the time at which plans become effective create additional costs.

The second alternative for implementing Shaw — the quantitative approach we develop here — is more promising, not just for implementing Shaw, but for other, related purposes. First, Shaw requires that values associated with district appearance be judicially separated from other relevant redistricting concerns; district appearance triggers strict scrutiny, after which jurisdictions must offer sufficient justifications to account for "highly irregular" shapes. To implement this framework, district appearances must therefore be separated, at least initially, from other districting values. Before Shaw, many commenta-
tors had resisted treating appearance or compactness as of any intrinsic value; compactness might be associated with relevant substantive districting values, like preserving communities that shared common political interests, but commentators viewed compactness as a poor proxy for those values. 177 Similarly, commentators disagreed as to whether a requirement of compactness is an important instrumental prophylactic against partisan and other forms of gerrymandering. 178

177. Commentators have generally argued that compact districting directly advances three principal values: enhanced communication between representatives and constituents; greater voter knowledge of their representatives and of their political "neighbors"; and greater trust in the legitimacy of a political system in which districts appear "fairly" shaped — or, at least, not obviously unfairly shaped.

With respect to the first value, some have argued that technological changes — such as telephones, modern highway systems, fax machines, and the like — considerably undermine the relationship between compactness and effective communication. See, e.g., CAIN, supra note 7, at 32–33. At the same time, communication still often takes place in group contexts, with legislators meeting all manner of boards, committees, organizations, governmental bodies, and so on. Compact districts might facilitate communication because they are likely to hold in check the number of such groups. Empirical evidence on this question is slim. "Community-based" districts make it more likely that constituents can identify their congressmen, though this result does not necessarily mean that such districts encourage better communication. Richard G. Niemi et al., The Effects of Congruity Between Community and District Congruity on Salience of U.S. House Candidates, 11 LEGIS. STUD. Q. 187 (1986). There is, of course, no guarantee that compact districts enhance communication, but the question is whether there is any meaningful tendency in this direction.

With respect to voter knowledge, the above study suggests, not surprisingly, that constituents are more likely to know the names of their congressmen when the lines of districts and "natural" communities coincide. See id. at 187–88 (citing studies). At the same time, "meaningful" and compact districts are not necessarily the same. When cities or other political subdivisions are themselves noncompact, requiring compact districting would be at odds with this very concern. See Grofman, Vince Lombardi, supra note 7, at 1263 (advocating a "cognizability," rather than a compactness, standard).

Finally, with regard to the claimed relationship between compactness and political legitimacy, critics have argued the public knows so little about districting that any such effect can be safely ignored. See CAIN, supra note 7, at 188–91. Shaw, however, with its evident concern about social perceptions, appears to reject this argument.

Of course, to the extent that departures from compactness are necessary to promote other values, such as enhancing fair and effective minority representation, a complete assessment of compactness must weigh the costs of departing from it against whatever values it might intrinsically serve. Cain writes:

Those who argue for the importance of compactness must be willing to accept limitations on the achievement of equity for minorities . . . . From the perspective of the white, median voter in this country, compactness is desirable, since it enhances the strength of the majority. From the perspective of the nonwhite population, compactness deprives them of equitable representation for the same reason.

Id. at 51.

178. For a strong argument that compact districting does tend to minimize impermissible gerrymandering, see Justice Stevens's separate opinion in Karcher v. Daggett, 462 U.S. 725, 755–58 (1983) (Stevens, J., concurring). Nevertheless, compactness certainly is not sufficient to guarantee fair distribution of power among competing groups — assuming, for the moment, that fairness is to be measured through some degree of proportionality between groups in the electorate and in the representative body. An equitable distribution of power depends on the geographical distribution of the relevant groups. In addition, computer programs now allow the creation of large numbers of potential districts, all of them compact, but differing in their partisan, racial, and other characteristics. Thus, the ability of compactness to serve as a partial constraint on gerrymandering is lesser now than previously. See generally CAIN, supra note 7, at 35–38.
For Fourteenth Amendment purposes, however, the terms of the debate have shifted. *Shaw* isolates district appearance and turns it into a threshold factor for setting strict scrutiny into motion. Thus, district appearance must now be constitutionally assessed, in and of itself, regardless of whether commentators might value it intrinsically, instrumentally, or not at all.

Second, outside of constitutional law, *Shaw* will also likely pressure courts to focus more attention on what compactness ought to mean under the VRA. Statutory requirements of compactness will be implicated in numerous voting-rights cases, particularly for dispersed minority populations, thus generating the need for clear guidelines implementing this element of the VRA. Quantitative measures of compactness are a way of providing clear and consistent standards for courts and reapportionment bodies to follow.

Third, such measures can be used to shift the focus of courts and others from individual districts, examined in isolation, to the pattern of districting within a state, as well as nationwide. We can also compare the shapes of districts historically, enabling examination of the response of district shapes to various forces over time. This kind of information can make judicial inquiry into district "appearances" meaningful by establishing the baselines against which individual districts can be evaluated. Absent such baselines, different judges are likely to find quite different districts failing their intuitive conception of "bizarre." This information is also crucial for general public discussion of where we are and ought to be in the legal regulation of the redistricting process. Thus, in Part IV, we are able to rank all the current U.S. congressional districts, compare North Carolina District 12 to other districts, indicate how many majority and minority districts are designed in ways that might trigger the strict scrutiny of *Shaw*, and compare U.S. congressional districts over time.

The information we provide here should be used carefully, and we must note several caveats at the outset. As in most legal areas, quantitative measures for redistricting are not a panacea. With respect to the question in *Shaw*, quantitative measures cannot be used mechanically to determine whether a district is "bizarre." Even after district shapes are catalogued in absolute terms, the significance of the results will continue to depend on the specific contexts in which particular districts exist. Maryland, for example, is a convoluted state, and any "irregular" district there is presumptively less troubling than a similar district in the square state of Colorado. The results of our quantitative studies enable meaningful threshold comparisons. The ultimate signif-
icance of any quantitative assessment of district "appearance," however, necessitates analysis of the specific political and geographic context in which particular districts originated.

In addition, we do not suggest that there is some ideal level of compactness that every district ought to meet. Nor do we suggest that there is some objective level of "highly irregular" that every district ought to avoid. Neither Shaw nor the VRA entail any requirement that districts meet some Platonic ideal of shape. Similarly, at what point irregular districts become "too irregular" is a political and legal judgment about the appropriate trade-off between competing values; quantitative measures can provide absolute and comparative information about districts, but they cannot resolve this question of judgment. Once such judgments are made, however, quantitative measures can assist in ensuring that they are carried out consistently.

Redistricting is an area in which quantitative standards have demonstrated their appeal in the past. Once Baker v. Carr declared malapportionment claims justiciable, legal principles gravitated quickly, indeed almost ineluctably, to the one-person-one-vote quantitative formula. Although there is disagreement over the extreme mathematical exactitude the Court has given this principle, there is little disagreement that one person, one vote is the appropriate ideal. Quantitative measures of compactness cannot function in precisely the same way as the one-person-one-vote measure, because no obviously analogous ideal exists toward which all district shapes should converge. Yet, after Shaw, similar forces may impel courts toward using quantitative approaches to define, at least, the outer-boundary constraints the Constitution now imposes on the conjunction of race-conscious districting and district shape. Given that no approach to redistricting is politically neutral, public confidence in both courts and redistricting bodies is likely to be enhanced through quantitative standards capable of being applied in consistent ways.

A. The Nature of the Problem

Shaw suggests that North Carolina District 12 is self-evidently so extreme in design that it stands out at a glance. Thus, while Justice O'Connor acknowledges the possible "difficulty of determining from the face of a single-member districting plan that it purposefully distinguishes between voters on the basis of race," she emphasizes that

“proof sometimes will not be difficult at all.” As another example, she points to the obviously “tortured” municipal boundaries in *Gomillion v. Lightfoot*.

The task of determining when district appearances are so “highly irregular” as to require strict scrutiny, however, will be more difficult than these comments suggest. First, the language of “appearance” obscures the fact that districts might be oddly shaped along several different dimensions. In the absence of a clear conceptual understanding of what dimensions of district appearance are relevant, the basis for judging districts will be unclear. Different observers will find different aspects of districts to be troubling. Second, district shapes vary along a continuum; they do not come marked in two clearly distinct categories of the reasonably regular and the bizarre. Third, one cannot adequately distinguish the relevant variations among districts through intuitive, eyeball assessments.

To begin to understand the nature of the problems, consider Figures 2 and 3, which show thirteen current congressional districts drawn after the 1990 Census.

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181. Shaw v. Reno, 113 S. Ct. 2816, 2826 (1993). As the Court puts it, in some cases, a district is “so highly irregular that, on its face, it rationally cannot be understood as anything other than an effort to ‘segregat[e] . . . voters’ on the basis of race.” 113 S. Ct. at 2826 (quoting Gomillion v. Lightfoot, 364 U.S. 339, 341 (1960)).
182. 113 S. Ct. at 2826-27 (discussing *Gomillion*).
FIGURE 2(A): MICHIGAN — CONGRESSIONAL DISTRICT 7

FIGURE 2(B): MISSISSIPPI — CONGRESSIONAL DISTRICT 5

© Election Data Services, Inc.
FIGURE 2(c): CALIFORNIA — CONGRESSIONAL DISTRICT 22

FIGURE 2(d): WISCONSIN — CONGRESSIONAL DISTRICT 9

© Election Data Services, Inc.
FIGURE 2(G): TEXAS — CONGRESSIONAL DISTRICT 18

FIGURE 3(A): MICHIGAN — CONGRESSIONAL DISTRICT 9

© Election Data Services, Inc.
FIGURE 3(B): MINNESOTA — CONGRESSIONAL DISTRICT 7

FIGURE 3(C): MARYLAND — CONGRESSIONAL DISTRICT 3
FIGURE 3(D): OHIO — CONGRESSIONAL DISTRICT 19

FIGURE 3(E): FLORIDA — CONGRESSIONAL DISTRICT 3
Most observers would probably agree that Michigan CD7 (Figure 2(a)) is considerably more compact than Texas CD18 (Figure 2(g)), and that Michigan CD9 (Figure 3(a)) is more compact than Florida CD22 (Figure 3(f)). Beyond these observations, it becomes more difficult to make such assessments; but the districts in Figures 2(a) and 3(a) might also generally seem reasonably compact. Perhaps there would even be agreement that the districts in Figures 2(g) and 3(f) are irregular, maybe extremely so. Line-drawing problems, however, quickly become substantial. If the districts in Figures 2(g) and 3(f) were minority-dominated districts, would their design be so irregular as to be presumptive evidence of districting processes in which race had exerted too dominant an influence over other values? What about districts “close to” the most distorted ones in the country — such as districts “in between” Figures 2(f) and 2(g) or in between Figures 3(e) and 3(f)?

Keep in mind that there are 428 congressional districts in states with more than one representative. Given this large number, the range of shapes illustrated in Figures 2 and 3 is not surprising. Indeed, one would expect an almost continuous gradation from very regular to very irregular. Of course, a single court would not have to
consider all 428 districts simultaneously. Litigation involving a single state would typically involve only five to twenty districts. Nevertheless, consistent standards are needed to guide and constrain policymakers. Left to intuitive judgments, policymakers will find the task of ordering districts by appearance unlikely to yield consensus. 184

Part of the difficulty involved in creating standards stems from the fact that "the" appearance of a district could mean one of several things. District shape can be measured along several seemingly relevant dimensions. We will define these different dimensions in technical detail shortly, but we first describe them in more intuitive terms.

First, we might ask how dispersed, or spread out, a district is. This question is commonly taken to mean how efficiently the district covers the territory it includes: in common terms, the question is how "round" or "square" the district is, or how "long" it is versus how "wide." 185 From this perspective, the crucial issue is the degree to which a district has a central core and the extent to which all points in the district are relatively close to that core. If we judge districts in terms of how dispersed they are, circular or square districts will be the most compact. Extremely long and narrow ones are much more dispersed and hence would be judged as less compact, as would districts that tie together two or more core areas with narrow corridors. Dispersion is also worse if "fingers," or other protrusions, stick out from the main body of a district.

Second, one might judge districts by the regularity or length of their perimeters. The important concern in this assessment ought not to be the number of sides, but how similar and regular the sides are. From this perspective, what matters is how much a district's borders wander around in contorted ways. Legislative districts with smooth borders, especially ones of equal length, are most regular or compact. When borders are not straight or when they repeatedly twist and turn, perimeter measures will be accordingly low.

Third, we might judge districts in terms of how regularly they distribute the population in and around the district. We are less accustomed to judging shapes this way; it does not play a role in elementary geometry. In the context of legislative districting, however, such a measure makes some sense. Legislators represent people, not land.

184. *Shaw* presumably also applies to state legislative districts. In upper houses of state legislatures, the number of districts is often 30-50, and in lower houses the number is often 100 or more. Harold W. Stanley & Richard G. Niemi, Vital Statistics on American Politics 153 tbl. 4-6 (4th ed. 1994).

185. One should not confuse these questions with how big a district is in absolute size. Districts in sparsely populated areas of a state are necessarily larger in overall size than those in large urban areas; given one-person-one-vote requirements, this disparity cannot be avoided.
Moreover, the way in which district lines move through or around population concentrations is at the heart of concerns regarding such devices as "cracking" or "packing" minority populations. One way to systematize these concerns is to examine the size of the population in the district and compare it to the population outside but near the district. From this perspective, a district that encapsulates most of the population in some well-defined area would be highly regular. Exclusion of large numbers of people who live within such an area makes a district fare much worse on this dimension.

Choosing among these different dimensions makes a significant difference in judgments about the "appearance" of legislative districts. A district can be "highly irregular" in one dimension but not in others. Consider the contrast between "dispersion" and "perimeter" in, for example, Texas CD18 (Figure 2(g)). This district includes most of the city of Houston, is by far the most Democratic in Texas, and was designed to yield a fifty-one percent black population (forty-nine percent black voting-age population). The adjoining Texas CD29 was designed in 1991 as a new Hispanic district, thought to be required under the VRA, and has a Hispanic population of sixty percent (voting-age population of fifty-four percent). To achieve these dual objectives, the redistricters carved heavily Hispanic blocks out of Texas CD18 and moved them next door into Texas CD29.186

Texas CD18 is not spread over a large area, hence it does not enclose a highly dispersed population. Despite being part of a large metropolitan area, its bands of streets and neighborhoods do not stretch out excessively. Although it contains extremely narrow corridors, it does not, like North Carolina CD12, stretch between cities many miles apart. Consequently, in terms of the first dimension described above — dispersion — Texas CD18 is not highly irregular. Yet, to some observers, the shape of this district is likely to be as troubling as that of North Carolina CD12. Its borders, especially on the west, meander in and out in an almost continual dance. In the second sense described above — perimeter regularity — this district is certainly extreme.

Next, consider Florida CD22 (Figure 3(f)). This district contains the barrier islands and lucrative beachfront properties of Florida's Gold Coast and has the highest percentage of over-sixty-five residents of any U.S. congressional district. This district is not a minority one, though its shape resulted in part from efforts to maximize the black

186. The facts concerning these districts are drawn from MICHAEL BARONE & GRANT UJIFUSA, THE ALMANAC OF AMERICAN POLITICS 1994, at 1250-51, 1275-76 (Eleanor Evans ed., 1993) (describing the creation and composition of Texas CD18 and Texas CD29, respectively). In the first election in Texas CD29, a Hispanic did not win the seat. Id. at 1276.
percentage in the adjoining 23d and 17th districts. The borders of Florida CD22 are relatively smooth. With few exceptions, the district does not snake into and out of the neighborhoods of cities. While in some places it moves farther inland than in others, this pattern is obviously necessary to include a sufficiently large population. In terms of perimeter, this district is fairly regular. Yet in length and width, the district stretches nearly 100 miles from north to south and is never more than about five and a half miles wide. This shape makes it look more like a flagpole than any other district in the country. In the sense of dispersion — in terms of its territory not being close together — this district is certainly extreme.

Intuitive assessments based on visual appearance alone are thus likely to produce tremendous uncertainty. Indeed, if we now return to what is frequently considered the most egregious and self-evident example of the manipulation of district boundaries, the classic Gomillion case, the difficulties become even more obvious. Consider Figure 4, the Tuskegee municipal boundaries before and after the city council redrew them.

187. Id. at 320.

188. In part, this apparent smoothness is a function of the scale of the map. If each city were shown in detail, one would see more border irregularities.

189. It turns out, as we shall see, that this district is so extremely long and narrow that, together with the lengthened western border, it is relatively noncompact with respect to its perimeter. Nonetheless, at first glance, its border characteristics do not appear troubling.
Justice O'Connor suggests that this example is extreme on immediate inspection. Yet, in terms of visual appearance alone, the twenty-eight-sided figure hardly looks more irregular than a number of the districts in Figures 2 and 3. If the Tuskegee boundaries are extreme simply because of the way they look, the majority of congressional districts would be equally extreme. What actually makes Gomillion easy and exceptional is that, in the context of Tuskegee, this particular pattern of line drawing had such a racially differential effect that it could only be a blatant example of a racist design to exclude black residents

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190. The source of this map is Gomillion v. Lightfoot, 364 U.S. 339, 348 (1960).

191. To be sure, one projection sticks out incongruously from the side of the main body of the new boundaries. Yet even Wisconsin CD9 (Figure 2(d)), which appears by comparison to be fairly regular, has an appendage on the north side that sticks out some miles from the main portion of the district.

192. Two hundred thirty-nine of the 1990s congressional districts are less compact than the reconfigured Tuskegee district on both of the quantitative measures introduced below.
from the political boundaries of the town.\textsuperscript{193} Any intuition that the appearance of this twenty-eight-sided figure, standing alone, is an example of extreme manipulation of district appearance would be considerably misguided.

Thus, both abstract considerations of the different ways one can judge appearance and the current array of congressional districts argue for a more systematic, consistent way of comparing district appearances. Fortunately, in recent years, quantitative methods for assessing district appearance have been developed. The results are expressed in terms of a district's compactness. While measures of compactness are only now being introduced into redistricting procedures and their use is not yet settled, Shaw makes certain quantitative measures more meaningful and relevant than others.

\section*{B. Three Quantitative Measures of Compactness}

Compactness has been part of the redistricting lexicon for over a century, but only recently has it been rigorously and quantitatively defined. Even with the development of appropriate, theoretical definitions, the technology for measuring compactness was not effectively available until the 1990s. The recent digitization of U.S. geography carried out by the U.S. Census Bureau has made it possible to apply the new quantitative approaches with considerable accuracy.\textsuperscript{194}

Compactness can be measured along several dimensions and in different ways. In a systematic review of proposed conceptions of compactness, which one of the authors of this article led,\textsuperscript{195} three distinct dimensions emerged as most relevant.\textsuperscript{196} These dimensions are the traits we have described colloquially above: dispersion, perimeter, and population. We now provide more technical definitions of each and then employ the two of them to rank and analyze congressional districts throughout the country.

\textsuperscript{193} The Tuskegee case was so extreme because the effect was "to remove from the city all save only four or five of its 400 Negro voters while not removing a single white voter or resident." Gomillion v. Lightfoot, 364 U.S. 339, 341 (1960).

\textsuperscript{194} The cost of calculating district compactness scores does not seem to have stopped states and even some local jurisdictions from making them. The entire cost of redistricting has increased dramatically in recent years, but, given requirements for strict population equality, for example, the marginal additional burden of calculating district compactness should not be prohibitive.


\textsuperscript{196} These characteristics also turn out to be the basis for most operationalizations of the term.
1. Dispersion

The term dispersion captures "how tightly packed or spread out the geography of a district is."197 Underlying all dispersion measures is the notion that a perfect district is a regular, simple shape, usually a circle. Different quantitative measures exist because different ideal shapes can be taken as a starting point198 and because there are multiple ways of measuring deviations from the ideal shape.199

During the 1990s round of districting litigation, one approach became common. This technique measures the ratio of the district area to the area of the minimum circumscribing circle.200 Such a test is intuitively meaningful and has useful technical features. Operationally, it involves taking the areas of the district and of the smallest circle that completely encloses the district. The ratio of the former to the latter yields the dispersion compactness score.201 Hence, a circular district is perfectly compact. A square district is relatively compact because, when one draws a circle around the district, there is little area inside the circle that is not also in the district. A long, narrow district, or one with "fingers" or other extensions, is less compact because it takes a large circle to enclose the entire district, yet much of that circle is empty.

We arranged the congressional districts in Figure 3 in descending order of dispersion, measured in this way. Districts do not come much more square than Michigan CD9. Minnesota CD7 is too rectangular to be perfectly compact, but it still ranks high. Maryland CD3 circles around Baltimore and includes no area west of the city, which lowers its compactness. Ohio CD19 is stretched out, relatively long and narrow, and is consequently even less compact. Florida CD3

197. Niemi et al., supra note 195, at 1160.
198. Some might suggest that hexagons provide a better base than circles because hexagons can fill an entire space, in principle, with no "in-between" area left over. Given the irregular shapes of states and other jurisdictions, however, it is unlikely that any real area could be divided into a set of perfect hexagons, even if equal population were not a consideration. Perfection in the real world of districting is impossible regardless of the theoretical standard one uses.
199. Because squares — which have equal length and width — are considered relatively compact, some have suggested that length and width should be the basis of quantitative measures. See, e.g., Curtis C. Harris, Jr., A Scientific Method of Districting, 9 BEHAVIORAL SCI. 219, 221 (1964). The difficulty is that no unique method exists of measuring the length and width of irregular shapes. Length might well be the distance between the two points farthest apart in the district. Yet what is the width? How would one judge it in congressional districts such as those shown in Figures 2(f) or 3(e)?
200. Earnest C. Reock, Jr., originally defined this measure, Earnest C. Reock, Jr., Note, Measuring Compactness as a Requirement of Legislative Reapportionment, 5 MIDWEST J. POL. SCI. 70, 71 (1961), which Niemi and others catalogued as Dispersion 7. Niemi et al., supra note 195, at 1161.
201. In a practical sense, it is not always easy to measure areas of complex shapes, though computer programs are now available for this purpose.
essentially has no central core; not surprisingly, it has a very low compactness score. The extreme flagpolelike district discussed above, Florida CD22, has the lowest dispersion score of any district in the country.

Dispersion scores theoretically range from 1.0, which is perfectly compact — a circle — to 0.0 — a straight line. For the districts in Figures 3(a) to 3(f), the scores are .50, .40, .30, .20, .11, and .03, respectively. With an appropriate technical measure of how dispersed districts are, we are thus able to rank order congressional districts as well as to provide a more precise sense of the magnitude of the differences between the “appearance” of various congressional districts. This analysis can provide guidance to reapportionment bodies and discipline the judicial assessments Shaw now requires.

2. Perimeter

Instead of focusing on the dispersion of a district, we can examine the extent to which district borders wander in irregular ways. We do this through a perimeter measure; the most effective technical measure of perimeter relates length of the district perimeter to the area the district includes.\textsuperscript{202} The intuitive justification for this measure is that a given perimeter length will enclose the most area if the shape it surrounds is a circle. Once again, then, a circle is the baseline against which districts are compared. A precise definition of the measure we use here is the ratio of the district area to the area of a circle with the same perimeter.\textsuperscript{203}

\textsuperscript{202} Intuitively, one might think the most obvious measure of perimeter is overall perimeter length, measured in distance units, such as miles or kilometers. The Colorado State Constitution incorporates this approach for its state legislative districts. COLO. CONST. art. V, § 47. While easy to grasp, this measure has certain undesirable properties, especially when comparing congressional districts across the nation. First, because overall length is very sensitive to the absolute size of a district, one can only sensibly apply it to districting plans taken as a whole. That is, as noted above, it makes little sense to compare the overall lengths of the boundaries of rural and urban districts. See supra note 185. Rural districts, no matter how smooth and regular their borders, will register longer boundaries than urban ones, no matter how convoluted the boundaries of the latter.

Comparing alternative districting plans on the basis of the overall boundary lengths for all the districts in the state does make sense. Nevertheless, given regional variations between urban and rural areas, one cannot reasonably compare individual districts, even within one state. In addition, comparisons of aggregate boundary lengths across states are inappropriate because the shapes of the states will greatly affect such measurements. For these reasons, we do not use this measure here.

\textsuperscript{203} In equation form, this definition is expressed as $\frac{4\pi A}{P^2}$, where $A$ is the area and $P$ is the perimeter of the district. One can easily confirm that a circle has a perimeter score of 1, as follows. If the perimeter of a circle is $P$, by definition, $P = 2\pi r$, where $r$ is the radius of the circle. In addition, $A$, the area of the circle, is $\pi r^2$. Then, perimeter score $= \frac{4\pi(\pi r^2)}{(2\pi r)^2} = 1$. This measure is called the Schwartzberg measure in Daniel D. Polsby & Robert D. Popper, The Third Criterion: Compactness as a Procedural Safeguard Against Partisan Gerrymandering, 9 YALE L. & POLY. REV. 301, 348-49 (1991). In fact, as Polsby and Popper point out, it is a slight
In general, districts that have smooth borders and relatively regular shapes will have shorter boundaries and enclose considerable area given the boundary length. They therefore score high on this perimeter measure. Convoluted district borders substantially lengthen the boundary without enclosing more area and hence score low.

We arranged the congressional districts in Figure 2 in descending order of perimeter scores. Michigan CD7 has nearly straight borders and is relatively square-shaped. Mississippi CD5 is regularly shaped and has mostly smooth borders, except along the Mississippi River and Gulf Coast. California CD22 has a stair-step border on the northeast. This feature, in addition to the coastline and two small islands, lowers its perimeter score, but the district remains sufficiently regular for its score to fall in the middle of the district scores shown. Wisconsin CD9, Texas CD14, and North Carolina CD7 have increasing boundary twists and turns, and they therefore score progressively lower. Finally, the border of Texas CD18 is extraordinarily long for the area it encloses as a result of the many narrow corridors, wings, or fingers that reach out to enclose black voters, while excluding nearby Hispanic residents.

Perimeter scores, like dispersion scores, theoretically range from 1.0 to 0.0. The perimeter scores for the districts in Figures 2(a) to 2(g) are .50, .40, .30, .21, .10, .05, and .01, respectively. Using this measure, we can rank all congressional districts in terms of the regularity of their borders, as well as suggest the magnitude of differences between districts. If courts applying Shaw focus on district perimeter, this quantitative approach can yield a far more systematic and clear set of norms than intuitive judicial assessments.

3. Population

A third focal point for concerns of district "appearance" is sometimes taken to be the way in which a district distributes voters. We can translate this concern into a population measure, which focuses not on shape alone, but on the distribution of population between a district and its surrounding territory. Developing a quantitative measure requires some way of comparing the district's population with the "nearby" excluded population. Commentators have suggested two variation (and improvement) of the measure originally proposed by Schwartzberg. Id. at 349 n.204; see also Joseph E. Schwartzberg, Reapportionment, Gerrymanders and the Notion of "Compactness," 50 MINN. L. REV. 443 (1966).

204. These observations illustrate the point that natural features will affect compactness scores — dispersion as well as perimeter. The effects of natural features are a reason that one cannot use such scores in a mechanical fashion to eliminate districts that fall below some predetermined level. For more discussion, see infra text accompanying notes 231-32.
similar measures; both are ratios in which the numerator is the district’s population. In the most common measure, the denominator is the population in what is called the “rubber-band” area around the district — the area that would be inside a rubber band stretched tightly around the district. In the alternative measure, the denominator is the population in the minimum circumscribing circle — it excludes populations that would fall outside the state. Both measures vary from 1.0 to 0.0. For reasons we describe in Section III.C, population measures do not seem to reflect the concerns Shaw expresses. Thus, we do not provide quantitative assessments of the districts in Figures 2 and 3 in terms of population measures.

C. The Relevant Measures Under Shaw

Of the three potentially relevant measures of compactness — dispersion, perimeter, and population — the first two best capture the concerns Shaw expresses. Although the decision offers little in the way of specific criteria for judging “bizarre” appearances, it invokes many synonyms for widely dispersed districts and for those whose borders are severely distorted. Indicating concern for perimeter manipulation, Shaw refers to Gomillion as employing “a tortured municipal boundary line,” and Shaw similarly takes note of the way in which North Carolina CD12 “winds in snake-like fashion” through various areas.

At the same time, Shaw also refers to the concentration of a “dispersed” minority population and to individuals “widely separated by geographical and political boundaries.” In describing District 12, the Court notes that it is “approximately 160 miles long and, for much of its length, no wider than the I-85 corridor.” These comments refer not to twists and turns of district boundaries, but to how spread out the district is, both geographically and with respect to the types of areas — rural versus urban, farming versus manufacturing — it encompasses. Similarly, the proposed state senate district, about which

205. Niemi et al., supra note 195, at 1162 tbl. 1.
206. In technical terms, this measure is described as the minimum convex figure that completely contains the district.
207. For the “rubber-band” definition, a perfect district would be one in which the border had only “convex” angles — that is, a rubber band stretched around it would have no areas that are outside the district but inside the rubber band. For the alternative definition, a circle would receive a score of 1.0.
209. 113 S. Ct. at 2821.
210. 113 S. Ct. at 2827.
211. 113 S. Ct. at 2820-21.
the Court intimated doubts in *Growe v. Emison*, 212 has a relatively smooth, but elongated, border. 213 These comments point to concerns about a district's dispersion.

For these reasons, we believe that if courts and reapportionment bodies look to quantitative approaches to implement *Shaw*, the dispersion and perimeter measures are the most appropriate. Population measures do capture certain manifestations of partisan or racial gerrymandering, but they do not measure "shape" in the usual sense and therefore do not necessarily reflect the problems *Shaw* identifies. 214 In our quantitative assessment of congressional districts throughout the country, we will therefore rely on only the dispersion and perimeter measures.

In interpreting the results that follow in Part IV, one must keep in mind at least three complexities, to which we have alluded above. 215 First, compactness, as quantified, varies on a continuum from zero to one. The point when the compact becomes the noncompact requires judgments about social perceptions that *Shaw* barely begins to articulate. 216

Second, although both dispersion and perimeter appear relevant under *Shaw*, they measure different dimensions. Recall the contrast between the tight core and wandering boundaries of Texas CD18 (Figure 2(g)) and the highly dispersed, but smooth bordered, Florida CD22 (Figure 3(f)). 217 Different quantitative measures will not al-

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212. 113 S. Ct. 1075 (1993); see supra notes 157-58 and accompanying text.

213. 113 S. Ct. at 1085.

214. Having for the first time been able to calculate and assess fully a population measure, we are able to see that it measures, in part, the type of population the districts include and exclude, and not simply the degree to which the districts retain nearby populations. In particular, largely rural or suburban districts may tend to circle around an urban area rather than incorporate a portion of the city itself. This pattern often leaves a large population in the "rubber-band" or circle area, lowering the population score. Favoring higher scores would thus give preference to districts that mixed urban and suburban-or rural areas. For example, Colorado CD4, near Denver, and Ohio CD13, near Cleveland, are outlying districts that have relatively low scores on the population measure because they abut large urban areas. A largely rural or suburban district that circles around an urban area also lowers the dispersion measure. The effect, however, is especially strong for population measures; the excluded land area may not be great, but the excluded population will often be large. For these reasons, we will refrain from further use of population measures.

215. See supra text accompanying notes 177-80.

216. Lest this statement seem to render the concept meaningless, consider the analogy of outdoor temperature. There is no bright line dividing hot from warm or warm from cold. Although there are some meaningful points on the temperature scale, such as the point at which water freezes, those points do not provide an objective division between hot and cold. Temperature is relative. Yet we all make use of temperature information daily.

217. Can one simply combine dispersion and perimeter scores by averaging them? The problem with averaging the two scores is that it can mask situations in which one score is high and the other low. In principle, one might have a district with a dispersion score of .80 and a perimeter score of .02. The average — .41 — appears fairly reasonable; indeed, it is greater than the
ways rank individual districts, and even districting plans, in identical order.\textsuperscript{218} For many districts, the two measures will yield similar results, but, when they conflict, questions will remain as to which measure, or what combination of the two measures, should be the focus.

Third, one must take care in comparing compactness scores across states and between different types of jurisdictions. The more compact a state as a whole, the more one might expect its individual districts to be compact.\textsuperscript{219} Similarly, as a general rule, we might expect state legislative and local districts to be more compact than congressional districts.\textsuperscript{220} Contextual differences of these sorts must be considered before drawing ultimate conclusions concerning comparisons across districts. At the same time, \textit{Shaw} seems to discuss district appearance in absolute terms or as a generic concept; before requiring strict scrutiny for District 12, the Court did not compare it to other congressional districts in North Carolina or anywhere else. With the quantitative measures defined and these caveats in mind, Part IV analyzes the compactness of congressional districts throughout the country.

\textbf{IV. THE COMPACTNESS OF CONGRESSIONAL DISTRICTS IN THE 1980s AND 1990s}

In this Part, we apply our quantitative methods to answer three questions that \textit{Shaw} raises. First, we compare North Carolina District 12 to other districts in the state to determine the extent to which

mean score for the congressional districts in many states. Nevertheless, it hides the extremely low perimeter score. Such extreme situations are not likely to occur in practice, but the data we present below, \textit{see infra} Table 3, reveal a number of situations in which the average does not convey an extremely low score on one — usually the perimeter — measure. \textit{See supra} text accompanying note 186 for the discussion of Texas CD18.

\textsuperscript{218} Niemi et al., \textit{supra} note 195, at 1167-76, demonstrate this point with respect to entire plans.

\textsuperscript{219} Note that some states with water boundaries define the perimeters of the district as extending into the water — for example, a relatively straight line in the middle of a river dividing two states. Consequently, one cannot always equate the apparent shape of the state with the compactness levels possible.

\textsuperscript{220} Federal constitutional requirements of one person, one vote are more stringent for congressional districts. For state legislative districts, the Court has declared population deviations of up to 10% to be presumptively valid and has upheld deviations up to 16.4% while noting that the latter “approach tolerable limits.” \textit{Brown v. Thompson}, 462 U.S. 835, 842 (1983); \textit{Mahan v. Howell}, 410 U.S. 315, 319, 329 (1973). In contrast, the standard for a congressional district remains that the district be “as mathematically equal as reasonably possible.” \textit{White v. Weiser}, 412 U.S. 783, 790 (1973); \textit{see also} \textit{Karcher v. Daggett}, 462 U.S. 725 (1983) (finding unconstitutional for congressional districts an average deviation from absolutely perfect equipopulation of 0.1384% when the maximum deviation of any one district was only 0.6984\%). The stricter the requirement of population equality, the more districts are likely to deviate from compactness. Note, though, that some state constitutions require nearly absolute equality of state legislative districts.
District 12 is aberrational. Second, we examine post-1990 congressional districts throughout the country to determine which districts, and how many, have dispersion or perimeter scores comparable to District 12. Specifically, we determine how many African-American-dominated, Hispanic-dominated, and white-dominated districts have shapes that appear, at least initially, to be as irregular as District 12. As a related point, we also show how many congressional districts would be affected if courts translated *Shaw* into an absolute requirement that districts not exceed some specific measure of compactness. Finally, we compare the shape of congressional districts in the 1990s with those in the 1980s to determine whether districts have become less compact in recent years. If they have not, *Shaw* would constitute a sudden change in the legal rules governing districting. If they have, *Shaw* would not change the rules in the middle of the game, but rather would be a response to the changed context of districting.

A. *North Carolina District 12 in the Context of the 1990 North Carolina Redistricting Plan*

After the Justice Department’s denial of preclearance for its first effort at redistricting, the North Carolina General Assembly eventually designed the twelve-seat congressional districting plan that took effect in time for the 1992 congressional elections. As a map of this plan shows,221 it included several districts, in addition to CD12, that many observers might consider irregularly shaped.

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221. See infra Figure 5.
FIGURE 5: NORTH CAROLINA 1990 CONGRESSIONAL DISTRICTS

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Note: The shaded districts, Districts 1 and 12, are minority-dominated ones. In the 1992 congressional elections, District 1 elected Eva Clayton and District 12 elected Melvin Watt, North Carolina's first two black congressional representatives since Reconstruction.
Several facts immediately stand out. First, in a certain obvious sense, District 12 is unlike any other district in that it wanders through the middle of the state as a long, thin line. On the other hand, it might be less distinct than many readers would expect. Shaw emphasizes the extreme length of District 12, but the northwestern-most district, District 5, covers more miles east to west and a similar number of miles north to south. Indeed, many readers may be surprised by how many districts in North Carolina fall considerably short of being square or rectangular. We wonder whether even two districts satisfy many readers' intuitive view of how districts should be drawn. In general, this map confirms the fact that district shapes vary along a continuum and that separating them through an eyeball assessment is extremely difficult. Is District 1, 2, 3, 7, or 10 considerably more compact than District 12? How can one meaningfully compare the appearance of these other districts with District 12 and with each other?

In Table 2, we provide the dispersion and perimeter scores for the 1990s North Carolina congressional districts:

### TABLE 2
Compactness of North Carolina Congressional Districts in 1990s

<table>
<thead>
<tr>
<th>District</th>
<th>Compactness Measure</th>
<th>Dispersion</th>
<th>Perimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.25</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.25</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.35</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.40</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.14</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.44</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.29</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.33</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.28</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.30</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.29</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.05</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.28</td>
<td>.095</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>.10</td>
<td>.08</td>
<td></td>
</tr>
</tbody>
</table>

With these quantitative assessments, we can reach one confident conclusion. District 12 is certainly the least compact of North Carolina's districts; measured either in terms of dispersion or perimeter, District 12 ranks lowest in the state. Whether it is so unique as to be consid-

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222. Information provided by Election Data Services, Inc.
ered an aberration, however, becomes a matter of judgment. In terms of the dispersion measure, District 12 falls far below any other district,\(^2\) even when compared to its nearest competitor, District 5. Along this dimension, most other districts are considerably more compact. This comparison means that District 12 has less of a central core than all other districts or, conversely, that it is relatively longer and narrower than other districts. It incorporates a significantly more geographically dispersed population. With respect to district perimeters, however, District 12 is far less unusual. While it remains the least compact when judged this way, the perimeter scores for nine of the twelve districts are less than 0.10. These scores are quite low compared to districts throughout the country.\(^3\) Indeed, almost all the districts in North Carolina have perimeters that could be classified as quite, if not extremely, irregular.\(^4\) To observers who focus on CD12 in isolation, this result might come as a surprise. It might also raise questions as to whether the “appearance” of any congressional district ought to be evaluated on its own or only in the context of the other districts in the same redistricting plan. Perhaps irregular minority districts are, or should be, less troubling when contained within a redistricting plan that employs similarly contorted majority-dominated districts.\(^5\) In \textit{Shaw}, the Court’s first entry into this arena, however, the Court assessed CD12 in isolation from other districts in the same plan.

B. \textit{The Compactness of 1990s Congressional Districts Throughout the Country}

With the quantitative measure we have described above and recently developed technology, we are able to rank congressional dis-

\(^2\) Just as there is no bright line between compact and noncompact districts, there is no one number that determines whether the difference between compactness scores is significant. Clearly, a small difference — for example, .01 — is not meaningful, and certainly the larger the difference, the more likely it is that the scores are meaningfully different. A given difference has to be evaluated at least in the context of: (a) whether the difference is due to geographical or other obvious factors — for example, a case in which adjoining districts are “reoriented” so that the common border is now along a meandering river, or a case in which one district follows noncompact subjurisdiction boundaries while another is made compact by crossing those boundaries; (b) the size of the difference in both dispersion and perimeter score — it can even happen that differences in dispersion and perimeter scores are contradictory; and (c) whether the comparison is of the average scores for entire plans or of the scores of specific districts — a plan average may be based on scores of a large number of districts, so even if a few districts in the plan are made substantially more (or less) compact, the average across all districts may not change much.

\(^3\) Nationwide, 13% of congressional districts have perimeter scores below 0.10. \textit{See infra} Table 3.

\(^4\) Note that only Districts 1 and 12 are majority-minority districts.

\(^5\) \textit{See supra} text accompanying note 165.
tricts throughout the country in terms of their dispersion and perimeter. 227 In Table 3, we provide an abbreviated version of this information by listing the congressional districts whose dispersion or perimeter score (or both) is relatively low. In choosing the cutoff points used in Table 3, we do not imply that all districts below those points, or only those districts, are vulnerable after Shaw. Later in this section, in Table 4, we show how many districts, majority and minority, are affected when a range of different cutoff levels are used to define "low" dispersion and perimeter scores. 228 The cutoff points in Table 3 are somewhat arbitrary, 229 and on each dimension they are higher than the scores of North Carolina District 12. Nonetheless, because they identify the districts that are objectively least compact, these are the most important tables we present for the purpose of Shaw's future application.

227. We have also ranked them in terms of the population measure, but for reasons discussed above, see supra text accompanying notes 208-14, we do not provide that information here.

228. See infra Table 4.

229. A historical comparison may be of interest: as suggested above, the "uncouth twenty-eight-sided" figure in Gomillion is not particularly noncompact by the standards of the 1990s. See supra notes 190-91 and accompanying text. We estimate its dispersion score to be in the neighborhood of .41, and its perimeter score to be approximately .34. The dispersion score puts the district above the average 1990s congressional districts in all but seven states; the perimeter score is above the average in all but eight states.
TABLE 3
1990s CONGRESSIONAL DISTRICTS WITH LOW DISPERSION OR PERIMETER COMPACTNESS SCORES

<table>
<thead>
<tr>
<th>District</th>
<th>Dispersion Score</th>
<th>Perimeter Score</th>
<th>Largest Population Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA36</td>
<td>.04</td>
<td>.10</td>
<td>White</td>
</tr>
<tr>
<td>FL3</td>
<td>.11</td>
<td>.01</td>
<td>Black</td>
</tr>
<tr>
<td>FL17</td>
<td>.08</td>
<td>.06</td>
<td>Black</td>
</tr>
<tr>
<td>FL18</td>
<td>.14</td>
<td>.03</td>
<td>Hispanic</td>
</tr>
<tr>
<td>FL22</td>
<td>.03</td>
<td>.05</td>
<td>White</td>
</tr>
<tr>
<td>HI2</td>
<td>.05</td>
<td>.11</td>
<td>Asian</td>
</tr>
<tr>
<td>IL4</td>
<td>.19</td>
<td>.03</td>
<td>Hispanic</td>
</tr>
<tr>
<td>LA4</td>
<td>.13</td>
<td>.01</td>
<td>Black</td>
</tr>
<tr>
<td>LA6</td>
<td>.29</td>
<td>.05</td>
<td>White</td>
</tr>
<tr>
<td>MA3</td>
<td>.14</td>
<td>.11</td>
<td>White</td>
</tr>
<tr>
<td>MA10</td>
<td>.15</td>
<td>.06</td>
<td>White</td>
</tr>
<tr>
<td>NJ13</td>
<td>.11</td>
<td>.07</td>
<td>White</td>
</tr>
<tr>
<td>NY5</td>
<td>.19</td>
<td>.05</td>
<td>White</td>
</tr>
<tr>
<td>NY7</td>
<td>.22</td>
<td>.05</td>
<td>White</td>
</tr>
<tr>
<td>NY8</td>
<td>.06</td>
<td>.03</td>
<td>White</td>
</tr>
<tr>
<td>NY9</td>
<td>.27</td>
<td>.04</td>
<td>White</td>
</tr>
<tr>
<td>NY12</td>
<td>.12</td>
<td>.02</td>
<td>Hispanic</td>
</tr>
<tr>
<td>NC1</td>
<td>.25</td>
<td>.03</td>
<td>Black</td>
</tr>
<tr>
<td>NC5</td>
<td>.14</td>
<td>.08</td>
<td>White</td>
</tr>
<tr>
<td>NC7</td>
<td>.29</td>
<td>.05</td>
<td>White</td>
</tr>
<tr>
<td>NC12</td>
<td>.05</td>
<td>.01</td>
<td>Black</td>
</tr>
<tr>
<td>TN4</td>
<td>.12</td>
<td>.08</td>
<td>White</td>
</tr>
<tr>
<td>TX3</td>
<td>.29</td>
<td>.05</td>
<td>White</td>
</tr>
<tr>
<td>TX6</td>
<td>.21</td>
<td>.02</td>
<td>White</td>
</tr>
<tr>
<td>TX18</td>
<td>.36</td>
<td>.01</td>
<td>Black</td>
</tr>
<tr>
<td>TX25</td>
<td>.20</td>
<td>.02</td>
<td>White</td>
</tr>
<tr>
<td>TX29</td>
<td>.19</td>
<td>.01</td>
<td>Hispanic</td>
</tr>
<tr>
<td>TX30</td>
<td>.24</td>
<td>.02</td>
<td>Black</td>
</tr>
</tbody>
</table>

Note: Districts shown here are all those with a dispersion score of ≤ 0.15 or a perimeter score of ≤ 0.05. For the purpose of this table, "White" means non-Hispanic white; "Black" means non-Hispanic black; and "Asian" means Asian or Pacific Islander. "Hispanics" may be of any race, and "population" refers to total population.

* Please also note that blacks and Hispanics constitute a majority in NJ13 and TX30.

One must make comparisons carefully because of the effects of state shapes. Twenty-eight congressional districts fall below the

230. Information provided by Election Data Services, Inc.
231. One of the authors previously wrote that we should "almost always" limit comparisons to one state or jurisdiction. Niemi et al., supra note 195, at 1176. Professor Niemi now regards nationwide comparisons as more useful than that statement would suggest, as long as one makes them with sensitivity to the shapes of states and to other complicating factors such as islands and coast or shorelines.
compactness levels we have selected. In two cases, however, the low
to scores are clearly artifacts of their unusual geography; they can be
quickly dismissed because geography, not legislative politics, immedi­
ately accounts for their apparently low compactness. Hawaii CD2 is
composed of islands, and California CD36 includes two islands as well
as part of the coast in the greater Los Angeles area. 232

With respect to the remaining districts, one result is immediately
striking. If we rather crudely consider dispersion and perimeter simul­
taneously, by simply adding the two scores, North Carolina CD12
turns out to be the worst district in the nation. In this specific sense,
this district is truly exceptional. Thus, if a district must be at least as
"bizarre" as District 12 to trigger strict scrutiny, and if bizarreness is
measured by adding dispersion and perimeter scores, District 12
stands alone. This result is potentially of considerable significance: if
Shaw is applied by adding the quantitative and perimeter measures
used here, no other current congressional district is as extreme as that
in Shaw.

At the same time, District 12 is not a statistical outlier under this
combined approach, for other districts are not far behind. New York
CD8 and Florida CD22 are nearly at the level of North Carolina
CD12 on both measures, followed closely by Florida CD3 and CD17,
Louisiana CD4, New York CD12, and then by Florida CD18 and
New Jersey CD13.

While combining the two measures in this way is revealing, it poses
several theoretical and conceptual problems. Most significantly, Shaw
provides no guidance as to whether a district should be considered
"highly irregular" if it is extreme on either dimension — dispersion or
perimeter — alone or only when these two dimensions are combined.
This point is especially relevant for districts like the previously dis­
cussed Texas CD18, which is not spread over a large area but does
have a very irregular border. 233

If we focus on dispersion scores alone, North Carolina CD12 turns
out to be the second worst in the nation, 234 with the long, narrow
district we described earlier, Florida CD22, at the bottom. 235 Other

232. In both cases, the islands are well spread out, thus greatly lowering the dispersion score.
The perimeter score is also reduced because the perimeter is calculated around each island — as
well as mainland area — separately.

233. If one averages the dispersion and perimeter scores for Texas CD18 (Figure 2(g)), the
resulting score is .185, which does not place it among the 25 least compact congressional districts
in the nation.

234. We leave aside the cases of California CD36 and Hawaii CD2 because they are artifacts
of the unusual geography of the two states.

235. Political observers describe this oddly shaped district as a result of the way in which the
Voting Rights Act was interpreted in Florida. The beach towns were apparently isolated when
districts, however, follow close behind. If Shaw requires that CD12 be deemed noncompact, the question of how to treat districts that are similarly, but not quite as badly, dispersed — such as New York CD8 (majority white) or Florida CD17 (majority black) — remains open.

If we focus on perimeter irregularities alone, North Carolina CD12 remains extreme, but several other districts are equally extreme. Even more clearly than with dispersion, compactness falls along a continuum when we focus on the shape of boundary lines. Distinguishing the "unusual" from the "highly irregular" or "bizarre" inevitably requires seemingly arbitrary cutoffs.

Note that over half the districts in Table 3 are majority white. In part, this distribution occurs because majority-white districts that border on irregular minority-majority districts necessarily incorporate those irregularities into their own boundaries. In absolute terms, a greater number of extremely noncompact districts — as defined in Table 3 — are white-controlled districts. In relative terms, however, minority districts would currently suffer more from any rule that barred districts with scores below the levels of dispersion and perimeter in Table 3. The fifteen majority-white districts listed constitute only four percent of the 370 majority-white districts in the country. But the six majority-black districts are nineteen percent of the thirty-one majority-black districts nationwide, and the four majority-Hispanic districts are twenty percent of the country's twenty majority-Hispanic districts. In addition, given our earlier analysis, Shaw might have little or no effect on any of the extremely irregular white-dominated districts.

Table 3 further reveals that a few states have the most at stake in the way Shaw is applied. More than three-quarters of the districts in Table 3 are concentrated in only five states: Florida, Louisiana, New York, North Carolina, and Texas. In at least some of these states, Shaw has already influenced litigation. That so many irregular dis-

the adjoining 23d and 17th districts, just inland from the coast, were designed as minority-dominated districts. From this perspective, the oddly shaped coastal district is the residue of an effort to create minority-dominated districts. See generally BARONE & UJIFUSA, supra note 186, at 320-21 (describing Florida CD22 and the redistricting process).

236. In addition to Florida CD22, Louisiana CD6, New York CDs 5, 7-9, and North Carolina CD7 are each majority-white districts that share parts of borders with a minority district.

237. All these figures exclude districts in which no one racial or ethnic group is a majority. The exact numbers, but not the conclusion, would change if we counted those districts. STANLEY & NIEMI, supra note 184, at 43-44 tbl. 1-17, lists congressional districts with a majority-minority population, based in part on Election Data Services data.

238. See supra text accompanying notes 181-220.

239. See, e.g., League of United Am. Citizens v. Clements, 999 F.2d 831 (5th Cir. 1993) (en
tracts are concentrated in a few states will exacerbate the problem of choosing the relevant baseline for assessing districts. As noted earlier, judges might evaluate an individual district against the mean compactness scores of other districts in that state. Alternatively, judges might examine an individual district in isolation or, perhaps more meaningfully, by comparing it to the kind of nationwide districting standards we make available in this article.

As noted, the cutoffs in Table 3 are somewhat arbitrary. In Table 4, we shift these threshold levels, while keeping them at the low end of the spectrum, and show how many minority and majority districts are affected as the “appearance” threshold changes.

TABLE 4
NUMBER OF 1990s CONGRESSIONAL DISTRICTS FALLING BELOW VARIOUS LEVELS OF COMPACTNESS

<table>
<thead>
<tr>
<th>Dispersion Score</th>
<th>Perimeter Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤.15</td>
<td>≤.05</td>
</tr>
<tr>
<td>15</td>
<td>20</td>
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<td>25</td>
<td>30</td>
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<td>27</td>
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<td>.06-.08</td>
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<td>31</td>
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<tr>
<td>.21-.24</td>
<td>.09-.12</td>
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<td>27</td>
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<td>25</td>
<td>30</td>
</tr>
<tr>
<td>27</td>
<td>31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Districts</th>
<th>Number of Minority Districts*</th>
<th>Cumulative Number of Districts</th>
<th>Cumulative Number of Minority Districts</th>
<th>Number of Districts with Dispersion Score ≤.24 and Perimeter Score ≤.12</th>
<th>Number of Minority Districts with Dispersion Score ≤.24 and Perimeter Score ≤.12</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>07</td>
<td>15</td>
<td>07</td>
<td>15</td>
<td>17</td>
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<td>25</td>
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<tr>
<td>27</td>
<td>05</td>
<td>67</td>
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<td>30</td>
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<td>81</td>
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</tr>
<tr>
<td>31</td>
<td>05</td>
<td></td>
<td>25</td>
<td>20</td>
<td>41</td>
</tr>
</tbody>
</table>

* Districts with combined black and Hispanic populations of more than 50%

The results further illustrate our argument that congressional districts lie along a compactness continuum. As cutoff levels are raised, even by small amounts, more and more districts fall below them. The levels in Table 4 also give a more concrete idea of the degree of compactness of districts at the low end of the spectrum. For example, one out of every twenty congressional districts currently in use has a perimeter score no higher than that of North Carolina CD7 (Figure 2(f)), and bane); Hines v. Mayor of Ahaskie, 998 F.2d 1266 (4th Cir. 1993); Kimble v. County of Niagara, 826 F. Supp. 664 (W.D.N.Y. 1993).

240. Information provided by Election Data Services, Inc.
more than one in ten has a score less than that of Texas CD14 (Figure 2(e)).

The number of minority districts below various cutoffs goes up more slowly. Nonetheless, the results in Table 4 show in stark fashion the tension between the goals of more minority districts and high levels of compactness, at least as congressional districts were drawn before Shaw. If courts were to define “highly irregular” as districts that violated the strictest standards of both dispersion and perimeter that Table 4 uses, seventeen of the current fifty-one single-minority districts in the country would be subject to strict scrutiny.

C. Compactness of Congressional Districts over Time

In response to Shaw, some might argue that the Court’s sudden concern with district appearances arose only when states began to use unusual boundaries to create minority-dominated districts. Those who take this view necessarily assume that districts have always been as contorted as they are presently. If this premise is right, Shaw might be taken to reveal a cynical or even invidious concern with district shapes only when they benefit minorities.

To test this premise, we compared the compactness of congressional districts in the 1980s and the 1990s. We first focus on North Carolina, which had eleven districts in the 1980s. Table 2 contains the dispersion and perimeter scores for the 1990s districts; Table 5, below, provides these scores for the 1980s districts.

241. As noted earlier, the ability to calculate compactness scores has been developed only recently. See supra text accompanying note 194.

242. See supra Table 2.
TABLE 5
COMPACTNESS OF NORTH CAROLINA CONGRESSIONAL DISTRICTS IN 1980s

<table>
<thead>
<tr>
<th>District</th>
<th>Compactness Measure</th>
<th></th>
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<td>9</td>
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<td>11</td>
<td>.36</td>
<td>.42</td>
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<tr>
<td>Mean</td>
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<td>.30</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>.08</td>
<td>.07</td>
</tr>
</tbody>
</table>

As these tables reveal, districts became significantly less compact, at least in North Carolina, after the 1990 round of redistricting. In terms of dispersion, all but one district had a score of .30 or above in the 1980s while, today, only five of the twelve districts are that compact. The perimeter measure, however, reveals even more striking results. Every current district, with the exception of CD4, has a considerably more distorted perimeter than the worst North Carolina district in the 1980s. Average perimeter compactness has plummeted. Although most North Carolina districts are still built around a core area — though less so than in the 1980s — they meander in and around that area to a far greater extent than previously. Compared to the 1980s districts, especially on the perimeter measure, almost all the current districts are significantly more irregularly designed.

For the most part, the pattern in North Carolina turns out to be a general one. Table 6 provides a state-by-state comparison of district compactness, measured in terms of dispersion and perimeter, for the 1980s and for the 1990s. We also show the numbers of districts falling below various levels of compactness.

243. Information provided by Election Data Services, Inc.
### Compactness of 1980s and 1990s Congressional Districts, by State\(^{244}\)

<table>
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<tr>
<th>State</th>
<th>Dispersion Scores</th>
<th>Perimeter Scores</th>
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</thead>
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<td>1990s</td>
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\(^{244}\) Information provided by Election Data Services, Inc.
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<th>State</th>
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<td>Rhode Island</td>
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<td>.22-.46</td>
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</table>
The nationwide figures make it clear, of course, that low compactness is not an invention of the 1990s. A few districts in the 1980s were extremely noncompact, nearly as much so as the least compact districts of the 1990s. In addition, a few states had significantly less compact districts in the 1980s than in the 1990s. California is the prime example. Under the Burton districting plan, considered one of the most notoriously partisan gerrymanders in recent years, several extremely contorted districts were created, making overall compactness scores lower than in the 1970s and lower than those in most other states.

In general, however, there is no denying that the present congressional districts are less compact than those they replaced. Between

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245. See Niemi et al., supra note 195, at 1175.

246. That extremely noncompact districts are not evident, in general, in the 1970s and 1980s does not, of course, mean they were not prevalent in earlier periods. Southern Redeemers used gerrymanders, involving extremely noncompact election districts, as a central technique to reestablish political control after the national retreat from Reconstruction began in 1877. Thus, in Mississippi, Redeemers in 1877 concentrated "the bulk of the black population in a 'shoestring' Congressional district running the length of the Mississippi River, leaving five others with white majorities. Alabama parcelled out portions of its black belt into six separate districts to dilute the black vote." ERIC FONER, RECONSTRUCTION: AMERICA'S UNFINISHED REVOLUTION, 1863-
the 1980s and 1990s, average compactness levels dropped, precipitously in the case of district perimeters. More importantly, at extremely low levels of compactness, the number of districts increased sharply. Overall, the number of districts with very low scores rose substantially, with the decline in perimeter scores the most noticeable. Nationwide, the number of districts with scores at or below .08 more than tripled, as seen in Table 6.

State-by-state comparisons indicate that the number of states in which average compactness declined is greater than the number in which average compactness increased (by a margin of thirty-two to nine for perimeter scores). However, the results in Table 6 also reveal that low compactness is particularly prominent in a small number of states. The chronological comparison in those states indicates the depth of the change the 1990s districting created. In Florida, Louisiana, North Carolina, and Texas, only one district in the 1980s was below the dispersion or perimeter cutoffs shown in Table 6. In these same states in the 1990s, sixteen districts fall below the dispersion cutoff, and twenty-seven fall below the perimeter cutoff.

Three factors best explain this dramatic decline. First, since Karcher v. Daggett, congressional districts must have virtually identical populations. In pursuit of the mathematic exactitude the Court has demanded, jurisdictions necessarily have had to compromise other values, like compactness. This is a trade-off legal doctrine itself has imposed on political bodies. Second, the increasing sophistication of redistricting technology enables constant manipulation and recalibration of district boundaries to achieve that equalization, or other goals. The new computer programs facilitate twists and turns in perimeters that add or subtract small numbers of people until some desired level of equality is achieved — or until more partisan and personal agendas are realized. Third, the interpretation of the VRA in Thornburg v. Gingles has played a major role. Gingles had the ef-

1877, at 590 (1988). In South Carolina, Democrats constructed the “bizarre” South Carolina Seventh District in 1885, which “contained the homes of two Republican incumbents and sliced across county lines in order to pack in every possible black voter.” Kousser, The Voting Rights Act, supra note 21, at 144. After these gerrymanders, the Seventh District in South Carolina was 81.7% black and the Sixth District in Mississippi was 77.5% black. Id. at 148. (There are small discrepancies between Foner's and Kousser's figures regarding the postgerrymander populations in the Mississippi congressional districts.).


248. In 1983, the Court upheld the invalidation of a New Jersey districting plan in which the maximum deviation from exact equality was 0.6984%. The Court based its holding on the existence of a plan with a smaller deviation and the fact that the state had not justified its adoption of a less accurate plan. Karcher, 462 U.S. at 725.

fect of requiring jurisdictions to put greater emphasis on fair and effective representation of minority interests. Because the emphasis on interest representation often conflicts with the traditional role of geography in constructing districts — particularly when minority populations are dispersed — *Gingles* has led to further deviations from compactness. These explanations are consistent with the greater decline in perimeter measures compared to dispersion measures and with the strong correlation between states with large minority populations and those whose perimeter scores declined in the 1990s.\(^{250}\)

Whether rightly or wrongly decided, *Shaw* therefore cannot be seen as the Court’s sudden awakening to a phenomenon of long-standing existence. Contorted appearances are not a new invention, but shifts in legal doctrine and technological developments have combined to produce generally less compact congressional districts and a number of extremely noncompact individual districts. In this sense, *Shaw* should be seen as an outgrowth of the changes occurring in the 1980s, including those the Court itself set into motion through changes in legal doctrine.

**V. THRESHOLDS VERSUS JUSTIFICATIONS: THE LEGAL ROLE OF COMPACTNESS**

District “appearance” is a threshold, not an ultimate, issue under *Shaw*. It is important to be clear about the precise way in which *Shaw* makes compactness relevant. “Bizarre” districts that appear to be drawn for racial reasons are not per se unconstitutional. Instead, jurisdictions must offer specific, legitimate, and compelling purposes that account for the location and design of these districts. Under *Shaw*, noncompactness functions as a trigger for strict scrutiny; once a district crosses a threshold of noncompactness, special burdens of justification apply. Nonetheless, even extremely noncompact districts can survive strict scrutiny if sufficiently justified.

The process of justification involves two steps. First, the odd shape of a district must result from a state’s pursuit of aims that are legitimate and constitutionally compelling. Second, the means the state chooses must be narrowly tailored to achieving those legitimate aims and no others. The issue of justification, therefore, is as crucial as that of appearance. *Shaw*, however, touches on that issue only briefly. In this last section, we can sketch a few considerations relevant to the justification inquiry.

\(^{250}\) Of the states with combined black and Hispanic populations above 20%, between 10% and 20%, and less than 10%, 13 of 15 (87%), 7 of 9 (78%), and 12 of 19 (63%), respectively, saw a decline in their perimeter scores.
Potentially acceptable justifications can be divided into three types: those that are obviously legitimate; those that pose more difficult questions; and those that trace directly to the VRA. With respect to each, we both describe the general form of justification and suggest some of the difficulties courts will face in applying it. We then turn to the more pervasive and general problem posed by Shaw’s demand that intensely political and partisan districting decisions be justified in terms of rational, articulable principles. This conflict between the political and the legal poses daunting obstacles to judicial application of Shaw.

A. Justifications: Ends

1. Conventionally Sufficient Ends

Certain traditional districting ends are, in theory, precisely the kind that will provide sufficient justification under Shaw for even “highly irregular” districts. They include respecting existing political boundary lines when they are oddly shaped, following natural geographic features of a landscape, and preserving “communities of interest.” At the least, when a court finds these ends to be the dominant purpose behind a district’s design, Shaw ought to be satisfied.\(^{251}\) For mixed-motive cases, however, in which these purposes are present alongside race-conscious districting aims, Shaw provides no direct guidance. With respect to “highly irregular” minority districts, these cases are likely to be common. Whether in such situations the enhancement of minority representation must be a motivating factor, the dominant motivating factor, or the exclusive motivating factor remains an open question.

Even after courts determine the appropriate causation standard, the evidentiary and administrative difficulties they will face in seeking to untangle mixed motives will remain formidable. The underlying purposes and principles that animate Shaw should govern the choice of standard. If we are right that Shaw fundamentally concerns social perceptions that race has subordinated all other traditionally relevant values in redistricting — but that race-conscious districting is not per se a constitutional problem — the proper causation standard in mixed-motive contexts ought to track this concern. This interpretation might suggest that the enhancement of minority representation must be more than merely a motivating factor behind a “highly irregular” district; it

\(^{251}\) See, e.g., Shaw v. Reno, 113 S. Ct. 2816 (1993) (“[W]hen members of a racial group live together in one community, a reapportionment plan that concentrates members of the group in one district and excludes them from others may reflect wholly legitimate purposes. The district lines may be drawn, for example, to provide for compact districts of contiguous territory, or to maintain the integrity of political subdivisions.”); Reynolds v. Sims, 377 U.S. 533, 578 (1964).
must be either the exclusive explanation for that district or, at the least, the dominant purpose behind it. Deciding on which standard is most consistent with *Shaw*, however, requires a more detailed analysis of the likely effects of these different scenarios on social perceptions.

Apart from the problem of mixed motives, these theoretically sufficient justifications will pose additional conceptual difficulties in practice. With respect to "community of interest" justifications, reapportionment bodies often give some weight to defining districts in terms of attributed common interests. The list of potential interests, all reflected in actual districting plans, includes urban interests, rural interests, coastal interests, agricultural interests, mountain interests, beachfront property ownership, ethnic interests, and many more. The intersection between race-conscious districting and the acknowledged legitimacy of preserving communities of interest generates at least three interrelated questions that courts applying *Shaw* must confront.

First, what kinds of interests can policymakers legitimately treat as the basis for attributing a community identity to some group? This question is normative, not descriptive. The issue is which of the many dimensions that might describe some group’s common interest may be acted on by legislators. If living on the coast defines a legitimately distinct political interest, does being wealthy? If so, does being poor?

Once inroads into territorial districting can be made in the name of preserving communities of interest, the second question is whether policymakers can treat race itself as constituting such an interest. The argument for doing so is particularly strong when two of the predicates to a section 2 claim under *Gingles* are present: that is, when majorities engage in racial-bloc voting against minority interests that are themselves politically cohesive. Under these circumstances, there might be strong reasons for permitting, if not requiring, policymakers to define communities of interest in racial terms. If urban residents or rural residents can be assumed to have cohesive political interests, perhaps racial groups can as well\(^\text{252}\) — particularly when this cohesiveness is not assumed, but demonstrated in fact.

With respect to "bizarrely" shaped race-conscious districts, however, *Shaw* seems to reject this kind of justification. If a "bizarre" district that appears to be a racial gerrymander cannot stand absent sufficient justification, the fact that the district was designed to be a racial gerrymander cannot provide that justification. This different

\(^{252}\) These assumptions are always subject to constitutional and VRA constraints, of course, that prohibit minority-vote dilution.
treatment of race and other interests may be a basis for criticizing Shaw, but it is the sine qua non of the decision.

Third, as the Court has recognized in other contexts, race frequently correlates with other socioeconomic factors. In evaluating oddly shaped districts, this correlation will require courts to attempt to untangle legitimate communities of interest from the now-illegitimate one of race. If blacks as blacks cannot be grouped into a "highly irregular" district, but urban residents or the poor can, how will courts distinguish these contexts, and under what mixed-motive standard?

In short, even the justifications most readily acceptable in theory — acknowledgement of existing political boundary lines, recognition of natural geographic features, preservation of communities of interest — will pose considerable difficulty in application.

2. More Complex Ends

Redistricting necessarily distributes political power between parties and specific politicians, particularly incumbent officeholders. In general, the Supreme Court has embraced political realism and, at least to some extent, tolerated these facts as inevitable or even desirable. As Justice White, perhaps the leading judicial realist in this area, wrote for the Court in Gaffney v. Cummings: "Politics and political considerations are inseparable from districting and apportionment. ... It requires no special genius to recognize the political consequences of drawing a district line along one street rather than another. ... The reality is that districting inevitably has and is intended to have substantial political consequences." After Shaw, the extent to which partisan objectives and protection of incumbent officeholders will be permitted to justify "highly irregular" race-conscious districts, if at all, becomes a critical question.

Currently, the Justice Department is taking the litigation position that these ends — partisan advantage or incumbent protection — do suffice to justify districts that Shaw requires to pass strict scrutiny. Thus, in post-Shaw litigation challenging certain black-dominated congressional districts in Louisiana, the Justice Department has filed a brief arguing that "where a compact majority-minority district could be drawn, but the state chooses to draw the district in a different, less

255. 412 U.S. at 753; see also White v. Weiser, 412 U.S. 783, 795-96 (1973) ("Districting inevitably has sharp political impact and inevitably political decisions must be made by those charged with the task.").
compact way to protect an incumbent or to give partisan advantage to one political party, the state will be able to explain the odd shape of the district on considerations other than race.\textsuperscript{256} As a descriptive or analytic statement, this assertion is certainly accurate, as we argued earlier,\textsuperscript{257} but whether these explanations will satisfy Shaw is more uncertain.

The pattern of judicial response to these motivations in other redistricting contexts forms an intricate mosaic. With respect to protecting incumbents, federal courts accept this as legitimate state policy in some contexts; moreover, federal courts are actually required to defer to state aims of this sort in some circumstances when those courts are called upon to redistrict. For example, in interpreting the cause of action \textit{Davis v. Bandemer}\textsuperscript{258} creates, which makes extreme partisan gerrymandering unconstitutional, courts increasingly focus on whether the plan treats incumbents of both parties "fairly." If a plan pairs too many incumbents from the same party against each other in a new district, this becomes significant evidence of impermissibly partisan redistricting.\textsuperscript{259} In effect, this approach not only tolerates state efforts to protect incumbents, but comes dangerously close to ensuring fair districting by making public office a personal sinecure.\textsuperscript{260} Federal courts have labeled protecting incumbents an "important state goal"\textsuperscript{261} and a "legitimate" justification when special justifications for district design are required.\textsuperscript{262} Similarly, the Supreme Court has held that, when federal courts are forced to choose among state redistricting plans, those courts must respect state policy preferences for pre-

\textsuperscript{256.} Supplemental Brief for the United States as Amicus Curiae at 14, Hays v. Louisiana (W.D. La. filed Aug. 9, 1993) (No. 92-1522S).

\textsuperscript{257.} See supra text accompanying notes 90-96.

\textsuperscript{258.} 478 U.S. 109 (1986).

\textsuperscript{259.} For example, after the Wisconsin legislature failed to reapportion itself following the 1990 Census, the court adopted its own plan and construed \textit{Bandemer} to require that the smallest number of incumbents be paired. The critical feature of the plan chosen was that it "pair[ed] only 16 incumbents in both houses of the legislature, and only 6 of the same party." Prosser v. Elections Bd., 793 F. Supp. 859, 871 (W.D. Wis. 1992).

\textsuperscript{260.} For a critique of the courts' protection of incumbents as a way of ensuring against extreme partisan gerrymandering, see Samuel Issacharoff, \textit{Judging Politics: The Elusive Quest for Judicial Review of Political Fairness}, 71 \textit{Texas L. Rev.} 1643, 1672 (1993) ("Courts have repeatedly invoked \textit{Bandemer} for the proposition that it is impermissible to place incumbents in head-to-head contests with each other in redrawn districts.").

\textsuperscript{261.} Burton v. Sheheen, 793 F. Supp. 1329, 1342 (D.S.C. 1992) (describing the avoidance of incumbent contests as "an important state goal").

\textsuperscript{262.} Gonzalez v. Monterey County, 808 F. Supp. 727, 735 (N.D. Cal. 1992).
serving "the constituencies of congressional incumbents." 

Yet, in other redistricting contexts, federal courts have refused to acknowledge state interests in protecting incumbents. For example, when jurisdictions fail in repeated efforts to draw legally valid redistricting plans, federal courts assume that role. In these circumstances, some courts explicitly refuse to permit partisan or incumbency concerns to influence redistricting policy. In the recent court-mandated reapportionment of the Minnesota legislature, the court evaluated the plan in terms of independent, nonpartisan fairness criteria, explicitly assuming a veil of ignorance concerning effects on incumbents. In other cases, court-appointed expert witnesses have specifically requested that they not be provided with data concerning partisan or incumbent effects of various plans. Arguably, an affirmative judicial role in redistricting might implicate different concerns than a more passive review of policymakers' reapportionment plans, but these cases reflect some judicial discomfort with legitimating too strongly state efforts to protect existing officeholders.

As for the legitimacy of partisan political aims, the argument that they justify "bizarre" race-conscious districts can be pressed in two forms. In the most compelling form, states might argue that oddly shaped districts are necessary to create a legislature that fairly reflects the distribution of partisan power in a state. In the least attractive but often more realistic form, states might argue that the political forces in control of redistricting ought to be permitted to exploit their advantage as far as possible. The argument would continue that, as long as this pursuit of political advantage is not carried to the unconstitutional

263. White v. Weiser, 412 U.S. 783, 797 (1973). Note, though, that the Court explicitly reserved the different question of whether a state can justify a deviation from population equality among districts that is a prima facie violation of equal protection on the ground that it is necessary to protect incumbents. 412 U.S. at 791-92. Justice Marshall rejected the Court's willingness to defer to state desires to protect incumbents, even when the question arises only in the context of federal courts' choosing between reapportionment plans after a constitutional violation has been established. 412 U.S. at 799 (Marshall, J., concurring in part).

264. See, e.g., Prosser v. Elections Bd., 793 F. Supp. 859, 867 (W.D. Wis. 1992) (three-judge court; per curiam) ("Judges should not select a plan that seeks partisan advantage — that seeks to change the ground rules so that one party can do better than it would do under a plan drawn up by persons having no political agenda — even if they would not be entitled to invalidate an enacted plan that did so."); Terrazas v. Slagle, 789 F. Supp. 828, 844 (W.D. Tex. 1991) ("Ensuring free and equal access to the ballot, not partisan considerations or the protection of incumbents, is the sole focus of federal law in the area of redistricting and reapportioning seats to legislative bodies."). aff'd., 112 S. Ct. 3019 (1992) (mem.).

265. "The plan developed by the court was developed without regard to the residence of incumbents. Adherence to principles of compactness and population equality, and respect for governmental boundaries insures that partisan gerrymandering is reduced or eliminated." Emison v. Growe, 782 F. Supp. 427, 445-46 (D. Minn. 1992) (footnote omitted), rev'd., 113 S. Ct. 1075 (1993).

266. See, e.g., Issacharoff, supra note 260, at 1694.
extremes that Bandemer condemns, state political forces should be permitted to battle for control, even through the means of contorted, race-conscious districts. The Court has acknowledged the inevitable role of political aims in redistricting and has held that the pursuit of "political fairness," in the form of districts designed to bring about proportional representation of Democrats and Republicans in the state legislature, is not unconstitutional. Beyond that context, however, the Court has not suggested how much weight partisan aims will be given under the Fourteenth Amendment.

This wavering and uncertain pattern of decisions suggests a limit on the willingness of courts to accept state partisan and incumbency-protection interests as compelling ones. Shaw offers no direct guidance on the question, but it seems unlikely that courts will view these interests as sufficient to justify "highly irregular" race-conscious districts. Both the tenor of Shaw and its formal legal requirement of strict scrutiny suggest the Court believes it has identified a value of profound constitutional importance that certain oddly shaped districts threaten. Although a state's partisan agenda might be a legitimate aim that courts will defer to in some contexts, it will be awkward for courts to declare it compelling enough to override the constitutional values Shaw identifies.

In addition, Shaw itself suggests that partisan motivations are a further reason to condemn, rather than to salvage, "bizarre" race-conscious districts. No veil obscured the possible role of incumbency protection behind the creation of District 12; the dissents raised it several times as a reason justifying the district, while amicus curiae squarely presented it as a reason to find North Carolina's plan unconstitutional. With partisan "defenses" so obviously available, Shaw would be a strange exercise in formality if the Court believes that, on remand, these defenses should be sufficient to justify contorted districts. Moreover, if Shaw rests on concern for social perceptions involving the role of race in politics, this concern suggests invalidating "highly irregular" districts when these perceptions are likely. Shaw resists permitting politicians to manipulate these social perceptions in pursuit of their own self-interest and partisan advantage. For these reasons, we consider it unlikely courts will find protection of incum-

267. See supra notes 254-55 and accompanying text.


269. See, e.g., Brief Amicus Curiae of the Republican National Committee in Support of Appellants at 12-13, 19-21, 25, Shaw.
bents or pursuit of partisan gain to be a sufficiently compelling justification for "highly irregular" race-conscious districts.

3. VRA Compliance as an End

Race-conscious districting most often occurs in the context of efforts to comply with the VRA's ban on minority-vote dilution. But compliance with the VRA is not a unitary phenomenon. Claims of compliance can arise in purely remedial contexts, they can arise when jurisdictions claim to be preventing future violations, or they can arise when jurisdictions affirmatively use race to comply with the general aim of enhancing minority representation.

As in other areas involving race and the Constitution, the purely remedial context is the easiest one. When a minority district is required for a jurisdiction to comply with either section 2 or 5, that mandate should provide sufficient justification under Shaw. With respect to district shapes, the difficult question will not be whether required compliance satisfies strict scrutiny, but what kinds of districts the VRA will be interpreted to require. We have described the conflicting ways in which federal courts have approached that statutory question. Shaw directly bears on this question only when an interpretation of the VRA would be unconstitutional — that is, when the district it requires would be unconstitutionally contorted. But, Shaw will cast a larger shadow, for it will likely change the background assumptions courts bring to interpreting the Act. Courts might become more likely to find that the Act does not require extremely noncompact districts, particularly at the stage of determining substantive liability under the Act. The difficult question will not be the formal

270. Many years ago, John Ely observed that legal standards treating ex post racially disparate impact as racial discrimination would necessarily require policymakers ex ante to engage in race-conscious policymaking. He noted:

[So] long as the Court remains unwilling to order states to take race into account . . . judicial review must await proof of racial motivation and cannot be triggered by disproportion per se. To undertake automatically to invalidate [state actions] because of racial disproportion would obviously be to order that balance be intentionally achieved.

John H. Ely, Legislative and Administrative Motivation in Constitutional Law, 79 YALE L.J. 1205, 1260 (1970). Because the VRA prohibits electoral arrangements that discriminate in intent as well as result, policymakers must be aware of — rather than indifferent to — the racial distribution of political power that different electoral structures will produce.

271. See, e.g., Shaw, 113 S. Ct. at 2830 ("The States certainly have a very strong interest in complying with federal antidiscrimination laws that are constitutionally valid as interpreted and as applied."). There is some circularity, inevitably, to this analysis. If only "highly irregular" districts trigger strict scrutiny, then only those districts require special justification. But as a statutory matter, courts are unlikely to interpret the Act to require highly irregular districts after Shaw.

272. See supra text accompanying notes 160-76.

273. Even if courts become more strict in the way they interpret the first prong of Gingles, thus finding no liability when no reasonably compact minority district can be created, they might
one of whether VRA compliance is sufficiently compelling, but how broadly the courts will construe this compliance. We examine this question shortly.

Apart from the pure remedial context, jurisdictions might use race to forestall potential VRA violations. With respect to oddly shaped minority districts, the crucial question is whether Shaw will lead to Croson-like constraints on racial redistricting.\textsuperscript{274} Must jurisdictions first establish a factual predicate for the position that race-conscious districting is a necessary preventative? What evidence would be required and what level of proof must be met? For example, must jurisdictions engage in the costly and complex process of establishing racially polarized voting patterns, a task plaintiffs must undertake to establish a section 2 violation? Because we are focused here on "highly irregular" districts, it is unlikely jurisdictions will be able to establish that such districts are necessary to avoid substantive VRA liability.\textsuperscript{275}

Finally, jurisdictions might seek to justify oddly shaped minority districts not in remedial terms, but prospectively. If forced to put this in terms of compliance with the VRA, jurisdictions might argue that such districting is consistent with the general purposes and spirit of the Act, even if not technically required. Jurisdictions might assert, for example, that these districts are a means of enhancing the legitimacy, fairness, and responsiveness of democratic institutions. Under Voinovich v. Quilter,\textsuperscript{276} nothing in the VRA prohibits race-conscious districting justified in these terms. But, whatever the constitutional status of such justifications for race-conscious districts that are reasonably compact, Shaw seemingly requires that these justifications be found insufficient for "highly irregular" districts. Shaw requires strict scrutiny for irregular districts, and, again, it is difficult to see the point

\textsuperscript{274} We focus here only on oddly shaped districts, rather than race-conscious districts in general, because of our view that Shaw applies only to the former. See supra text accompanying notes 57-74.

\textsuperscript{275} If the Justice Department denied § 5 preclearance on the ground that the failure to create a particular, "highly irregular" district would amount to a potential § 2 violation, a jurisdiction that complied by drawing such a district would likely have sufficient justification. Of course, an aggressive interpretation of Croson could further require that the Justice Department's conclusion of potential § 2 liability itself rest on a sufficient factual foundation, such as proof of racially polarized voting in the relevant area.

\textsuperscript{276} 113 S. Ct. 1149 (1993).
in that requirement if jurisdictions can successfully defend with the argument that they were seeking to enhance minority representation.\footnote{277}

B. Means: The Requirement of Narrow Tailoring

In addition to sufficiently compelling ends, \textit{Shaw} requires "narrowly tailored" means that advance those ends with precision.\footnote{278} This will be a complex undertaking, again raising, among other difficulties, the problems of mixed motives.

Consider VRA compliance. When the Justice Department under section 5 or the courts under section 2 find that a jurisdiction is required to create an additional minority district, neither typically specifies precisely where that district must be located and how it must be designed. This policy of self-abnegation rests both on the recognition that districting implicates multiple, diverse values, and on policy reasons for deferring to state recommendations of those values. As long as the jurisdiction gets to the required end state and creates the additional district, federal concerns are satisfied.

In this context, the meaning of "narrowly tailored" is obscure. Absent direct specification from either the courts or the Justice Department as to how a district is to be designed, no obvious baseline exists against which to measure "narrowly tailored."

One solution is to construe this language to suggest that the minority districts the VRA requires must be drawn in the most compact way possible. Yet this would confuse the purpose of \textit{Shaw}'s strict scrutiny standard and require jurisdictions, for no obvious purpose, to compromise significant redistricting values. The purpose of demanding close connections between means and ends is to ensure that the state is not covertly pursuing forbidden ends. But compactness is not constitutionally required;\footnote{279} \textit{Shaw} does not forbid noncompact districts per se. Instead, the suspect districts are those so noncompact as to create the social perception that the single value of race-conscious districting has subordinated all other districting values.

As a result, "narrowly tailored" in this context should mean no

\footnotesize{\begin{itemize}
\item \footnote{277. As we argued earlier, see supra text accompanying notes 126-32, \textit{Shaw} can be read broadly and narrowly; if \textit{Shaw} applies only when a more compact minority district could have been created, then the inability to do so would provide a sufficient defense under strict scrutiny.}
\item \footnote{278. \textit{Shaw v. Reno}, 113 S. Ct. 2816, 2819 (1993). This statement is made in the specific context of remedying violations under § 5's nonretrogression standard. 113 S. Ct. at 2819. The Court does not make a similarly explicit statement regarding narrow tailoring with respect to § 2. Nonetheless, nothing the Court says about § 5 would appear to distinguish it from § 2 in this respect.}
\item \footnote{279. \textit{Shaw}, 113 S. Ct. at 2827 (citing Gaffney v. Cummings, 412 U.S. 735, 752 n.18 (1973)).}
\end{itemize}}
more than avoiding "highly irregular" district shapes. This view may make the means test appear redundant, given that *Shaw* requires strict scrutiny for precisely such districts. Interpreted this way, however, the narrow tailoring requirement would still be an element in *Shaw*'s logic because it would clarify that vague assertions of compliance with the VRA will not suffice. At the same time, as long as jurisdictions are complying with their VRA obligations, while still accommodating traditional redistricting goals, *Shaw* implies that they will retain policymaking discretion to make trade-offs among these goals. *Shaw* requires that jurisdictions respect value pluralism and avoid value reductionism. The requirement of "narrow tailoring" should be construed with this principle in mind.

C. Justifications: The General Problem

Easily lost in this technical legal analysis is the essential nature of the districting process. Districting implicates an array of values, some relatively neutral, some intensely partisan. For the most part, one cannot rank these values in any lexical order; no decision rule specifies the precise trade-offs to be made among these values when they conflict. Moreover, the design of even a single district reflects not one decision, but the cumulation of hundreds of small decisions — whether to include this or that section of adjacent towns, whether to extend the district to the north or to the west, even whether to include this or that street. In addition, district plans draw from a virtually unlimited range of potential alternatives. There is no ideal districting plan that forms a baseline against which to measure individual districts or a district plan.

*Shaw* attempts to pull one thread out of this tapestry; it demands specific, articulable justifications in one particular districting situation. It is not clear, however, whether this aim can be achieved without unraveling the fabric of the districting process. Districting plans are integrated bundles of compromises, deals, and principles. To ask about the reason behind the design of any one particular district is typically to implicate the entire pattern of purposes and trade-offs behind a districting plan as a whole. Searching for "the reason" or

280. It is generally recognized that equal population and avoidance of minority-vote dilution are goals that must be achieved. Beyond that, there is widespread disagreement on the priority ranking of other goals.

281. See, e.g., Robert G. Dixon, Jr., *Fair Criteria and Procedures for Establishing Legislative Districts*, 9 POLY. STUD. J. 839, 844 (1981) (noting that districting is not an exercise in logic but in compromise and accommodation); Issacharoff, supra note 260, at 1650 (noting that states are hard pressed to articulate coherent policies for districting plans "in light of the political horse-trading and compromises that typically — and perhaps inevitably — underlie such plans"). The difficulties here are analogous to those that underlie the judicial resistance to engage in substan-
“the dominant reason” behind a particular district’s shape is often like asking why one year’s federal budget is at one level rather than another. Moreover, to require a coherent explanation for the specific shape of even one district is to impose a model of legalistic decision-making on the one political process that least resembles that model.

These general pressures may lead Shaw in another direction. Rather than providing a doctrine for recovering the reasons behind an irregular district, Shaw might eventually become an external constraint on the districting process. That is, Shaw might come to define an outer constraint on extreme noncompactness. As long as redistricting bodies stay within that constraint, however, they will retain the discretion to make arbitrary, politically laden policy trade-offs between competing districting values. In this way, Shaw would not demand ex post what does not take place ex ante: reasoned articulation of specific purposes for drawing district boundaries in particular ways.

Rather than seeking the reasons an irregular district was drawn, courts might implement Shaw as a constraint on the extent to which districts can become extremely noncompact. With a clearly announced constraint on extreme noncompactness, political bodies will understand the domains in which they cannot act and those within which they retain policymaking discretion. As long as policymakers stay within this specified constraint, courts will not have to inquire into the reasons behind district designs. Many of the issues discussed above can then be bypassed. When policymakers continue to believe they have sufficient reasons for violating this constraint, courts will still have to evaluate those justifications. Yet such contexts are likely to be rare once a clear constraint is specified.

CONCLUSION

In some respects, Shaw might function as the Baker v. Carr of the Voting Rights Act era. In Shaw, the Court found justiciable an entirely new kind of equal protection claim that constrains the design of election districts. Like Baker, the decision will be controversial, in part because it is bereft of virtually any guidance as to how the elusive principles that underlie its holding are to be turned into an administrable set of standards. In an area as explosive as race and redistrict-

tive rationality review of economic legislation; just as individual economic regulations are tied to each other through an ongoing process of compromise and logrolling, individual district lines cannot be rationalized apart from the compromises and trade-offs they embody. See generally Frank Michelman, Politics and Values or What’s Really Wrong with Rationality Review, 13 CREIGHTON L. REV. 487 (1977) (analyzing rationality review of economic regulation).

ing, the political, legal, and social costs of this uncertainty are potentially vast.

We have argued that Shaw ultimately must be understood in terms of judicial concern for “expressive harms.” American conceptions of political representation are riven right now by competing ideals. Traditionally, the fundamental template has been that of the territorially based single-member districting system, in which geographically defined interests are the foundation on which political representation is built. Working within this mold, the VRA stresses instead direct representation of group interests, seeking to ensure the fair and effective representation of minority groups. In Shaw, the Court effectively held that the tension between these alternative visions had reached the breaking point. When jurisdictions create “bizarre” territorial districts, in single-minded pursuit of enhancing minority representation, they compromise the perceived legitimacy of political institutions. The harm is a generalized one, for it lies not in specific burdens on particular individuals, but in government’s expression of disrespect for significant public values. Right or wrong, this is the theory on which Shaw is decided.

Expressive harms are notoriously difficult to translate into legal rules. We have argued that quantitative measures of compactness provide the most secure starting points for defining “bizarre” districts in principled and administrable terms. Using these measures, we have shown that North Carolina District 12 can legitimately be considered the least compact congressional district in the country. At the same time, other districts — majority and minority — are not far behind. The precise effect of Shaw will depend on how “irregular” a district must be to trigger strict scrutiny, but quantitative measures of compactness promise the most useful guidance for making that choice. Baker became meaningful once Reynolds v. Sims translated it into the one-person-one-vote standard. If Shaw is to have its Reynolds, it will be through the quantitative measures of compactness we offer here.

283. 377 U.S. 533 (1964); see also Wesberry v. Sanders, 376 U.S. 1 (1964) (requiring one person, one vote for congressional districts). Professors Aleinikoff and Issacharoff make a similar observation. See Aleinikoff & Issacharoff, supra note 59, at 622 (“Shaw would then be the Baker of compactness standards, with its own Reynolds presumably to follow.”).