

Berset, Alain; Kebir, L.

Conference Paper

Regional Development, Movement and Anchoring of Competencies

39th Congress of the European Regional Science Association: "Regional Cohesion and Competitiveness in 21st Century Europe", August 23 - 27, 1999, Dublin, Ireland

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Berset, Alain; Kebir, L. (1999) : Regional Development, Movement and Anchoring of Competencies, 39th Congress of the European Regional Science Association: "Regional Cohesion and Competitiveness in 21st Century Europe", August 23 - 27, 1999, Dublin, Ireland, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/114301>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

REGIONAL DEVELOPMENT, MOVEMENT AND ANCHORING OF COMPETENCES

A. BERSET, L. KEBIR¹

SUMMARY

The present economic environment invites a threefold observation: first, a region's economic development is closely bound up with its potential in the form of mobilisable resources, more particularly specific intangible resources, which make it possible to forge competitive advantages (Colletis and Pecqueur, 1994). Second, the forging of these competitive advantages is the outcome of territorialised learning processes that have already been studied in the literature on the concepts of learning regions (Morgan 1995, Maillat and Kebir, 1998) and of learning economy (Lundvall and Johnson, 1994). Third, in this context, the mobility of resources and in particular of competences takes on crucial importance (Berset, Weygold, Crevoisier and Hainard, 1999).

The aim of this article is to highlight the role of migration in this process and more specifically to bring out the importance of attuning specific competences to the receiving regions. It will attempt, on the basis of empirical elements, to show that the more specific the resources, the more specific the receiving context must be if migration is to become a factor of regional resource creation/renewal. It also attempts to offer a classification of forms of interlinkage between mobility and anchoring of skills in the processes of regional resource renewal and hence to underscore the part played by migration in the creation of regional competitive advantages (reinforcing the specificity of resources).

Key words: Migration, specific resources, competences, learning economy, learning regions

1 INTRODUCTION

In an economic setting where competition turns increasingly on innovative capacity rather than on cost management, intangible resources such as knowledge, know-how and skills are a major stake in spatial competition. To ensure long-term development, regions must be capable of meeting the potential intangible resource needs of enterprises.

Hence, enterprises are no longer on the lookout merely for cheap infrastructure or labour; they also need to assimilate elements such as qualified labour and know-how, and to utilise or generate the presence of

¹ Institut de recherches économiques et régionales (IRER), Université de Neuchâtel (Suisse).

research and/or training centres, and so on. The mobility of resources, in particular of skills, becomes an important factor: although labour migration has long made it possible to attenuate the identified absence of skills, the problem is compounded once the objective ceases to be strictly short-term (scarcity management) and becomes a long term one (renewing, bolstering regional potential).

Yet it is not enough merely to import knowledge and competences, they must also be able to integrate their full potential into regional production system.

Based mainly on the literature on learning regions (Morgan, 1995) and the learning economy (Lundvall, 1992), this article attempts to highlight the processes by which "imported" skills contribute to creating and renewing regional specific resources.

2 THE FACTORS OF SPATIAL COMPETITION

In line with Colletis and Pecqueur (1994), we grant that two factors enable territories to distinguish themselves from one another. These are *resources* (factors existing in the form of potential to be revealed, exploited, organised) and *assets* (factors already activated, in use, updated). Whether they be generic or specific, these factors enable the enterprise to build up comparative advantages (cost competition) for the first category or competitive advantages (competition by differentiation of supply) for the second.

A) GENERIC ASSETS AND RESOURCES

Assets and resources are generic by reason of "the fact that their actual or potential value is independent of their role in any production process" (Gaffard in Colletis and Pecqueur 1994, p. 100). They are tradable on the market and their price is set by the quantitative interplay of supply and demand. They encompass the full range of traditional price-driven factors considered in the location of enterprises and which enter into optimisation calculations (e.g. unskilled labour and untapped labour, capital stock in the form of potential but unrealised savings, unworked deposits, standardised but unused information).

B) SPECIFIC ASSETS

Specific assets "exist as such, but their value is determined by the conditions under which they are utilised". Transferring them entails a cost. The higher that cost, the more specific the asset; "even a highly specific asset is still transferable" (Colletis and Pecqueur 1994, p.100).

C) SPECIFIC RESOURCES

Specific resources "exist only in the virtual state and are not at all transferable" (Colletis and Pecqueur 1994, p.100). They cannot be measured and have no price. "These resources are spawned by interactive processes

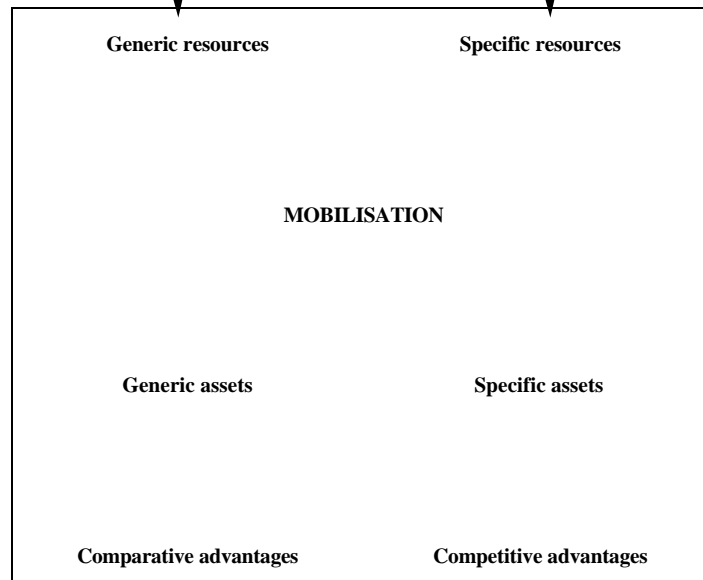
and are thus engendered as they take shape. They are the expression of the cognitive process that is triggered when the players, with different competences produce new knowledge by pooling them" (Colletis and Pecqueur 1994, p.100).

Such resources are intrinsically wedded to the territory and its organisation. They emerge from the territory's historical and socio-cultural context, from interchange based on reciprocity. They come into being only when the players jointly devise strategies for solving a new problem.

These various factors are not mutually exclusive. Enterprises will seek to lower their costs and gain access to specific resources (qualified workforce, quality of inter-industrial co-operation). An area may therefore be just as attractive for its generic as for its specific factors. Moreover, these elements are not static but dynamic: they can evolve from the generic to the specific. This depends entirely on the dynamics of the territory. Long-term territorial differentiation can only be possible based on specific resources; the other elements - given the mobility of factors - may exist or be transferable elsewhere.

THE PROCESSES OF SPATIAL COMPETITION

By reason of its history and culture, a region possesses a certain development potential comprising resources that are both generic (common) and specific (which are its own and strongly rooted in the territory). This range of resources includes knowledge and competences. The latter, underpinned by training and experience, will enable the region's players to mobilise all the available resources, to update and transform them into assets. The means by which resources are brought into play may be schematically represented as follows:



The nature of a competitive advantage will vary according to the type of resource being mobilised. In the case of generic resources, the advantage will be "comparative" (cost competition). If on the other hand the resources are specific, the advantage will be a "competitive" one (competition by supply differentiation).

This diagram depicts two "extreme" scenarios. Indeed, competitive advantages are most often forged from a combination of different types of resources. Besides, a generic element may become specific and vice versa. In this framework, a region's competitive advantage corresponds to the aggregate of resources and assets that attract firms to a region and keep them there. The more specific these elements, i.e. comprised of tacit knowledge, the more durable will be the advantage and the greater will be its contribution to buttressing production systems.

As resources, knowledge and competences play a crucial part in this context because they enter into the

Example: Hydroelectricity in Valais, banking and trading culture in Geneva

The region possesses a combination of generic and specific resources. The harnessing of specific resources (determined by the level of individual competences) will give rise to the building of competitive advantages. The following two cases may be cited as examples:

- Industry in Valais was marked at the turn of the century by the implantation of big companies (Alusuisse, Lonza, Ciba). These enterprises chose that location so as to be near to sources of hydroelectric power. Their products (aluminium, chemicals) called for enormous amounts of energy. Located in the Alps, this resource was then a specific one: the requisite electric power was not transportable and it was necessary to develop infrastructure, skills and know-how in order to generate it. In the course of the century, this resource has become generic; modern technology now makes it possible to transport power. Proximity to a source of energy now secures little more than an advantage in terms of cost reduction. Hence, there is now a greater risk of delocalization of these firms.
- Geneva's banking sector is specialised in portfolio management and international trade finance. The origin of this specialisation lies chiefly in a particular historic and cultural context (which gave rise to the banking and trading culture). It is also noteworthy that Geneva's positioning as an international city (venue of international organisations) and peace broker (East-West bridge) has led to the development of competences in international affairs. The aggregate of these elements has enabled Genevan bankers to develop the two specialisations mentioned above and thus secure a competitive advantage. In this case, the banking, trading and international cultures are a specific resource.

processes of innovation that underlie these specific advantages.

KNOWLEDGE

The concept of "knowledge" may be understood in a great many ways. In keeping with its common definition, knowledge will be construed here as the totality of elements known as a result of learning. Knowledge is explicit, i.e. can be easily formalised, put on paper and shared, or on the contrary, it may be tacit, i.e. difficult to formalise and unable to be shared (Journé, 1996, p. 13).

Lundvall and Johnson distinguish between several types of knowledge: know-what, concerning facts (number of inhabitants of a city, etc.), know-why, concerning the "principles and laws of motion in nature, in the

human mind and society » (1994, p. 27), know-who, which is knowing who does what, know-when and know-where, which relate to temporal and spatial matters and finally know-how, which is the capacity to do certain things concretely and practically.

COMPETENCES

Competences are clearly distinguishable from knowledge. According to Le Boterf (1995, p. 17), competence does not lie in the resources to be mobilised (knowledge, cognitive, relational abilities etc.), but in the actual mobilisation of these resources. It is "indissociable from action". It is functional and contextualised: being competent is knowing how to mobilise one's knowledge and qualities in response to a given problem. It is also the art of combining and integrating what one knows. A competent person takes initiatives, makes proposals. That person is autonomous.

Competence is not just a matter of intelligence, but also of personality. To be able to mobilise, one must want to do so (Aubret, Gilbert, 1994). A person becomes one with his sphere of competence. Competence entails commitment and responsibility.

In the light of all these considerations, Le Boterf defines competence as knowing how to act (1995, p.32). That knowledge differs from know-how as it implies that a person has succeeded in interlinking the different elements of education separately acquired. Competence is thus considered in its globality.

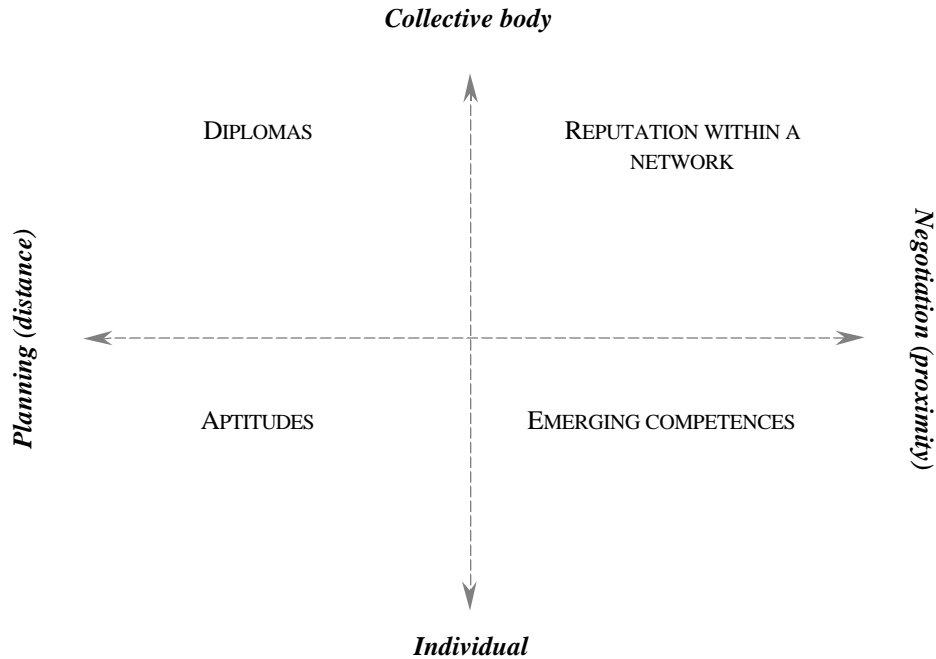
Like Le Boterf, we assume that the activity and its locus constitute two dimensions of competence² (1995). We should not overlook a third dimension, the "quality of the action", which should be perceived as the adaptation of the action to the goal (notion of effectiveness).

In this line of thought, the mere possession of knowledge and experience is not yet tantamount to competence: what is central is the utilisation of that capital or its mobilisation as part of an action whose aptness is determined by the context in which it takes place. Context is construed here as a system of production characterised by a distribution of activities, production methods and by a set of private and public actors. The determination and transformation of the production system takes place with constant reference to the evolution of the competitive environment and of the system of production itself. Competence also presupposes judgement by others, which adds a constructed socio-cultural dimension.

The question therefore arises as to how competences are evaluated or how that evaluation is done (Eymard-Duvernay, Marchal, 1997).

As competences can only be grasped in an act or in a situation, the evaluator has no direct access to them and must fall back on assessment criteria that can be applied *a priori*. In the circumstances, the axiom "there is no

² Competences are associated with a given activity but may also cover a range of activities, as with linguistic or leadership abilities for instance.



competence without performance" becomes "there is no competence without assessment of competence". The introduction of a competence assessment analysis rounds out the notion of competence as we have defined it: by including in the analysis the notion of recognition of competences, distinguishing it from that of practical application, we are broadening the means of enhancing competence in context. Therefore, competence can exist, that is, have real effects - e.g. in terms of salary or reputation - as distinct from its practical application in a specific situation.

This notion of assessment, applied to competences, is closely akin to the approach developed by Eymard-Duvernay and Marchal (1997). These authors draw a distinction between assessment that may be made "from a distance" and that which requires "proximity" to the person embodying the competences, as well as individual or collective assessments. Competence assessments are made both by the recruiter or employer and by the candidate himself. By self-evaluation, the latter determines which are those competences that he will be offering to the enterprise and what forms the core of his professional resources.

Fig. 1: Competence assessment

A judgement is shaped on the basis of four elements. Schematically, an individual may be judged or may judge himself to be competent: a) based on his belonging to a community (e.g. a community of engineers, "diploma"); b) because of his intrinsic qualities ("aptitudes"); c) by virtue of a good reputation within a professional network ("reputation"); d) because he proves his worth in a situation ("emerging competences").

Diplomas and aptitudes are forms of competence that can be gauged independently of relational context. As such, they are stable, predictable and can be evaluated from a distance. Even so, qualifications relate to the

institutional or the collective, while aptitudes are individual in nature, as they are deeply rooted in the individual and are highly personal.

Unlike qualifications and aptitudes, reputation and emerging skills invariably depend on interpersonal relations (proximity). They are therefore unpredictable and subject to reciprocal adjustment. Here again, the collective/individual distinction re-emerges. Reputation is the product of a network: it results from person-to-person transmission of local opinions on competences, the agents of this transmission being persons or objects attesting to them. As regards emerging competences, they come within the framework of face-to-face relationships. They are considered as emerging in that they result from the actual practice of the professional activity. They emerge in a situation by bringing local indicators rather than general qualifications (e.g diplomas) into play. It should nonetheless be underlined that these skills are neither individual nor collective **per se**, but that they are categorised as one or the other by the evaluator.

These two core considerations shape and account for the action of recruiters (who may be regarded here as the spokespersons of the production context). Ultimately, the context (through the evaluators that it brings into play) makes a decision on the competence of individuals, guided by four principal indicators (diploma, reputation, aptitude and emerging competences).

3 MIGRATION AND TRANSFER OF COMPETENCES

The specificity of competence refers to the relative scarcity of the professional abilities that the migrant generates, embodies, transmits and transforms by his very migration. In particular, these may be bound up with his own pre-migration training, experience, mobility and linguistic and cultural skills. In parallel, as defined above, specific competence is characterised by its aptness for assimilation into a process of innovation.

Human migration makes it possible to establish contacts between professional and geographical spaces with different potentials (in terms of specialisation of activities, educational systems, and so on) and involves the diffusion of competences and technologies. *A priori*, migrants are easily credited with skills, a different vocational potential and in this framework migration serves to reveal potential.

It is also a matter of managing the barriers which, paradoxically, can be thrown up by mobility, with respect to the transferability and adaptation of competences in the post-migration context. Both migrant and receiving work context participate in the adaptation process, which activates learning processes.

What is at stake for the receiving context through migration is access to scarce skills that can generate or accompany innovation processes. We shall therefore be focusing our attention on the specific competences of migrants.

From the individual standpoint, the transfer and enhancement of competences in the post-migration setting is the overarching consideration. The processes of adjustment or alignment between the migrant, his potential competences and a context marked by its degree of specificity are at the core of this article. The transfer and upgrading of skills entails the creation of favourable conditions for adjustment, especially in terms of learning.

First of all, it appears that the types of competences previously defined in connection with the assessment of competence react in different ways to migration. For example, the competences determined by "collective bodies", or qualifications (diplomas) and professional reputation are particularly sensitive to changes of context, while aptitudes - being closely wedded to the person embodying - them, are less sensitive to changes of professional or socio-cultural context. Qualifications, aptitudes and reputation must be previously recognised if they are to be negotiated, while interactive skills can only be verified *in situ*.

The transferability of the value of diplomas obtained by the migrant in a pre-migration context is dependent on the evaluation made by the context and on the renown of that training in the receiving country. The transferability of a migrant's professional reputation is contingent upon the extent of the professional network of which he is a part (regional, national international, worldwide network).

The use of a competence-assessment approach is especially fruitful in the context of human migration for at least two reasons. The first - and most obvious - stems from the fact that while any change of professional context (even a change of workshop within the enterprise) is invariably attended by a redefinition of the individual's competences, the greater the differences (in terms of activity, education system, professional experience) between the contexts concerned, the more profound will be the redefinition. Hence, the lack of nearness and of interpersonal relationships between a pre- and post-migration context complicates the changeover.

Migration creates a gap (geographical or even professional) the closing of which depends on a learning process and is a central consideration for both migrants and enterprises. Closing this gap calls for adaptation, which takes time and draws on the evolutionary capacities of the context and of individuals. In keeping with our theoretical framework, we submit that the adjustment - if it occurs - could be incumbent more on the context or on the migrant, or it may be mutual. At all events, it is the quality of that adjustment that will condition the updating and value enhancement of specific competences.

4 LEARNING AND INTEGRATION OF COMPETENCIES

Specific competences such as those described above can boost a region's potential only under two quite distinct conditions:

- 1) the competencies must be upgraded
- 2) this upgrading must occur in a context of interchange.

These two prerequisites both underlie the process of adjustment on the part of the migrant and the production system of which he becomes a part.

These processes draw on different types of learning. More than a link between the migrant and his new environment, they aid the mutual enrichment of the players by generating resource-creating synergies. It is by means of these processes that skills are pooled and shared and the production system is able to assimilate them.

UPGRADING OF SPECIFIC COMPETENCIES

The upgrading of competences is two-phased. The first phase, that of recognition, is where a decision will be made as to the post, the particular context into which the migrant will fit. This phase occurs mainly when the migrant is being recruited by one of the system's entities (enterprise, institution and the like). This phase calls on the full range of learning processes connected with recruitment techniques as well as knowledge of the sphere of insertion. This initial phase strongly conditions the second, that of insertion into the situation. Once employed in the production system, the migrant must still deal with work situations that mobilise his skills. The configuration of such situations calls for technical learning³ on the part of the players in the system so as to provide, for instance, the requisite materials or services. The system must be capable of adapting itself organisationally so as to pave the way for the migrant's entry into the context. It must therefore undergo organisational learning. This type of learning, defined by Scott as "the capacity of an organisation to learn how to do what it does, where what it learns is possessed not by individual members of the organisation but by the aggregate itself. That is, when a group acquires the know-how associated with its ability to carry out its collective activities, that constitutes organisational learning" (Scott et al., 1996, p.438) enables the organisation's players better to co-ordinate their action (Maillat, Kebir, 1998). It makes it possible to create organisational conditions that foster the updating of the migrant's skills.

The entry into the context can also cause a clash of codes, values, ways of operating and of convention. If appropriate, institutional learning will make for the transformation of the institutions in question; indeed, it corresponds to "the capacity of institutions to question themselves, adapt their structures and objectives, renew themselves in line with changes in their environment" (Maillat, Kebir, 1998). This form of learning is essential to the emergence of the innovation process as it reduces the systemic inertia of institutions and makes for the resolution of blockages.

The "curiosity" of the system's players is also a significant factor. This curiosity determines the degree of openness to new ideas arising from the migration of competences. It is a component of the players' learning ability and is associated with learning-by-learning. This latter concept corresponds "to the process of enhancing learning-related skills" (Le Bas, Zuscovitch, 1993, p. 158). The fact is that the more one learns, the more one develops his own assimilative capacities and the techniques that make for learning. The easier

³ *Learning by doing, learning by using, learning by scaling, learning by interacting, learning by searching, learning by exploring, learning by producing, etc.*

learning becomes, the more the players wish to learn. This type of learning in fact acts as the motor of the system: learning begets learning, which in turn spurs the players to outdo themselves" (Le Bas, Zuscovitch, 1993, p. 158)

The situation most often involves several players directly. If they are to work successfully together, they must be capable of interactive learning. That is "the process of interaction by which the knowledge essential to the proper functioning of the production system and possessed individually by all the players (individuals, firms, institutions) are integrated and pooled" (Maillat and Kebir, 1998, p.9). These interactions take place, for instance, through the sharing of experiences, the transmission of information, and so on.

There is no doubt that the more specific or scarce a skill, the greater is the likelihood that the existing material, organisational, institutional and networking structures will be ill-adapted, which will render the adjustment process more complex and necessitate learning processes.

UPGRADING IN A SITUATION OF INTERCHANGE

Competencies are updated through learning processes that reflect the lessons drawn by the system from the implementation of skills. Nevertheless, if the competences brought into play by the system are to help boost the region's resources, the individual must be integrated into networks favourable to sharing and the transfer of technology. Interactive learning plays a key role here as it enables competences to be placed in a context broader than that of work in the strict sense. It is no longer a matter of mere adaptation (even though that is necessary), but one of the system's appropriation of the competencies in question and hence of creating specific resources. This is more akin to the notion of "knowledge networks" based on the "flow of information and exchange of knowledge irrespective of its connection to the flow of goods" (Gelsing, 1992, p. 117).

FORGETTING

Forgetting reflects the processes of losing memory. It is an indispensable component of the adjustment processes outlined above as it enables the players in the system to forget values, methods and other forms of organisation, as well as some knowledge and competencies, thus giving way to innovation in the broad sense (technical, organisational, among others).

Forgetting can have a twin impact on the region's resource potential. When the forgotten elements are redirected, they participate directly in the creation of new resources. This is known as creative forgetting (Maillat and Kebir 1998, p.14). In contrast, when these elements are quite simply forgotten, potential diminishes. That is a case of simple forgetting.

This kind of forgetting also occurs when the conditions for the integration of competences are not present (e.g. in the case of absence of recognition or integration into a context. Competences that are neither

recognised nor updated can be gradually forgotten or outdated, which leads to a total or partial depreciation of the skills in question.

PROCESSES OF RECOGNITION OF COMPETENCES

The diagram below depicts in gist the various conditions that must exist if the specific competences of migrants are to be integrated.

Central to the migration of skills is a plan; the migrant's plan to leave his context of origin so as to realise a project guided either by professional interest (better wages, further education, and so on), or by private motives (life project, migration plan). If the migrant's competences are to be integrated into the region's resources, they must be recognised to begin with. We have already seen that they are measured by four principal yardsticks (diploma, reputation, aptitudes and experience) based on which it will be determined what place the migrant will occupy within the system. That stage requires recruiters to be conversant with recruitment techniques and therefore draws on technical expertise.

The next phase is that of implementation: for the migrant to upgrade his skills, the receiving context must endeavour to adapt so as to provide the most favourable setting (organisational, institutional, technological, and so on). This adaptation process necessitates a range of learning processes.

For these skills to become an input into the system's overall resources, the migrant must be integrated into networks the scope of which surpasses the specific locus of the action (enterprise, research centre). That could take the form of participation in region-wide projects involving several players (in which the migrant is able to share his skills: training, production system leadership project, etc). This stage of interchange activates the interactive learning process, which is necessary for the proper functioning of the networks.

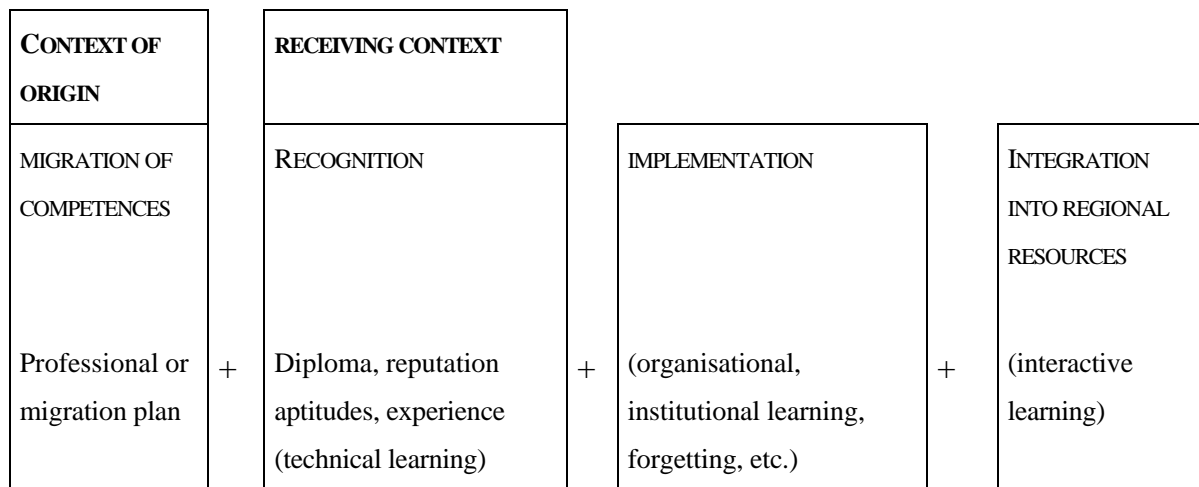
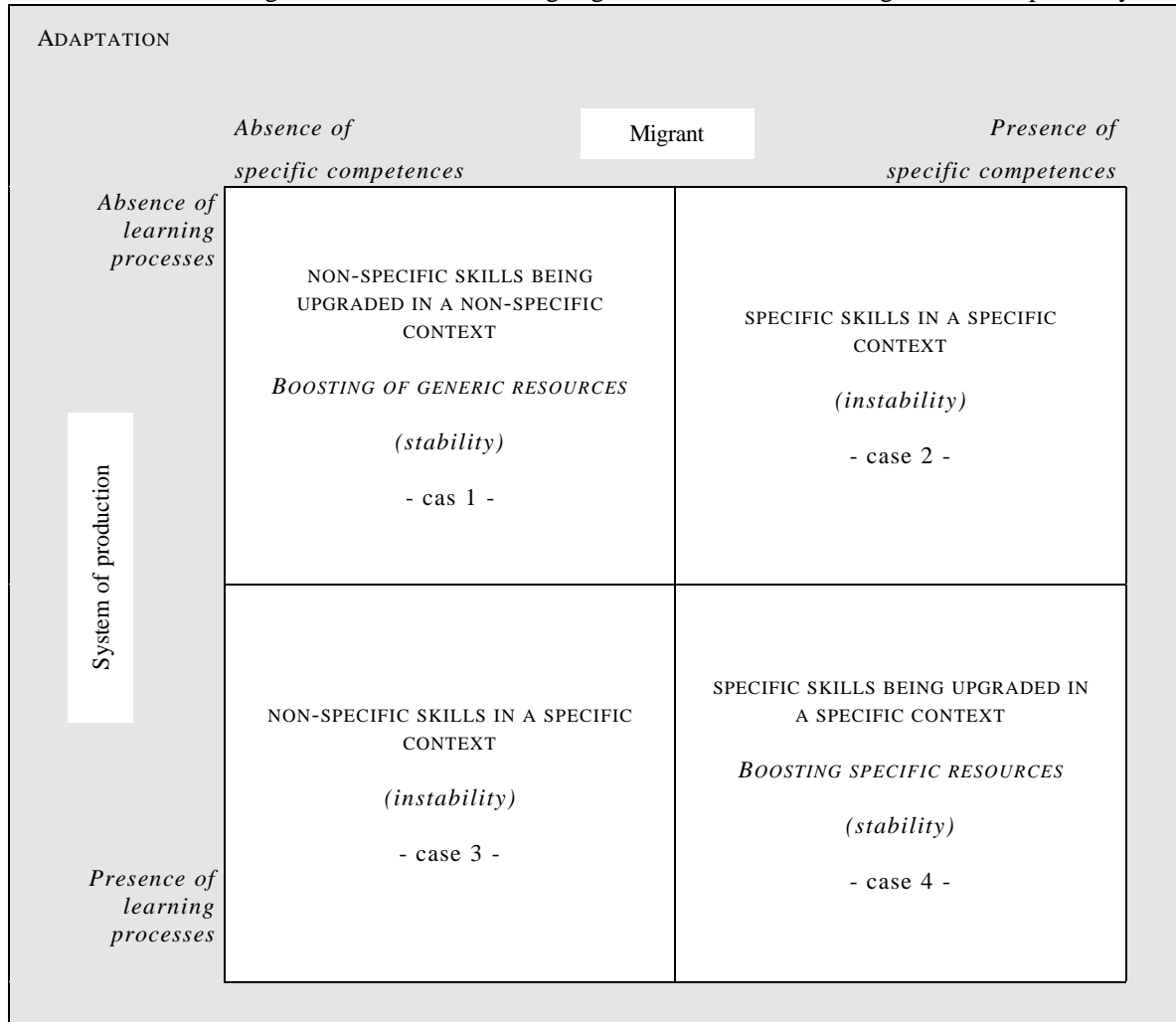


Fig. 2: From migration of competences to integration into regional resources

5 THE RULE OF SPECIFICITY

The contribution of migration towards bolstering regional resources is contingent on the specificity of the



imported skills (are they specific or not?) and on the specificity of the context. By context we mean the system of production into which the migrant fits upon arrival. The specificity of the context (vertical axis) is correlated to learning capacity. This refers in other words to the ability to generate different forms of learning described above. The horizontal axis represents the presence or absence of specific competences in the migrant's professional baggage, i.e. the presence, *a priori*, of skills that are locally in short supply and which are identified as skills that can participate in or create innovation processes.

Fig. 3: Specificity of competences and of context, types of adaptation

The first scenario represents a migrant's professional adaptation within a generic context. In this situation, which is stable in that the expectations of the context seem to match the migrant's skills, the latter is not bringing scarce competences and neither is the context seeking these, and both sides are therefore suitably attuned to each other. In reality, the genericness of the context takes the form of stagnation (renewal without transformation) of the production system (e.g. from the technological standpoint). The production system

may even fall back on past achievements and undergo no learning process (the technological division of labour could reflect such a situation), while the migrant takes up a professional post without specific skills. In this case the migrant's skills help to reinforce the system's generic resources and hence its comparative advantages.

From the standpoint of quality of migrant/context adaptation, the fourth case is similar to the first: the situation is stable. The context is specific, that is, it can be defined by the importance and role of learning processes in renewing it. It is an evolutionary, participatory context that changes by harnessing all the energies available to it. The migrant possesses specific competences, that is, skills that are in short supply in the region concerned and can enter into a regional process of innovation. The context and competences are specific and thanks to this shared quality, they are able to complement and reciprocally enrich each other. In reality, this case is very much in line with the practice of enterprises (or regions?) that boost their competitive capacity by recruiting specific competences (scarce and suited to innovation). The full range of learning processes are present in this case, they are therefore assimilated and go towards strengthening the specific resource base.

Cases 2 and 3 are similar (thereby differing from cases 1 and 4) in that they represent unstable situations. Two scenarios may then arise: either the situation evolves towards better adjustment or it becomes blocked, which could mean the breakdown of the relationship and an end to the quest for optimum adaptation.

The second case depicts a situation in which a migrant has specific competences in a system that does not foster the learning process. It is an unstable situation in that skills and context are misaligned. In such a case, the migrant does not contribute to the system's specific resources. The context does not benefit from the migrant's potential. This untenable situation will call for a positioning on the part of both the context and the migrant: either the context activates learning processes (transition from case 2 to case 4) and successfully assimilates the skills in question thereby enriching its specific resource potential, or the migrant foregoes updating his skills, in which event the situation evolves from case 2 to case 1 (he then contributes to the system's generic resources). Finally, a blockage of the situation will probably lead to the breakdown of the relationship or even to renewed migration.

Case 3 depicts the situation that would result from the importation of non-specific skills into a production system that is dynamic in terms of learning. On arrival, the migrant does not contribute to the region's specific resources. On the other hand he may take advantage of the system's dynamism to enhance his competences (training, on-the-job learning for instance) and in the long term help to expand the specific resource base (transition from case 3 to 4). In the event, it is not the migration per se that induces this but the system's internal dynamics. The migrant may of course not embark on any learning process, instead retaining his original level of competence. In that case he would represent a contribution to the system's generic resources and hence its comparative advantages. The hypothetical case in which the lack of specific competences in immigrant labour would provoke the disappearance of learning processes in the context studied is hardly conceivable: the most likely outcome in such an event would be a blockage.

These different cases describe the processes taking place upon the migrant's arrival. Clearly these situations evolve over time. At a given point in time a production system may generate learning (at the innovation stage) and then cease to do so (standardisation of production), and vice versa. A migrant therefore most often possesses the two types of competence. He may therefore embody several cases simultaneously.

Two main conclusions may be drawn from this table. First, the four situations are not identical from the viewpoint of the stability of the relationship. In fact, the situation displays greater stability in the diagonal relationship between cases 1 and 4 than that between cases 2 and 3. Second, the different situations outlined impact unequally in terms of enhancing the value of a region's resources; in particular, the adjustment induced by unstable situations (cases 2 and 3) is a source of uncertainty for the players and, as we have shown, the situation may play itself out in any of several ways.

To sum up, the professional situations illustrated by the table show that the more specific the resources thrown up by labour migration, the more specific the receiving will also need to be if competences are to be upgraded in their new professional setting so that migration can become a factor of regional resource creation or renewal. This is what we have termed the rule of specificity, which turns on the quality of the realignment between the production context and the competences brought by migration.

6 CONCLUSION

In the present environment, inter-regional competition is on the increase. This involves the emergence of new factors of competition based more on quality considerations. Many regions with high production costs by international standards (e.g. wages, construction, social conditions) are hard put to preserve the advantage deriving from cost limitation. This means that competition must be based on other more qualitative factors such as those described in this article (specific resources and assets) that can constitute significant elements of differentiation.

In this climate of competition by differentiation, the specificity of professional skills in the local workforce is a key consideration. A production system with specialised and highly qualified human resources enjoys a competitive edge that is not negligible. Nevertheless, such a situation is the fruit of a long-term strategy that is centred on training and is favourable to the regional circulation of skills. Hence, labour migration can help attenuate the drawbacks attendant on the building up of specific competences. We have shown that the process of adaptation necessarily entailed in the regional integration of the competences brought by migration is a protracted one and must trigger learning processes.

The table of types of professional adjustment by migrants shows that in order to be assimilated into the regional resource base and help boost a region's competitive strength, the specific competences resulting from migration must be upgraded and this will be possible only if certain conditions prevail. Specifically, there must be a degree realignment between the specificity of those competences and the specificity of the

receiving contexts. What is most crucial for receiving regions is the fashioning of learning processes focused on the assimilation of specific skills suited to becoming part of regional resources and it is apparent that competences cannot be upgraded without realigning the competences and the receiving context.

REFERENCES

AUBRET, J., GILBERT, P. (1994) *Reconnaissance et validation des acquis*, Presses Universitaires de France, Paris.

BERSET, A., WEYGOLD, S.-A. ET AL. (1999) *Compétences professionnelles des immigrants et contribution à*, Rapport au FNSRS, Berne.

COLLETIS, G., PECQUEUR, B. (1994) « Les facteurs de la concurrence spatiale et la construction des territoires » in Garofoli, G., Vazquez Barquero, A. (eds.) *Organization of production and territory: local models of development*, Gianni Iuculano Editore, Pavia.

EYMARD-DUVERNAY, F., MARCHAL, E. (1997) *Façons de recruter*, Méridiens Klincksieck, Paris.

GELSING, L. (1992) « Innovation and the Development of Industrial Networks », in Lundvall, B. (éd.) *National Systems of Innovation*, Pinter Publisher, Londres.

JOURNE, B. (1996) « L'entreprise créatrice de savoir » *Analyses de la SEDEIS*, n°111, pp. 13-16.

LE BAS, C., ZUSCOVITCH, E. (1993) « Apprentissage technologique et organisation », in *Economies et Sociétés, Série Dynamique technologique et organisation*, n°1(5), pp. 153-195.

LE BOTERF, G. (1995) *De la compétence: essai sur un attracteur étrange*, Editions d'organisation, Paris.

LUNDVALL, B., (1992) *National systems of innovation*, Pinter publisher, Londres.

LUNDVALL, B., JOHNSON, B. (1994) « The learning economy », in *Journal of Industry Studies*, n°1(2), pp. 23-42.

MAILLAT, D., KEBIR, L. (1998) *The learning region and territorial production systems*, WP-IRER n°9802b, Neuchâtel

MORGAN, K. (1995) *The Learning Region: Institutions, Innovation and Regional Renewal*, University of Wales, Cardiff.

SCOTT, D. N., COOK, D. Y. (1996) « Culture organizational learning », in Cohen, M. D., Sproull, L. S. (eds) *Organizational learning*