The Cognitive Geometry of War

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Abstract

When national borders in the modern sense first began to be established in early modern Europe, non-contiguous and perforated nations were a commonplace. According to the conception of the shapes of nations that is currently preferred, however, nations must conform to the topological model of (approximate) circularity; their borders must guarantee contiguity and simple connectedness, and such borders must as far as possible conform to existing topographical features on the ground. The striving to conform to this model can be seen at work today in Quebec and in Ireland, it underpins much of the rhetoric of the P.L.O., and was certainly to some degree involved as a motivating factor in much of the ethnic cleansing which took place in Bosnia in recent times.

The question to be addressed in what follows is: to what extent could inter-group disputes be more peacefully resolved, and ethnic cleansing avoided, if political leaders, diplomats and others involved in the resolution of such disputes could be brought to accept weaker geometrical constraints on the shapes of nations? A number of associated questions then present themselves: What sorts of administrative and logistical problems have been encountered by existing non contiguous nations (such as the United States) and by perforated nations (such as Italy, which circumcludes the Vatican and the Republic of San Marino, and South Africa, which circumcludes Lesotho), and by other nations deviating in different ways from the received geometrical ideal? To what degree is the desire for continuity and simple connectedness a rational desire (based for

example on well-founded military or economic considerations), and to what degree does it rest on species of political rhetoric which might be countered by, for example, philosophical argument? These and a series of related questions will form the subject-matter of the present essay.

Introduction
There are different types of spatial shadows cast by human activities. There is first of all that sort of spatial shadow which is present in the phenomenon which psychologists call 'personal space', a phenomenon illustrated by the behavior of persons at a party, or at a political meeting, or in a queue, who can be observed to adjust their relative positions in order to preserve a certain proper distance from their neighbors. Individuals engaged in such activities can be conceived as contained within spatial bubbles which move with the individuals involved. Such spatial bubbles vary in size, shape and degree of elasticity in reflection of the type and degree of physical separation from other participant individuals that is required by the given activity. The geometry of such personal spaces will differ also as a function of the type (age, social origin, gender, etc.) of the individuals involved (Leibman 1970).

   Small groups, too, may have their own personal spaces in this sense, for example on the dance floor. Consider what happens when one stranger says to another 'Shall we dance?' and is greeted with acceptance. Here a plural subject of a new kind is formed, a civil society in microcosm, which has its own personal space of a certain shape, size and elasticity (depending on step, rhythm and culture) and which moves around the dance floor in such a way as to be marked by a certain more or less tacit resistance to penetration or separation in relation to other couples.

A different sort of spatial shadow is illustrated in the phenomenon of territoriality, a type of relation between an individual or group and an area of space which is of such a sort that the former will seek to *defend* the latter against invasion by other individuals or groups. The phenomenon of territoriality involves in each case a relation to some specific portion of space. A territory is 'a fixed area from which intruders are excluded by some combination of advertisement, threat, and attack.' (Brown 1975)

Force Dynamic Spatial Objects
Both territory and personal space are matters of disposition or tendency, of what *would* happen *if* something else happened for example of the defensive gestures or withdrawal maneuvers which would be provoked by different sorts of incursions. Exploiting a term coined by the linguist Leonard Talmy (1988), we will call such dispositionally demarcated regions *force dynamic spatial*

objects. Their borders, correspondingly, we shall refer to as *force dynamic spatial borders*; they are borders of a peculiar sort, possessed of a certain intrinsic elasticity. It is because of the dispositional character of force dynamic borders that their precise locations are hard to establish in any given case. Force dynamic spatial boundaries may moreover overlap; the resultant areas will then be marked by the existence of twilight zones subject to the dominion of no single individual or group.

Force dynamic boundaries may shift very rapidly. Consider the problem of modern warfare against rebels: during the day, the army can hold the cities and the road, at night only the cities. This means that the areas under government control change between night and day. Force dynamic boundaries depend also on the means of transportation in relation to which they are determined: if the two groups on both sides of the border do not use the same technology, the boundary is not well fixed. The boundary between Venezuela and Brazil in the jungle, for example, is very different if considered from the perspective of water and road transport with technical means or from the perspective of the network of paths of indigenous peoples.

Both territoriality and personal space are standardly a matter of continuous wholes the image of a single, roughly spherical bubble, whether stationary or in motion, is thus normally appropriate. The tendency for individuals and groups to seek to establish for themselves continuous regions of 'home'-space of more or less circular shape is well-justified: as Aristotle noted, the roots of politics lie in friendship, and thus in proximity, and accessibility. Such regions are in addition most easily defended against incursion from without. Where continuity is broken by invasion, measures will accordingly be taken to reconstitute continuous territory.

No 'Territorial Imperative'
Robert Ardrey, notoriously, has propounded in his book *The Territorial Imperative* a view according to which a 'hard-wired' terrritorial instinct applies to phenomena on vastly different scales, including interactions between nation-sized groups. The territorial instinct is according to Ardrey able to explain phenomena as diverse as war, national sovereignty and the workings of the real estate markets, as well as human and animal territorial defense behaviors of more restricted types. The tendency to territorial behavior is certainly a well-attested part of our biological heritage. Anthropologists have shown, however, that the force of territoriality diminishes with increase in group size and in spatial area, and that, in the case of both human and non-human animal species, a nested continuum of types of site must be distinguished. In the first place we

have the *home range*, that area within which the group spends most of its time (including foraging and hunting). Within the home range are various *core areas*, for example watering holes and other sites where desirable resources are available on a routine basis. Finally there are *territories* in the narrow sense, and it is only in relation to these, characteristically tiny areas that the occupying individual or group demands exclusive use. (Taylor 1988, pp. 21f.)

   Most anthropologists today, therefore, would argue that territoriality in the narrow, biological sense applies only to small (roughly: family-sized) groups. As far as application to larger groups is concerned, they prefer to speak instead of the much weaker and more variegated phenomenon of territorial *functioning,* defined as

> an interlocked system of sentiments, cognitions, and behaviors that are highly place specific, socially and culturally determined and maintaining, and that represent a class of personplace transactions concerned with issues of setting management, maintenance, legibility, and expressiveness. (Taylor 1988, p. 6)

Alternatively, they talk of territoriality not in terms of defence and exclusive use but rather in terms of 'the attempt by an individual or group to affect, influence, or control people, phenomena, and relationships, by delimiting and asserting control over a geographic area [the territory].' (Sack 1986, p. 19)

   The desire for exclusive control over a certain area of land has, certainly, served as a stimulus to war and intergroup violence in many cases. But there are many large groups which live for long periods in territories in which they are interspersed with other groups, and pogroms do not happen all the time. Indeed, the evidence of history tells us that many large groups did not act on the basis of any territorial imperative to seek exclusive occupation of any single continuous area. It is therefore unlikely that the so-called territorial imperative described by Ardrey can be exploited in giving an account of the causes of war. Not only are there successful and long-lasting multicultural and multiethnic societies involving systematic overlapping and intermixing of distinct groups within a single region, there are also and indeed far more commonly than is often presupposed non-contiguous nations (such as the United States) whose sovereign territory is broken up into separate pieces by the interspersed territory of other sovereign nations.

   Yet some remnants of the desire for exclusive control remain, and may be latent for long periods even when not expressed in action. Such remnants are moreover stimulated by, and are reciprocally a pre-condition for, the forcefulness of certain sorts of rhetorical devices on the parts of tribal elders, historians, poets and religious leaders. They are illustrated for example in

phrases such as 'manifest destiny', 'from sea to shining sea', *Deutschland ist unteilbar!*', and so on. Such rhetorical devices have the power to awaken or reinforce the desire of group members to establish for themselves exclusive occupation of certain territorial regions, often regions of certain desired ('natural', broadly circular) shapes, and marked by correspondingly 'natural' (broadly: topographically determined) frontiers. Poets favor 'natural' borders. The rhetoricians of the Nazi party were exploiting this appeal in their talk of '*Lebensraum*' and in their justification of attempts to establish unification of Germany with the German settlements to the east.

Such rhetorical devices have their equal and opposite counterpart in phrases such as 'the Palestinian entity', 'the six-county statelet' designed to diminish the significance of claims to sovereignty on behalf of unfavored groups. These phrases, too, point to the dimension of geometry as a crucial but hitherto neglected factor in the aetiology of wars, and to the tendency on the parts of leaders of national or ethnic groups and of war-propagandists to claim on behalf of their constituent populations rights to territories of certain geometrically favored sorts. Correspondingly, leaders of groups with established territories refer to attempts to dislodge them from control of even peripheral fragments of these territories as amounting to 'balkanisation', 'dismemberment', 'mutilation', 'violation of the motherland' and the like. Thus, to take just one example, in March 1996 Russian Defense Minister General Pavel Grachev referred to Chechnya as 'a testing ground for the strategic enemies of Russia whose main aim is to *split the country* and annex part of its territory.' (Emphasis added.)

Such devices are clearly illustrated also in the case of Quebec and Ireland, to name just two peculiarly conspicuous examples of the phenomenon I have in mind. Consider the following passage taken from the 'Manifesto' issued by the Bishop of Derry in 1916 in response to the prospect of partition:

> Blessed by St. Patrick as a nation the children of Erin have clung to the national ideal with a tenacity surpassed only by their loyalty to the Faith that he planted in their breasts. And are the Irishmen of today going to prove themselves degenerate sons of their great and noble forbears? Are we going to surrender even without a national protest the inheritance of a United Ireland handed down to us through the ages of persecution and bloodshed? Are we so indifferent to the memory of our forefathers as to allow the last resting place of St. Patrick and St. Bridgid, the spot dearest on earth to great St. Columbcille, and the Primatial See of Ireland's Father in the Faith, to be included in a new Pale and cut off from the Fatherland? In such an event what a mockery it would be to speak any longer of Ireland a nation! Is not Ireland dearer to us than any little enclave of individuals,

however important and indispensable they may seem to themselves? Such rhetorical devices have been instrumental, over and over again in the course of human history since (roughly) the time of the Napoleonic wars, in instigating 'freedom fighters' to give their lives in the cause of establishing borders of certain favored shapes. These devices thus certainly appeal to deep-rooted impulses on the part of the members of those groups towards whom they are directed. Yet, in contrast to what is affirmed by Ardrey and others, the whole phenomenon is primarily a cultural rather than a biological ('hard-wired') affair; it seems to be about as old as the human practice of making maps of fixed boundary-geometries, and has almost certainly enjoyed pervasive influence only since the development of printing and the dissemination of printed maps.

The desire for exclusive occupation of a 'natural' territory does of course in many cases have a rational basis in requirements of defence. This same desire exists today, however in Quebec, again, and also in Ireland in a form where this military dimension is entirely lacking. What is desired in these cases is not defensible territory but rather territory within which a given group can give expression to the peculiarities of its culture and, in tandem therewith, enjoy democratic advantage and control. This same desire was illustrated in the 'bizarre shape' settled upon by the British in their partition of Ireland in 1917; but it is illustrated also in the desire of Irish Republicans to establish 'the whole island of Ireland' as a single, sovereign entity. Gerrymandering can, it seems, lead in different geometrical directions.

Prehistory
Examining the history of the very earliest human settlements we encounter the following patterns. Groups, and the regions they occupy, exhibit a tendency to expand until they reach physical obstacles such as coastlines, or until they meet the resistance of an equal and opposite expansion on the part of neighboring groups. Mutual adjustments very similar to those effected spontaneously by bubbles on the surface of a soapy solution are then encountered, and what look like clusters of bubbles can indeed be found on maps depicting tribal expansion in early Africa.

It can lead also to the peaceful *merging* of groups through intermarriage and through trade and other forms of cooperation. A new, larger group is formed out of the coalescing of smaller groups. (Again, the factor of public rhetoric on the part of poets and other keepers of the tribal memory can both foster such coalescing and also mitigate against it.)
There may occur also a splitting off of sub-groups who proceed to establish new, disconnected territories in other regions. (Something like this was involved

in the colonization of the American continent.) The splitting off of sub-groups can occur also involuntarily, for example via natural disaster or by conquest leading to enslavement or to the agglomeration of feudal territories into larger constellations of political power.

As the process of expanding and splitting occurs on all sides, not least in response to the pressures on resources created by growth in population, groups become variously dispersed and also interspersed. *But interspersion need not be experienced as such.* If A's are to the east and to the west, and B's are in the center, then neither the eastern nor the western A's need feel any threat to the territorial integrity of their respective groups. This will occur only if (i) the A's conceive themselves *as* A's and as thus distinct from B's, and (ii) the entire territory of the A's is conceptualized by the A's as a single 'natural' whole. Only when both of these conditions are met will the B's be seen by the A's as having the status of intruders. As to (i) we shall here leave to one side the in itself important question as to the degree to which human groups of different scales are real unities or to some degree products of beliefs and practices on the part of their members. For it is condition (ii) which is the principal focus of our present investigation.

The Role of Boundaries

We note that the likelihood of satisfaction of condition (ii) is at least increased with the development of modern means of communication and with the spread of the institutions of democracy. Thus in the period of the agglomeration of feudal territories under the ownership of one single lord in early modern Europe, this agglomeration caused no experience of mixing, and hence no 'minorities'. Only with the growth of the modern conception of the nation(-state) do the latter begin to make themselves felt. A group of island dwellers might, for example, in light of this modern conception, come to conceive the whole of the relevant island (Fiji, say) as its natural and rightful home. They then begin to perceive the members of a second group as alien interlopers. A related case involves not the natural borders of an island but rather created, artificial borders of the sort which constitute (most) nations and empires. Such artificial borders are, like maps, a cultural phenomenon, a relatively late product of civilization. 'Artificial', here, can mean either (a) not such as to follow natural borders of a topographical sort (such as coastlines, mountain ranges, rivers) or (b) not such as to reflect existing group divisions on the ground (or some combination of the two). Such artificial borders, too, may create new politico geographical entities within which a dominant group may come to see non-dominant groups (for example Jews for much of European history) as interlopers deserving of

exclusion or elimination or isolation in ghettos. The redrawing of artificial borders can also bring it about that formerly dominant majorities become transformed into force dynamic remnants (this happened to the Serbs in Croatia, to the Russians in Ukraine and Lithuania, to the Swedes in Finland, to the 'Protestant Ascendancy' in Ireland).

Three Types of Spatial Object
We have distinguished three types of spatial object, as follows:

> 1. *Bona fide* spatial objects (for example islands, lakes): objects whose boundaries are intrinsic physical discontinuities in the material constitution of the earth.
> 2. *Fiat* spatial objects (for example counties, Indian reservations, state parks): objects whose boundaries exist as a result of human fiat or convention.
> 3. *Force dynamic* spatial objects (for example the area of land occupied by a given infantry troop): objects whose boundaries are determined by the actual or potential dynamic actions of their respective constituent parts.

Under the first type are included spatial objects which would exist, and would be set into relief in relation to their surroundings, even independently of all human intervention, whether physical or cognitive. This type includes also spatial objects such as polders and artificial lakes which are the enduring products of human physical endeavor.

Objects of the second type begin to exist and are sustained in existence only as a result of certain cognitive acts, practices or institutions on the parts of human beings. There are no fiat objects in the extra-human world. Such objects exist through and through as a matter of convention. Consider for example the case of Wyoming and Colorado, which, like many political and administrative spatial objects in the United States, have rectangular shapes (or more precisely: they have shapes constructed on the surface of the earth out of parallels of latitude and longitude).

Objects of the third type are geopolitical analogues of the small-group territories and personal spaces discussed above. They are characteristically transient, and tend to form systems with other third-type spatial objects in relation to which they are subject to a very high degree of reciprocal dependence in respect of their size, shape, location and degree of elasticity.

Three Types of Spatial Boundary
Corresponding to the tripartite division of spatial objects is a parallel tripartite division of types of spatial boundary:

1. *bona fide* boundaries, such as the fence around my neighbor's garden or the coastline of New York;
2. fiat boundaries, such as the Mason-Dixon line and the Greenwich Meridian;
3. force dynamic boundaries, such as the boundaries of British, French, Dutch and Spanish influence in the continent of North America in, say, 1670.

Having made this further distinction we can now point to the obvious fact of the existence of mixed cases: spatial objects whose boundaries are combinations of the different elements here distinguished. The boundaries of most modern nations involve a combination of *bona fide* and fiat elements. Geopolitical entities of earlier eras (such as the Seljuk Kingdom of Iconium or the Khanate of the Golden Horde) involved also force dynamic border-segments.

The great system of nations into which the land surface of the earth has been divided in the modern period rests not onlyupon reciprocal negotiation of shared boundary-stretches between neighboring nations, but also upon a complex balancing act between groups of nations joined together by treaty and pledged to defend each others' boundaries and thus to preserve the equilibrium of the system as a whole.

The Primacy of Force Dynamic Spatial Objects

Historical and anthropological reflection will tell us, now, that objects of the force dynamic type must in every case come first, that force dynamic spatial objects must precede the tidily demarcated fiat and *bona fide* spatial objects (nations, states, empires) with which we have grown familiar in the course of recent history. As the historian Owen Lattimore expresses it:

Frontiers are of social, not geographic origin. Only after the concept of a frontier exists can it be attached by the community that has conceived it to a geographical configuration. The consciousness of belonging to a group, a group that includes certain people and excludes others, must precede the conscious claim for that group of the right to live or move about within a particular territory. (Lattimore 1962, p. 471)

How are we to do justice to these 'frontiers of social origin' and to the processes by which they become attached to specific regions of space? Let us emphasize once more that they do this not singly, but in groups and in more or less harmonious consort. Only in the rarest of cases effectively restricted to certain selected island nations favored by fate do we have the possibility of a unilateral decision as to where the vague and transient force dynamic territorial frontiers of a given social group shall be converted into geopolitical boundaries of the

crisp and stable sort. In other cases, at least on those sides where the force dynamic boundaries correspond to no impenetrable topographical features such as deserts or mountain ranges, this determination must be made through a process of sometimes violent reciprocal negotiation between pairs of neighbors. The Thirty Years War is a process of negotiation of this sort, its goal in no small part being one of setting an end to the systematic interfingering and overlapping of force dynamic territories that was a product of differing religious allegiances in continental Europe. Given groups were brought, by degrees, to a position where they could claim to enjoy exclusive occupation of given well-demarcated regions. The results of such negotiation had thereafter to be defended and secured by treaty. The borders needed also, at least in many cases, to be defended against encroachment from within, since new force dynamic territories began to evolve, as groups (such as the Kurds in Iraq and Turkey and the Basques in Spain), whose territorial claims overlapped with those of the successful group, began to bring these claims to expression by more or less violent means.

Corresponding to the three types of spatial object, now, we can distinguish three types of nation, or three models or ideals against which specific nations or nation-building projects may be judged:

> 1. the *bona fide* nation: this type is illustrated most clearly by the great island nations: Iceland, Japan, Britain (we shall come to Ireland later);
> 2. the fiat nation, illustrated most clearly by African and Middle-Eastern nations, whose borders are to a large degree the products of colonialism (of colonial fiat). Post-contact native American 'nations' (reservations) would also fall under this heading;
> 3. the force dynamic nation: this type is illustrated for example by those groups of diaspora Jews, of gypsies, of Saami and Inuit, of Swedes in Finland, of Slovenes in Carinthia, of Poles in the era of partition whose members feel themselves (to different degrees) as one, but who have been denied or have renounced any claim to a physical territory over which they would maintain exclusive jurisdiction.

The Origin of Fiat Boundaries

We are interested primarily in the spatial objects of the human world: in counties, real estate parcels, nations, empires. How do such objects come into existence?

Bona fide boundaries are, by definition, boundaries we do not create but find there before us; we stumble over them. Fiat boundaries, in contrast, are brought into existence by human cognitive acts and practices, above all by cognitive acts

and practices which are linguistic in nature. The American Declaration of Independence is an example of a linguistic initiation of an object of this sort, and fiat objects in general, like many claims, obligations, laws, rights and titles, are tied intrinsically to initiating utterances, to speech acts of precisely appropriate sorts. There are also fiat initiations, belonging to the family of legislatings, contractings, baptisings, ennoblings, and so on, which involve essentially what we might call performative uses of maps. Thus Thomas Jefferson called into being the states of the so-called Northwest Ordinance by drawing off 14 neat checkerboard squares between the boundaries of the Atlantic colonies and the Mississippi River in 1784. Something similar is involved in the creation of parcels of real estate via entries in cadastral registries, and here we might note that again in marked contrast to what was the case in the feudal period such real estate parcels are today standardly continuous and simply connected.

The force of artificial borders patterned on this model is illustrated most clearly in Africa, where the colonial powers drew borders in ways which brought it about that different peoples came to be living together within a single legal-political territory. The paradigm instances of fiat nations in our sense (nations carved out via specific acts of human fiat, whose boundaries may be built in whole or in part out of exact geometrical figures, normally straight lines) are associated especially with colonialism. They have borders drawn by governments (in London, Washington, Ottawa, or Mexico City) before they know how things look on the ground.

Such borders can be quite stable and peaceful (this applies even to the colonially drawn borders in the sub-Sahara region), in contrast to the carefully drawn boundaries of Europe based on the idea of a 'self-determination of nations'. Nations have however been known go to war over borders of this artificial sort, sometimes protesting at their very 'arbitrariness'. This is so far example in the case of Iraq, a fiat spatial object formed in 1922 when Sir Percy Cox, the British High Commissioner, drew lines in the sand marking the borders of Iraq, Kuwait, and Saudi Arabia:

> The three Ottoman vilayets (districts) of Baghdad, Basra, and Mosul were separated from Turkey, Syria, Trans-Jordan, and Kuwait and were combined into a new Kingdom of Iraq Š under a British League of Nations mandate that lasted until 1932. (Geyer and Green 1992, p. 34)

With the ending of the British protectorate in 1961, however, Premier Kassem of the newly independent Iraqi nation announced immediately in Baghdad that 'Kuwait is an integral part of Iraq.' The justification of such pronouncements, then and later, rested not so much on intrinsic features of the land or people; as Sir Anthony Parsons acknowledged some years later: 'We, the British, cobbled

Iraq together. It was always an artificial state; it had nothing to do with the people who lived there.' (*Loc. cit.*) Rather, the Iraqi claim rested on the sheer *arbitrariness* of the fiat boundaries originally drawn in the sand or in other words on the geometrical ideal of 'natural' *bona fide* borders.

Rome
If the fixed lines of fiat borders are a product of human culture, then it seems reasonable to consider at what point in human history they first appeared. The boundaries of group territories were initially not fixed lines but rather force dynamic *zones,* to be accounted for not topographically or cartographically but rather by appeal to military, economic and ecological factors.

   Even as late as, and in relation to as sophisticated a product of human culture as the Roman Empire, it would be wrong to think of outer boundaries as sharp divisions, analogous to lines on a map. Ancient *limes* are not border *lines* but rather border *lands* where different cultures and social groups, for example groups of traders, nomads, farmers, meet and overlap, areas within which outposts of transport, trade and defence are linked together. These are zones of ecological marginality and demographic ambiguity. What explains why frontiers form as and where they do at this stage of human development is the marginality of the land, and in this respect we should bear in mind that the Roman emperors 'had some awareness, however crude, of the marginal costs of imperialism.' (Whittaker 1994, p. 86) This implies further that the frontier wars which, in cumulation, brought about the fall of the Empire are more like minor incursions, minor irritations, than great meetings of armies. Rome fell not by incursions of large enemies, but by a cumulation of pinpricks, by interlopers pretending to be intrinsic parts of the Empire ('multiculturalism'), which then gradually cut themselves off to form separate national groupings.

   On the other hand however, as far as *internal* boundaries of smaller-scale land-parcels are concerned, the Romans instituted very early on the practice of land surveying and of rectangular cadastration. The traditional date given to the *terminatio* ('the drawing up of boundaries') for the city of Rome goes back to Numa, or in other words to around 680 B.C. The art of land surveying (the art of the *gromatici* or *agrimensio*) was called by Cassiodorus 'this *disciplina mirabilis*, which could apply fixed reason to unlimited fields'. And as Whittaker points out:

> All rectangular surveys in history have had a strongly utopian character, used in a period of expanding power and colonial foundations as the dream of a distant administration for organized control. The great American Rectangular Land Survey of the eighteenth century was [likewise] designed

to bring "order upon the land" at a time of particularly fluid frontiers. (Whittaker 1994, p. 19)

The grand projects of imperial cadastration were thus means of establishing and organizing internal control; they and the corresponding concepts were not as yet applied to the drawing of external frontiers. Again, therefore, we have to recognize two kinds of boundaries: the fixed, fiat boundaries of administered land, within the *civitas* or area of application of the civil law; and the shifting force-dynamic boundary zones of unadministered land, the area of application of military law.

The Middle Ages

In medieval times, too, the extent of the kingdom was determined not by fixed external frontier (defense) lines marking out a certain territory, but rather by property and allegiance. A kingdom is a king and all the nobles, who were bound by a lien to follow him in battle. Such allegiances are not always stable. The nobles may have powers and ambitions of their own, which may result in the shifting of allegiances with a corresponding redrawing of territories, sometimes in radically different ways from generation to generation. The nobles in their turn had other lower-level noblemen bound to them in chains of allegiance descending downward until ultimately one arrives at farms (which include the peasants living on them) and thus at territory. The area of a 'nation' thus defined need not be any single contiguous region; this area could also quickly move (for example in the case of the Greek lost cities in Italy). Mantua, Pisa, Barcelona, Venice, Genoa, the Knights of Malta, the Hanseatic League, etc., are examples of non-contiguous sovereign political entities of the given sort, marked by frequent adjustment of borders, and there are many further such examples in that patchwork of principalities and bishoprics which was the Holy Roman Empire in, say, 1640.

Artificial borders seem to be absent from the Moslem conception of geopolitics also. The Koran talks instead of a division of the world into an ineluctably expanding Zone of Peace (ruled by Moslems) and a not yet pacified Zone of War. Only provisional and temporary force dynamic frontiers are allowed for in a world thus conceived, and Moslem princes correspondingly viewed the declaration of fiat borders around small or large blocks of territory by their enemies as a declaration of failure and a mark of inferiority. (See Lewis 1993)

Towards Fixed and Determinate Fiat Boundaries

Relics of this same idea are present in Jefferson's vision of a country spanning an entire continent ('from sea to shining sea'). Here, as in the case of the Roman

Empire during its period of expansion, there is originally no line, but only a limitless, open territory to expand into, beyond which there are barbarians, a wilderness which has to be brought under the control of civilization. As Whittaker points out, 'countries that are expanding have little interest in the limits to their power' (1994, p. 31). Only the ultimate natural frontier which is the coastline (in the Irish case: the whole island, in the Moslem case: the whole earth) can, according to the internal logic of this principle of manifest destiny, bring the process of expansion to a halt.

   The problems with the principle and the ways in which it leads to war and to inter-group conflict are clear: it ignores the role of aboriginal peoples and of other rival groups, and thus it sets aside the normally operative role of reciprocity in the establishing of frontiers.

> As Whittaker has argued, 'the very idea of a frontier as a line on a map is modern' (1994, p. 71), amounting to the transfer of the idea of *internal* cadastral boundaries to the realm of *external* frontiers. It seems, in fact, to have been the French who were primarily responsible for the consolidation and spread of this idea throughout the world, both in theory and in practice. The concept of natural, linear frontiers derives not least from the French fascination with *potamologie* or the myth of river frontiers as divinely ordained. (See Sahlins 1989, pp. 34ff.) It was from this idea that the popular misconception of the Rhine and Danube as Rome's natural frontiers was retrospectively derived. The French took seriously the idea that existing European frontiers, as defined by rivers, mountains and seas, are divinely ordained. We recall Danton's famous speech of 1793 defining the new French nation: 'Ses limites sont marquées par la Nature; nous les atteindrons toutes des quatre points de l'horizon, du côté du Rhin, du côté l'Oceán, du côté des Alpes.' The French central authorities then proceeded to *enforce* linguistic homogeneity in brutal fashion upon the region thus defined, in such a way as to create a single homogeneous 'modern' state (and we can see how similar patterns followed later in Italy and Germany). It was Napoleon, above all, who proceeded to impose the French ideal upon the rest of Europe. The myth of potamologie encapsulated French ambitions in Europe and in the Maghreb. A relic of this same obsession with fixed linear defenses embracing homogeneous populations is illustrated also in the construction of the Maginot line and, in another guise, in contemporary efforts of the Académie Française to protect the French language from the intrusion of alien anglophone expressions.

Hand in hand with the French cadastral ideal of fixed linear external frontiers is the idea of compactness and convexity, an idea according to which the natural

shape of a nation is a continuous, broadly spherical (in the French case: hexagonal) bubble. This idea encapsulates the geopolitical dream of the nineteenth century, not only in Europe but also, and more systematically and impressively, in Africa and in post-Jeffersonian America, where whole continents were subjected to a process of geometrical tiling and thus divided into nations and states on the basis of geometries inspired by the French model. Irish 'Republicanism', too, is a still-living product of this model, and of the violence and imperviousness to ground-level complexities with which it was often originally associated.

   The French ideal of the modern state is one which sees the need to divide each larger continent into geometrically natural constituent wholes (by analogy with a rectangular cadastre), and to ensure homogeneous (especially linguistically homogeneous) populations within each region. The ideal is standardly one according to which all and only the speakers of a given language should co exist within a single continuous region enjoying 'natural' frontiers. (Consider the failed attempt by the authorities in the Irish Free State to enforce Gaelic upon the population of the new Irish nation.) The ideal worked, to a degree, in France, and it was to a degree effective also in Italy, Spain and Germany, though each of these countries has significant indigenous national minorities. But it could not be made to work elsewhere in continental Europe, as is seen above all in the disasters which followed Woodrow Wilson's embrace in 1918 of the principle of 'self determination of nations'. As Kolnai wrote in 1946, reflecting on the regions of Eastern and Central Europe:

> Human society is not composed of nations ... in the same clear-cut sense in which it is composed of individuals or, for that matter, of sovereign states. The spectrum of nationalities is full of interpenetrations, ambiguities, twilight zones. It follows that the conception of nationalism as a universal principle, the conception of a 'just' or 'natural' order of nation states is in fact and in theory pure utopia. There can be neither an order of states nor of frontiers in which there does not enter to a large extent the factor of arbitrariness, contingency and historical accident. Pretending to 'purify' the body of mankind like other enterprises of a naturalist, pseudo-rationalist sort purporting to lay down 'evident principles' which generally prove to be illusory means to push arbitrariness to its extreme limit (Kolnai 1946, p. 536).

The Empire of the Habsburgs
The Habsburg Empire was, as one says, a multinational state, at times perforated, at times non contiguous, composed of a plurality of 'historico-

political entities' (*historisch-politische Individualitäten*), as one called the different kingdoms, archduchies, duchies, margravates, principalities, etc., in Austrian constitutional law. These several entities were themselves far from being ethnically homogeneous. Bohemia and the western part of the Kingdom of Hungary, and in particular the area including Buda and Pest, had substantial German populations. There were both German and Rumanian populations in eastern Hungary. The region of Trieste was inhabited by a mixture of Italians, Germans and Slovenes. Galicia was populated by a mixture of Poles, Ruthenians and Jews and one could extend this list still further.

The different nationalities were scattered throughout the Monarchy, so that no single ethnic or national group was confined to any one enclave or locality. Some of the problems raised by these mixtures of populations are still with us today, for example in Bosnia and in Transylvania. The problems were made still more complex by the fact that a similar diversity was present also in the religious life of the Empire, which encompassed Catholics, Uniates, Protestants (among them Lutherans, Hussites, Calvinists and others), Muslims and Jews, as well as practitioners of the Orthodox religion, separated by lines or zones of division often running skew to the lines and zones of division separating different national and ethnic groups within the Empire.

This complexity of intervolvements led to some of the most striking political alliances and divisions in the Monarchy. In Moravia, Germans and Slavs lived in close interrelation, brought together most of all by the Catholic Church and by a widespread bilingualism both of which served also to temper nationalist feelings in the population of Moravia as a whole. The Moravians indeed conceived their political allegiance almost entirely in dynastic and Austrian terms, and were hardly susceptible to extraneous Pan-Slavist or Pan-Germanic influences. The inhabitants of Brno/Brünn, the Moravian capital, tended to take their cultural bearings from Vienna, rather than from Prague, all ethnic and linguistic differences notwithstanding.

In Bohemia, on the other hand, Germans and Czechs intermingled hardly at all, the national (ethnic) division largely coinciding with a difference in religion and in social class. There were, accordingly, a significant number of Czech intellectuals in Bohemia, particularly after the Austrian Compromise with Hungary, who readily embraced Pan-Slavist ideology as a counterbalance to what they conceived to be an unjust treatment of the Czechs by the new Austro-Hungarian authorities. Such intellectuals then formed the nuclei of political movements which, under the influence of France and England to which they became increasingly susceptible, served as important dissolutionary forces within the Empire.

It was therefore not merely a complex congeries of nationalities which made up the manifold character of the Austrian Empire. There were also shared allegiances among different social groups, allegiances cutting across national boundaries and making of Austria a political organism of a quite peculiar sort. One expression of this fact is that, again, it is impossible to speak of 'minorities' within the Empire, which was still in this respect a product of the feudal, dynastic era of early modern Europe

The twilight zones of Eastern and Central Europe arose in virtue of the fact that a combination of different factors is at work in determining borders, factors which may yield conflicting results. Czechoslovakia, in 1918, was awarded the whole of the Sudetenland, in spite of the latter's predominantly ethnic German population, because the Sudetenland had belonged within the historical frontiers of 'Bohemia.'

Solutions to Inter-Ethnic Conflict

As Hayden has pointed out:

> When the majority is mobilized on ethnic grounds, minorities are incompatible with the definition of the state, and those that form a local majority are likely to try to secede, particularly when they can anticipate acceding to a neighboring state under the control of their ethnic confreres. This is the situation of Serbs and Croats in Bosnia and Herzegovina, Russians in Ukraine and Moldova, Albanians in Kosovo and Macedonia, Armenians in Nagorno-Karabakh, Kurds in Turkey, Iran and Iraq, Tamils in Sri Lanka, and Muslim Kashmiris in India. (Hayden 1995, p. 65)

Ethnic mobilization, as is all too clear, can yield urgent problems calling for diplomatic, political or in some cases military solution. The range of 'solutions' to such problems which have standardly been considered include:

1. extermination or 'ethnic cleansing' (of Jews and Gypsies by Germans in the Nazi era, of Moslems by Serbs in Bosnia);
2. expulsion (by Turkey of Armenians from Turkey and of Greeks from Northern Cyprus; by Czechoslovakia and Poland of Germans after 1944);
3. enforced or economically supported relocation (by Austria of Germans in the successor territories after the collapse of the Habsburg Empire; by Stalin of Jews, Cossacks, Tartars, Germans and other groups);
4. enforced or economically supported isolation (by the United States of native Americans; by Germans, Russians, Poles and others at various times of Jews);
5. military rule (by India in Kashmir, by Israel on the West Bank, by Serbia in Kosovo);

6. external imposition of authority (by the British under United Nations mandate in Cyprus or Palestine, by NATO forces under the Dayton agreement in Bosnia);

7. negotiated settlement leading to amicable distribution of democratic rights within a single territory (by the citizens of Canada at this writing in relation to Quebec; by the Finns and Swedes in relation to Åland);

8. negotiated settlement leading to a splitting of territories (in Pakistan with the formation of Bangladesh; in Czechoslovakia with the formation of the Czech and Slovak Republics).

A Modest Proposal

All but the first of these solutions are clearly to be favored on the minimal ground of respect for human life. Alternatives 4. to 8. are to be favored further, however, in virtue of the fact that they do justice to the feelings people have for their homes and for their land, for inherited rights of occupation, for established households and communities. The thesis to be considered here is that the range of these favored alternatives, and above all the range of available alternatives under 7. and 8., can be increased, if ways can be found to relax the geometrical constraints associated with the French ideal of nationhood and of the acceptable shapes of nations. The advocacy of non contiguous and of perforated nations is designed to be fully consistent with the fundamental principles of international law which dictate, for each given state, exclusive jurisdiction over its national territory and over the permanent population living there together with a duty of non intervention in the areas of exclusive jurisdiction of all other states. The suggested adjustment relates exclusively to the shapes of national territories that are to be made available as alternative outcomes of diplomatic negotiations designed to lead to settlement of inter-group disputes.

The imposition of new fiat boundaries is often recommended also outside Europe as a solution to the tribal intermixings that were brought about by colonial fiat boundaries. The onward march of political liberalization in Africa is likely to encourage further moves of this sort moves towards ethnic determination of territorial boundaries. Such moves, if they are possible at all given existing constraints, would have the advantage of involving no relocation of (or warfare between) peoples. They amount, at least initially, to a mere abstract reconfiguration of the pattern of fiat boundaries. But they will likely cause problems no less serious than those currently faced by the populations of Rwanda, Burundi, Liberia, and so on, and we are not advocating such moves here. Indeed we believe that the idea of national self-determination, to the degree that it presupposes that no intermixing obtains, is deeply flawed in relation to the world as currently constituted. Even leaving aside mixed

populations, land is rarely capable of being cleanly divided according to any single principle too many obstacles stand in the way, including resistant topography, existing property rights and dynastic allegiances, existing lines of communication and patterns of trade, as well as territorial divisions based on religious and other affiliations. What we are suggesting, rather, is that, *where a point of irretrievable breakdown has in any case been reached between ethnic or other groups living within a single territory*, the range of geometric alternatives brought forward for consideration in the division of the territory should be seen as being wider than is dictated by the French model based on the geometrical ideal of symmetric tiling. Geometrical alternatives should be included which deviate from this model to the extent that they serve the end of doing maximal justice to existing (land and community) rights in such a way that rights of autonomy (and even of sovereignty) should be granted to those who do not wish to relocate. We would thus encourage efforts to find ways of ensuring that diplomats and others involved in negotiations designed to lead to the resolution of inter-group disputes to embrace in their deliberations a wider array of geometrical alternatives than is at present allowed including 'bizarre shapes', perforated territories, and above all non-contiguous territories.

Our proposal should not be confused with the advocacy of new 'soft forms of union between national communities divided by international frontiers.' As Schroeder points out, such proposals amount, in effect, to the suggestion 'that nations skip a step in historical development. History teaches that it is rarely possible to skip a step in this fashion. Soft boundaries can only be established between states made up of peoples who have achieved the identity, self-esteem, and dignity that flows from having established a traditional nation state.' (Schroeder 1994, p. 161) Such proposals underestimate the human emotional force of exclusive occupation and the efficacy of the principle according to which 'good fences do good neighbors make'. Moreover they stoke up trouble for the success of democratic decision-making in the future.

The formation of ethnically homogeneous states may in addition have certain intrinsic advantages. Schroeder, for example, has argued that democracy presupposes a degree of ethnic homogeneity. and that the problems in the former Yugoslavia derive from the fact that the process of modern state formation was delayed there by 500 years of Turkish rule and 50 years of communism. We are not endorsing these advantages here. Rather we wish to point out only that, if they do exist, then efforts should be made to investigate the degree to which they can be realized without resort to ethnic cleansing or relocation.

Switzerland

Our proposal is similar to what is sometimes referred to as 'Cantonization', an idea which served as the basis of the 'Careful Jigsaw' of the Vance-Owen Peace Plan put forward in 1992. This plan was rejected by President Clinton on (we would argue) geometric grounds of just the sort described above. Had the Vance-Owen Plan been put into effect in Bosnia in 1992 (and had it succeeded) it would have saved 200,000 lives.

There are many examples of non-contiguous nations across the face of the earth: practically all island nations are non-contiguous in the sense here at issue. Our more radical proposal countenances non-contiguous nations whose constituent parts would be separated not be water but by land and by other jurisdictions (as Alaska is separated from the rest of the Continental United States by Canada). Switzerland, in dividing its cantons, has whether consciously or not worked exactly according to the principles of unconstrained geometry outlined above.The Swiss Canton of Fribourg contains several portions which are completely surrounded by the Canton of Vaud, which is, like several other cantons, a perforated spatial object. Switzerland itself is perforated in that it circumcludes *inter alia* the German town of Busingen on the Rhine, so that citizens of Busingen who work in Germany must daily pass through eight national borders on their journey to and from work. Switzerland in this respect reveals its origins in the feudal order of early modern Europe. (The Campione d'Italia is a similar isolated enclave of Italy surrounded entirely by Switzerland. There are 38 such enclaves (exclaves: see Catudal 1979) between Belgium and Holland in [Baarle](#) and the Spanish commune of Llívia in the Cerdanya region of Catalonia is entirely surrounded by France.) The Swiss have learned that borders can be oddly shaped, and that the exploitation of bizarre shapes can be a way of doing justice in peaceful fashion to inherited religious, linguistic, ethnic or dynastic divisions. (The 'bizarre shapes' of some of the cantons in Switzerland are a product of all of these factors.)

A similar idea might be applied also in relation to the Irish problem. One idea to be brought forward for consideration might be that of ceding to the Republic certain Catholic areas, even areas within the interior of Northern Ireland as presently constituted, whose populations overwhelmingly desire rule from Dublin. To establish the coherence of this idea would require investigation of the logistical difficulties which would arise in relation to the administration and government of the correspondingly non-contiguous and perforated jurisdictions which would result. In Quebec, similarly (and under the assumption that the dispute between the Francophone separatists and other groups has become truly irreconcilable), solutions to be considered might include the secession to (rest-)Canada of native Canadian territories and of some predominantly anglophone

regions of Quebec, followed by the secession of a correspondingly perforated (rest)Quebec from Canada as a whole.

Objections to the Proposal
We shall not go into detail here in giving an account of possible objections to the proposals here advanced for consideration. One issue to be addressed is the degree to which, in the Quebec case, the resultant perforated state would be seen as doing justice to what we might call 'the honor of the French.' Perforated nations prick pomposity (though we recall, once again, that Italy has survived throughout its history as a perforated nation). A perforated state may not do justice, either, to the native Canadian groups within Quebec, who may have no wish to secede from Quebec and who seem to have prior rights.

   The notion of loose geometry would not find easy acceptance on the side of the Irish Republican Army either, who want the 'whole island of Ireland'. In each of these cases it is a matter of debate whether the likely unwillingness to accept perforated or non-contiguous borders rests on genuine grounds (for example pertaining to defence or supply considerations) of a sort which would have been operative in previous centuries, or whether their force derives rather from rhetorical devices of the sort that might be countered, at least in principle, by rational argument.

   Further problems which would arise through the embrace of non-continuous nations turn for example on the fact that such countries would require roads through the sovereign territory of other nations. Rights of access can however be guaranteed by treaty (as the rights of access to embassies, those odd examples of perforations within sovereign territory which currently exist throughout the globe, have been successfully guaranteed by treaty for many generations). The Vance-Owen Peace Plan involved an 'International Access Authority' to be established to guarantee freedom of movement in Bosnia. And just as Alaska can communicate without problem with the rest of the United States, so also, we might suppose, anglophone portions of Canada surrounded by sovereign regions of a newly perforated Quebec might be similarly in a position to communicate without problem with the remainder of Canada. The degree to which problems might arise in connection with such arrangements is, however, a matter for investigation.

God made Ireland; all the rest is the work of man
The Irish case differs in one respect from the other cases which have been dealt with thus far, in that the rhetoric of Irish nationalism presupposes a thesis according to which a genuine (free and sovereign) nation is one whose boundaries are not merely (a): such as to comprehend a single connected region

(a region equivalent, topologically, to a circle), but also (b): entirely physical in nature in the strong sense of encompassing the entirety of the relevant surrounding area of land. 'Ireland cannot shift her frontiers. The Almighty traced them beyond the cunning of man to modify.'

We recall also the first two articles of the Constitution of the Republic of Ireland:

> Article 1. The Irish nation hereby affirms its inalienable, indefeasible, and sovereign right to choose its own form of Government, to determine its relations with other nations, and to develop its life, political, economic and cultural, in accordance with its own genius and traditions.
> Article 2. The national territory consists of the whole island of Ireland, its islands and the territorial seas.

Note, however, that even the unitary Ireland that is represented in the mental maps of Irish Republicans is not a *bona fide* entity in the sense defined in the foregoing. For we are not here dealing with a single land-mass with autonomous physical frontiers, but rather with a complex product of human demarcation. Ireland is not a single 'whole island' but rather a super-unitary entity built up in fiat fashion out of non-continguous parts (such as Inishkea, Inishmore, Inishbofin, Gorumna Island, and so on), and in such a way as to exclude other non-contiguous parts such as the Isle of Man in other ways comparable.

The overwhelming majority of geopolitical entities across the surface of the globe are indeed such as to fall short of the topological perfection of the *bona fide* spatial object, either because (like Russia and the United States) they are super-unitary entities comprehending non-contiguous parts, or because (like France and Germany, England and Scotland, Ulster and Eire) they are sub unitary entities, the result of a carving out of smaller fiat portions within some larger *bona fide* whole. Were Poland, say, to embrace the logic of the Irish, and demand autonomous coastal frontiers of her own, then Polish freedom fighters could not rest until they had occupied the entire Eurasian landmass.

The attitude according to which (against so many established precedents) geopolitical unities should approximate as closely as possible to the compact topology of the circle is incidentally illustrated not only in Irish Republicanism but also in the arguments of those American politicians and Supreme Court Justices who would have it that newly drawn African American and other minority Congressional districts should be ruled out as illegitimate already on *geometrical* grounds, because of their 'bizarre shapes'. As Justice O'Connor expressed it, praising 'compactness, contiguity, and respect for political subdivisions': 'Appearances do matter'. But *why* do (geometrical, topological)

appearances matter? Are aspersions to be cast also on Denmark, or Norway, or Malaysia, or the Canton of Vaud, or indeed on the United States itself, on equivalent grounds?

The Duality of Violence

There are, it should by now be clear, those who would go to war, or would deliver their sons to war, in order to institute a geometrical perfection of a certain sort. The other side of this same coin, now, is a geometrically motivated reluctance to defend territories or territorial appendages which are not attached in appropriate fashion to the relevant home territory. It is for geometrical reasons that Great Britain defends her compatriots in Ulster less than enthusiastically (and thus justifies on the part of the Irish Republican Army a certain faith in the ultimate victory of its cause). For Northern Ireland is not a connected part of British territory (any more than was India, Aden, Malta, Suez, Rhodesia). The English desire to preserve the union with Wales and Scotland is stronger than her desire to preserve the union with Northern Ireland, precisely because Scotland and Wales *do* form with England a natural (organic, continuous) whole. Secessionist movements in Wales and Scotland have on the other hand and for the same reason proved less strong than have their counterparts in Ireland.

The Virtues of Proximity

Any form of political activity is *a priori* likely to involve a principle of proximity or neighborhood. That is to say, political concerns are most likely to be directed to people and states of affairs with which one is familiar, and political activity is the more likely to be effective the more it is directed at what is proximate. But, and this is one central argument of this essay, there are different types and principles of proximity. The simplest type of proximity is spatial, and conceiving and drawing boundaries on the basis of spatial proximity can yield benefits in terms of efficiency and community (as well as benefits of a military sort, where these are relevant). But there are many cases in human history where spatial proximity has been overridden by other types of proximity (and the recent phenomenal expansion of electronic communication is clearly bringing about an entirely new sort of proximity, whose implications for the sorts of issues treated here are still entirely unclear). The principle of proximity for Australians was for a long time Anglo-Saxon culture ('Home'). This is now being replaced by a principle which emphasises geographical proximity and economic effectiveness ('Asia'). It is not only for the cause of spatial proximity that wars are fought. The investigation of different types and principles of proximity is nonetheless to be recommended, since it would seem to have a

multiplicity of different sorts of light to throw on the causes of war, and on the methods for the avoidance of war, in the future.

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