

**Zeitschrift:** Regio Basiliensis : Basler Zeitschrift für Geographie  
**Herausgeber:** Geographisch-Ethnologische Gesellschaft Basel ; Geographisches Institut der Universität Basel  
**Band:** 30 (1989)  
**Heft:** 2-3

**Artikel:** The perception of boundaries : barriers or invitation to interaction  
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**DOI:** <https://doi.org/10.5169/seals-1088635>

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## The Perception of Boundaries Barriers or Invitation to Interaction?

Walter Leimgruber

### *Abstract*

*The author deals with some species of boundaries with special interest for the perception by the population itself. As an indicator he chooses the spatial relationships. Switzerland is characterized by lots of boundaries: internal and external political boundaries as well as cultural and functional ones. This creates a network by which the country is divided in a great number of regional entities which partly overlap. The entities reflect historically developed local and regional peculiarities which are to be saved into the future.*

### **Grenzen und ihre Wahrnehmung: Trennlinien oder Kontaktzonen?**

#### *Zusammenfassung*

*Im vorliegenden Aufsatz werden einige Grenzen näher beleuchtet, und zwar vor allem aus der Perspektive der Wahrnehmung durch die Bevölkerung. Als Indikator dafür dienen die räumlichen Beziehungen. Die Schweiz ist durch eine Vielzahl von Grenzen gekennzeichnet: Innere und äussere politische Grenzen stehen neben kulturellen und funktionalen. Daraus resultiert ein vielfältiges Netz, das das Land in zahlreiche, sich überschneidende regionale Einheiten gliedert. Diese widerspiegeln lokale und regionale Eigenheiten, die aus der Geschichte ererbt worden sind und in die Zukunft hinüber gerettet werden.*

### **Frontières et leur perception: lignes de division ou zones de contacts?**

#### *Résumé*

*L'auteur traite quelques-uns des types de frontière, avec un intérêt particulier pour leur perception par la population elle-même. Comme indicateur il choisit les relations spatiaux. La Suisse est caractérisée par une multitude de frontières: des frontières politiques à l'intérieur et vers l'extérieur ainsi que des frontières culturelles et fonctionnelles. Il en résulte un réseau à des aspects multiples qui divise le pays en une multitude d'unités régionales créées par l'histoire et sauvegardées pour le futur.*

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## 1. Introduction

Boundaries have played an important part in my relationship with Werner Gallusser. Following his suggestion, I embarked on the study of borders in the 1970ies. The cooperation resulting from this reached a climax in 1981, when we jointly organized a symposium on "Boundaries and the cultural landscape", drawing together 20 speakers from 11 countries. This symposium has created a number of valuable contacts and has enabled us to pursue our activities in boundary research. It has also shown to which extent boundaries are a problem of scale. In his opening address, Werner Gallusser himself illustrated this fact by reference to local and international boundaries (*Gallusser 1981*). The fact that a second symposium on border landscapes has been held in Perth in 1988 demonstrates the significance of border studies in geography.

Boundaries are human (social) constructs (*Raffestin 1974, 23*). Man should therefore be taken as the measure for their effects: in how far are they in harmony with his needs and wants, with his capacities, in how far do they exceed them? This question is of importance when we discuss the role of the boundary as an obstacle or as an invitation to transborder interaction. Boundaries have to be seen in context with man's needs, pretensions, and images and, in a way, they are a direct mirror of them. I realized the full meaning of this when I discovered the field of environmental perception which provided me with the methodological framework. In particular, *Sonnenfeld's* (1972) model of the nested set of environments showed me a new way. The perception of boundaries and of the border landscape led me to see the boundary from a human perspective: by reducing the scale from "national" to "regional" and "local" the boundary began to assume its role in daily life. From this angle, the present topic and its methodology correspond to the theme chosen for this volume: man as measure.

## 2. The Problem

Switzerland is a country characterized by many types of boundaries: external and internal political borders can be found side by side with administrative, cultural and functional ones. The result is an intricate network of boundary lines and zones criss-crossing the country and dividing it into a multitude of small yet overlapping regional units. These reflect certain local and regional particularities inherited from the past and likely to be carried along into the future.

Little research has so far been conducted into this particular aspect of Swiss geography. The existence of these boundary lines has been accepted as something almost as natural as the division of the country into the three major natural regions of Jura, Plateau and Alps. Yet in daily life they often reveal themselves as obstacles and causes of tension and even conflict. This holds particularly good for certain internal boundaries (e.g. between different cantons or linguistic communities). The state boundary, on the other hand, is much less a source of problems – at least until now. The year 1992 may well mean a change in this respect, once the European Community puts into practice the Act of Unification, while the Swiss will be watching from beyond the fence.

### 3. The Perception of Boundaries

Boundaries are commonly regarded as barriers, and this may in many cases be to the point. However, if we consider the multitude of possible border lines, it may become apparent, that this view is too restricted. Boundaries are structured hierarchically, and their effects are not the same on all levels. It should be borne in mind that not boundaries as such are relevant in spatial organization but the way people perceive them. The presence or absence of spatial interaction does not simply indicate that a border connects or separates regions and people. Rather does it throw light on how people actually perceive and evaluate it. Perception to a large extent depends on social factors (education, information etc.) controlled by central government. The extent to which such a government allows its population to experience the boundary thus influences their perception. People who have to live at a certain distance from the boundary (for political, military or ideological reasons) will get a different perception of a boundary from people who live in daily contact with it.

Physical contact alone, however, does not provide a sound enough basis for the perception of the border zone. A boundary can only be fully perceived if people are given the opportunity to travel across it and to experience the feeling of being beyond (having, of course, the possibility to return home again). Interaction across a boundary is not so much dependent on physical but on functional distance (a concept originally developed by *Festinger*; see *Reynolds & McNulty* 1968, 27). The dual role of boundaries (separation and contact) is therefore directly related to this dual concept of distance: even a short metrical distance can be an obstacle to interaction if there is some physical, institutional or psychological barrier, and a considerable metrical distance can be of limited effect if no such obstacles exist.

The perception of boundaries has for a long time been studied implicitly rather than explicitly, as can be seen from *Minghi* (1963). However, *Goodey* (1971) refers to a number of studies on the perception of barriers, written during the 1960ies and demonstrating a clear interest in this new direction of research.

The perception of boundaries can therefore only partly be recognized by reference to spatial interaction – partly, because interaction may also be based on external factors which lie outside an individual's control (for example residence on the other side of the border because of professional reasons). In spite of this limitation, I shall use this aspect as an indicator as in many cases this is the only possibility to draw conclusions on how people perceive a boundary. The examples in my paper (which was originally presented at the IGU-congress in Sydney in 1988) are drawn from different kinds of boundaries in Switzerland and reflect a number of studies undertaken to date.

### 4. The Perception of Swiss Boundaries

From the multitude of boundaries mentioned above, I shall retain three types which at the same time reflect a certain hierarchy: the German-French linguistic "boundary", cantonal borders, and the national or state boundary. The amount of studies available varies greatly, thus the individual sections discuss either research perspectives or sum up results of existing studies.

#### 4.1 The German-French linguistic "boundary"

Being a country of four national and three official languages, Switzerland is constantly faced with the problem of plurilinguism. As each of the four languages represents a different cultural heritage, the linguistic problem is further enhanced by the cultural differences. This is particularly the case in the zone of interpenetration of German and French (the Cantons of Jura, Berne, Fribourg and Valais, fig. 1). In the Canton of Fribourg, just under one third of the population is German speaking, and it is concentrated in the northeastern part of the Canton. The German speaking district (Singine) is in fact fairly homogeneous (over 90 % of the population in the different communes indicating German as their mother tongue). On the French speaking side, however, the percentage of German speakers in the individual communes is high close to the linguistic "boundary" (up to 30 %) and falls away gradually to the west. The cantonal capital itself, Fribourg, is bilingual, but predominantly French (27 % German speakers).

In how far does this canton function in spite of its linguistic diversity? Both French and German are official languages; however, French is more official than German as the French version of legal texts is considered as authentic. In daily life both languages are used side by side. Under the surface, however, the French speaking population constantly fears to be more and more dominated by German speakers (germanization). The linguistic balance is very sensitive, and all potential discriminations are quickly denounced. A key issue is the problem of linguistic territoriality (linguistic regions), a concept hardly to be taken seriously as it is not possible to establish static regions of a dominant language. The mere evolution of the linguistic "boundary" (what I call the 50 % line) shows that this is hardly feasible in our age of mobility (see *Leimgruber 1987a*, 111, 113).

The linguistic diversity of the canton has no visible effect on the cultural landscape. Small differences may be discovered for example in agriculture ( farms are larger in French speaking than in German speaking communes; *Leimgruber 1987a*, 115), but no influence has so far been found with industrial location. Language is an important element in residential search behaviour of federal government officers: being situated just over 20 minutes by road or rail from Berne, the Fribourg agglomeration lies within easy commuting distance of the federal capital. French speaking civil servants can thus live in their own cultural surroundings and send their children to a French speaking school without being excessively far away from work.

The linguistic transitional zone (to avoid the misleading term of boundary) is thus only a limited barrier to interaction; the conflicts arising are not of a territorial nature but reflect the linguistic diversity in Switzerland as such. The differentiation of the cultural landscape is not very marked and may lie in details rather than in principle. This may be explained by the fact that the major cultural division runs perpendicular to this zone: the limit between alpine and plateau agriculture (*Walter 1983*, 47f.).

Looking at the language question from outside, one can see it as a typical question of scale: on the cantonal level, the German speakers are a clear minority, while they are a majority on the national scale. Internationally, however, they are again in the minority. In the present case, cantonal and national scale confront each other: the French-speaking majority is afraid

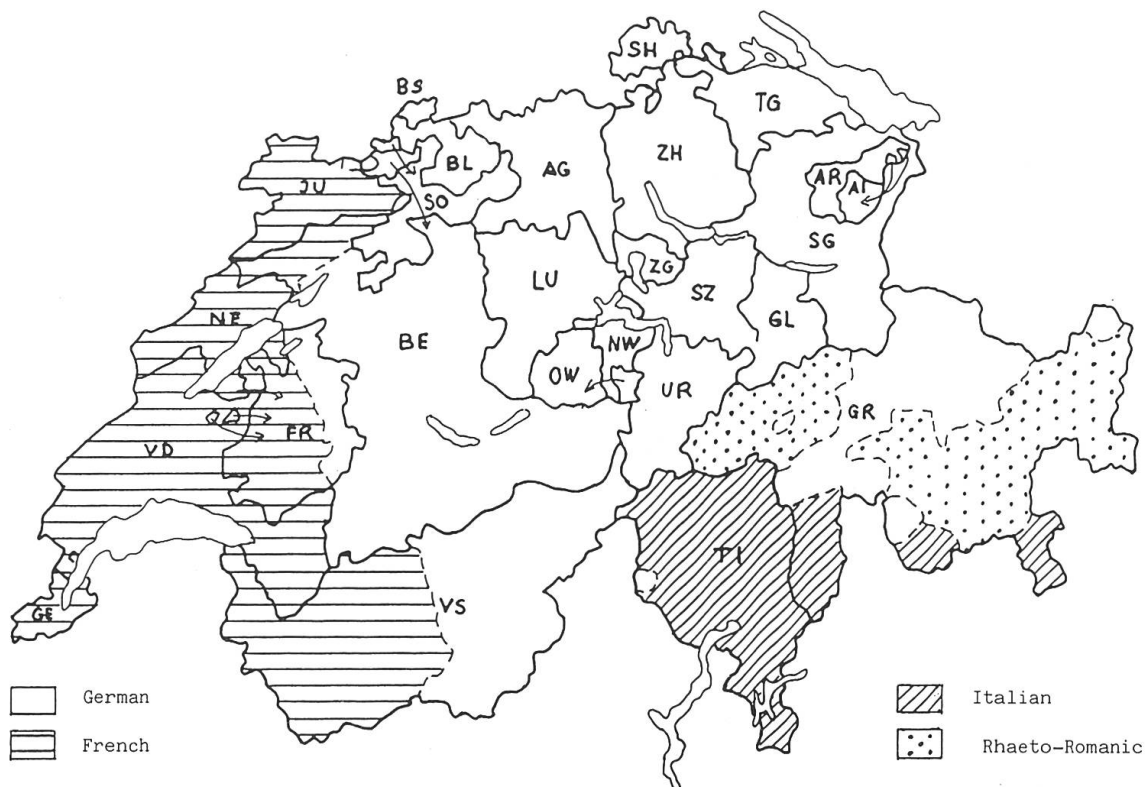


Fig. 1: Simplified map of the linguistic regions of Switzerland, 1980.

of the German-speaking minority which stands for the Swiss-German majority; the German-speaking minority feels dominated by the French-speaking majority. Basically a cantonal issue, this situation is also encountered on the local scale, in particular along the very sensitive transitional zone, as can be illustrated by an example.

The commune of Marly, a suburb of Fribourg, has unwillingly become the source of heated linguistic discussions in the past few years. The case is interesting because it concerns a truly bilingual village. In 1803, this commune had been classed as German-speaking, from 1817 onwards, however, as French-speaking. This would lead us to suppose that within fourteen years there had been a major change in the composition of the population. In his study on the linguistic situation of this commune, however, *Aerne* (1988) has estimated that until about 1850 more than a third of the population was admittedly German speaking, just under one third French speaking, while the remaining third could not be classed. Only when the German section of the local school was closed in 1840, it became obvious that French was becoming the dominant language. Although German declined in importance, it maintained a certain level (around 20 %) thanks to immigration. The situation changed drastically when, in 1965, a Basle chemical firm transferred research laboratories (including the research workers and their families) from Basle to Marly. This sudden immigration of several hundred German-speakers disrupted the delicate and traditional linguistic balance. A second transfer, in 1983, brought another wave of German speakers to the commune and worsened the situation. When the commune offered the children of German speakers free transport to German-speaking schools of Fribourg, French-speakers began to grow uneasy. Emotions

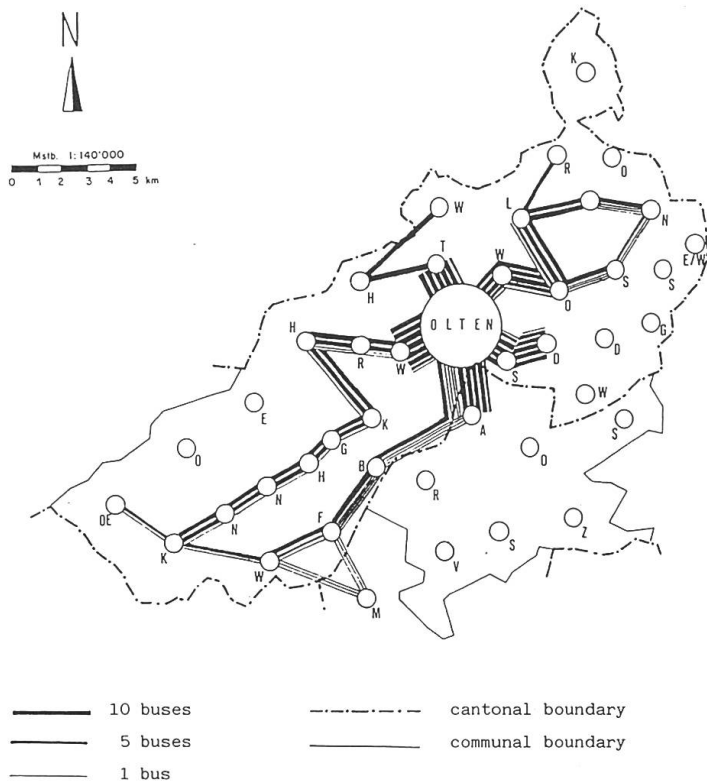


Fig. 2: Number of daily buses serving the hinterland of Olten, 1980 (Frey 1981, 37)

went high when this voluntary gesture was to be made compulsory by the revised school law. It was at this moment that the Francophones openly declared to fear "Germanization", and, after a violent press campaign and heated discussions in the cantonal parliament, the proposal was cancelled from the school law. – This example demonstrates how fragile the relations between the two language communities are, and how local issues can rapidly grow to cantonal ones.

#### 4.2 Cantonal boundaries

Politically speaking Switzerland is a confederation of 26 independent states. The cantons still enjoy a large range of sovereignty (despite the proliferation of centralizing federal laws) which is based on three elements: *finances* (each canton levies its own income and capital taxes), *education* (each canton has its own school system) and *order* (each canton has its own police force). It is true that the federal government tries to level out too striking disparities between the cantons, but basically the differences persist and may cause quite a lot of problems, in particular on the level of the individual citizen.

Again, there are few published studies which investigate into the role of cantonal boundaries in the organization of space. The following references are drawn from two unpublished theses, the former elaborated at the geography department of Basle University (Frey 1981), the latter at the Fribourg department (Poffet 1987).

Table 1: Select population data on communes in the Fribourg-Vaud border area (after *Poffet* 1987)

Canton Commune	Immigration from VD 1975-80		Land purchase by VD residents  1975-80	% protestants		
	Total	% of pop. 1980		1950	1970	1980
<b>Fribourg (FR)</b>						
Attalens	137	10.8	30	0.3	3.4	8.4
Auboranges	14	10.0	6	4.5	4.9	20.3
Châtel-St-D.	153	5.1	112	1.6	4.7	5.9
Saint-Martin	21	7.0	4	0.0	0.6	4.9
Semsaies	30	3.8	15	1.2	2.8	2.8
	Immigration from FR 1975-80		Land purchase by FR residents  1975-80	% catholics		
	Total	% of pop. 1980		1950	1970	1980
<b>Vaud (VD)</b>						
Bussigny/O.	0	0.0	n.a.	25.4	31.6	17.9
Chesalles/O.	0	0.0	n.a.	31.1	41.0	38.8
Oron-le-Ch.	10	9.6	n.a.	19.9	28.9	26.5
Oron-la-V.	25	3.0	n.a.	24.2	32.6	31.4
Palézieux	44	5.7	n.a.	19.4	32.5	35.0
Puidoux	18	1.1	n.a.	9.6	22.6	23.0

n.a. = not available due to lack of data and restricted access to land register

In his study on the influence of the Soleure-Argovie cantonal boundary on the centrality of the town of Olten, *Frey* arrives at the conclusion "that the cantonal boundary investigated weakens the intensity and the range of central relationships between this town and its umland" (p. 86). However, not all functions are touched to the same degree. People will purchase central goods which are freely available on the market in the town irrespective of the existence of the cantonal boundary. All services, however, which are subject to some sort of cantonal regulation (e.g. public transport – fig. 2 –, medical services) or which touch upon cantonal culture (theatre, newspapers) must or will be acquired preferably within the canton of residence. The cantonal boundary will thus be an element in the differential deformation of the hinterland of central places. The same phenomenon can also be observed in the case of a state boundary (see below).

In her study of the Fribourg-Vaud cantonal boundary, *Poffet* (1987) has been able to show the impact of the cantonal border on a number of aspects of the population (table 1). Immigration from the Canton of Vaud in the 1970ies and early 1980ies (in particular from the



Lausanne agglomeration) is about to transform the communes in the Veveyse district of the Canton of Fribourg. One of the consequences of this migration is a substantial growth of the population of the communes along the cantonal boundary. Besides, it has also led to structural changes as can be exemplified by the distribution of the two chief confessions, protestants and catholics. Although Vaud is predominantly protestant, the communes on the cantonal boundary are of a mixed nature with large catholic minorities which, however, tend to remain fairly constant over time. On the Fribourg side of the border, however, the percentage of protestants in formerly purely catholic villages has increased considerably (from 0 % to 10 %). *Poffet* notes: "We can observe how the confessional boundary is gradually pushed inside the Canton of Fribourg on the one hand, and, if we consider the evolution on the Vaud side, it will equally move away from the political boundary. In the long run a transitional border zone will emerge where the percentages of catholics and protestants will be balanced." (*Poffet* 1987, 53). – As a further consequence, one notices a growing number of commuters from these villages towards the major centres on Lake Geneva (Lausanne, Vevey, Montreux), although in relative terms, their number has not augmented. A negative aspect of this immigration is the pressure on the land market: prices in the (rural) Fribourg communes have rapidly risen above those in neighbouring rural Vaud communes. The popularity of the Fribourg communes can be explained by the fact that they offered sites facing south with a view on the lake (amenity factor), and that they lie within easy commuting distance of Vevey, Montreux, and even Lausanne (closer to the motorway than the neighbouring Vaud villages). Both these examples demonstrate the effect of the cantonal boundary on the cultural landscape. It becomes obvious, that the border is at once a barrier (with regard to certain central services) and a connecting link (with regard to migration). Thus the question in the title cannot be answered in a simple way. Quite obviously the cantonal boundary is seen as both, and people are quite conscious of this.

#### 4.3 *The state boundary*

The situation is somewhat different if we consider the boundary of the national state. While the "cantonal state" is embedded in a national system of laws and norms, the "national state" is largely independent. I say largely, because this is no longer as true as it was some decades ago: even Switzerland is nowadays bound by multilateral treaties and conventions. However, an extensive international system of binding laws and norms is still lacking, and the Swiss state boundary can therefore continue to play its filter role as before.

Judging by the reluctant attitude of the Swiss as concerns Europe or the world (cf. the negative result of the referendum on Swiss membership in the UNO held in 1986) one might be inclined to think that the Swiss perceive the border as a barrier. This is, however, not the case. The generalized Swiss attitude is more complex. The boundary is not to be an obstacle to all kinds of movement which may be of advantage. Thus capital transfer is not restricted, and the immigration of scientists and researchers is hardly limited. Equally, the Swiss like to travel abroad (see *Dunand* 1987, 213 ff), thus they are free to leave their country whenever and how often they like. On the other hand, the boundary assumes a filter or even a barrier role when negative or unwholesome influences have to be prevented from entering the country. Foreign workers and refugees are subject to severe restrictions, and the agricultural

market offers a very instructive example of a boundary which can be open or closed, depending on the product and its period of harvest in Switzerland: free import will be replaced by import restrictions and finally a ban on import.

This rather gloomy picture of the complex *national* perception of the Swiss state boundary has to be complemented by reference to the *regional* perception as testified by numerous studies in almost all the relevant border regions of the country. One of the areas which has received most attention over the past 25 years or so is doubtlessly northwestern Switzerland, where the Basle agglomeration includes areas on French, German and Swiss territory. Thus *Jenny* (1969) has shown to what extent the umland of Basle reaches into French and German territory, while *Eichenberger* (1968) has discussed the evolution of the Basle agglomeration. From *Polivka's* (1974) study it emerges that industry has never regarded the boundary as a barrier but that the Basle region can be seen as part of a large economic region in the upper Rhine valley. *Gallusser & Muggli* (1980) and *Leimgruber & Muggli* (1982) have updated and enlarged these findings.

Other border regions display a similar pattern of interaction and transborder cooperation, albeit in a less intensive way. In his study on the boundary in the Ajoie region, *Hauser* (1987) has demonstrated that cooperation on a local scale on matters such as touristic promotion or public services (firebrigade, sewage works and refuse disposal) effectively contribute to reduce the separative role of the boundary: the common problems in a peripheral region prevail over nationalist considerations. Or, as the locals would put it: "the cooperation between Delle and Boncourt is not just an avaricious or calculated exchange but is primarily dictated by relations of friendship" (*Hauser* 1987, 18). There is no doubt, however, that the two communes cooperate also on a calculated basis, as do other communes, if certain problems have to be solved (such as the ones mentioned above). However, *Hauser* (ibid.) attaches a considerable importance to this particular case in stating that "this transborder cooperation helps to overcome the obstacle of the boundary..., going as far as contributing towards a regional integration of the two communes, their peripheral situation within their respective states accelerating the process of getting closer together (*rapprochement*)."

Besides, there is what he calls the "geography of advantages" (p. 19), i.e. the interactions of people in the border zone drawing advantage of the differential price and goods situation in the neighbouring country – a phenomenon common to most border regions where interaction is possible. In addition, the case of the medical doctors has to be signalled: about two thirds of the population of the Swiss village visits one of the eight doctors in the neighbouring French borough. This is not so much due to a difference in cost (which is about equal) but to the fact that the Swiss health insurance companies pay for consultations abroad, while the French health service does not – the inhabitants of Delle therefore do not go to Boncourt for medical treatment.

Commercial activities are also quite characteristic of the Swiss-Italian border. Two studies (*Bonacina* 1984; *Leimgruber* 1987b) show the intensity of these interactions. The permeability of the boundary is evidenced by the fact that people buy certain goods in the neighbouring country despite customs regulations and restrictions. The daily presence in the border area facilitates shopping trips which are undertaken relatively frequently, particularly by the Swiss. The selection of goods varies and tends to be vaster with the Swiss who

shop in Italy. They buy chiefly food and beverages, but also books and papers as well as clothing and shoes (*Leimgruber* 1987b, 157 ff.). whereas their Italian neighbours focus on petrol and cigarettes, occasionally also on food such as coffee and fruit (*Bonacina* 1984, 24 f.).

One aspect of the perception of the border is the ideas people hold of their neighbours and the neighbouring border region. From two investigations conducted in the Basle region and on the Ticino-Lombardy border area (*Leimgruber* 1981; 1987b) it emerges that the populations generally hold very positive images of each other, i.e. that the usual stereotypes of certain populations are completely missing. This is an indication of the close interaction between the different populations on either side of the border, resulting in a fairly accurate idea about what these people are like.

## 5. Conclusion

The few studies available on the various types of boundaries do not permit us to draw a generalized picture, but the frequency of interactions may well be a clue as to the perception of boundaries. However, we have to bear in mind that not all factors have been taken into consideration. In particular, the cultural and political orientation have been omitted so far. Southern Switzerland (the Ticino/Italy border area) offers a very good example which may also be transferred to other regions: politically the Canton of Ticino belongs to Switzerland, but culturally it looks towards neighbouring Italy. Due to its language it is in a minority position in Switzerland, due to being part of Switzerland, it is in a minority position in Italian culture. As a result of this dual minority situation (*Lurati* 1982, 217), the canton seeks contacts across the boundary (which is therefore perceived as an obstacle rather than as a barrier). Cultural and economic links are indeed quite frequent. The Italians on the other side of the boundary, however, have a different perception. Their attitude to the Ticino is rather indifferent, and so is their image of the boundary: they are in a majority position both culturally, economically and politically. This can be seen from findings on perception research and the information field (*Leimgruber* 1987b). Thus the interaction hypothesis reveals itself as insufficient, even if it is valid to a certain extent.

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