'Identity matters':

What about territorial identity in transition?

Challenges for local and regional development and planning in Piombino and Val di Cornia

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"È uno strano destino quello che a volte tocca a una città e a un territorio:

diventare fantasmagorico luogo di una crisi ove precipitano

i fantasmi di ciò che "non è più" con le allegorie di ciò che "non è ancora"".

(Bonomi, 2013b)

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INTRODUCTION

Territorial transition: challenges for local and regional development and planning

The complex global crisis, which started at the beginning of the millennium, has uncovered significant transformative territorial dynamics. Apart from its financial and economic nature, the evolution of the crisis has revealed its complexity, bringing to light its deeper roots and wider causalities.

Indeed, over the last years, the 'emergency'-driven mindset has been dismissed in favour of a new territorial reading: *transition*, meant as a long-lasting process of structural change of the socio-economic paradigm, soon manifested within territories.

A deeper investigation of the rising territorial pushes and change has unfolded the transition as an open-ended, long-lasting and progressive process. How to deal with these transformative pressures is still a key and crucial question for many territories, regions and localities.

To this purpose, a theoretical vivid debate is providing a broad and rich set of cross-references as well as conflicting theoretical argumentations aiming at exploring the new emerging paradigm, its causality, form and impact.

A deeper understanding of this phenomenon rejects 'pre-set' and 'off the shelf' solutions as well as 'winning' formulas, besides uncovering crucial and strategic elements for the framing and implementation of a new territorial development and planning pattern and approach, capable to tackle the ongoing transition.

Therefore, a broader analysis of the phenomenon may bring to light three main points:

- first, transition ought imply the redesign of global/regional/local relations, stressing the consequent need to re-think and redefine territory and territorial settings according to a relation and network-driven approach.

- second, the renewed centrality of the regional and the local scale in territorial policy-making should lead to redefine 'territorial potential' in relation to the changing global scenario as well as rediscovering the core role of territory and place in the development policy framework.

- third, a relational reading of territory and territorial dynamics could demand further debate on local and regional development models in order to explore the premises for a redesigned strategic planning approach.

An additional exploration of the relational idea of space, place and identity in territorial development and planning is therefore crucial to attend these requirements, besides representing a key foundation for the development of a solid territorial policy framework.

While a relational definition of space and place is backed up by a number of academic works in cultural geography, its application in regional studies and regional economic development has only recently begun to spread as a means of reading transition phases.

The dynamic, hybrid, relational and progressive definition of territory and identity could so open to a joint, interdisciplinary work among regional science and cultural geography, so as to support a redesigned and integrated approach to local and regional development and planning.

To this purpose, the relational and dynamic definition of space, place and identity as offered by a number of Marxist and Post-Marxist scholars in cultural geography might be considered as additional to the Evolutionary Economic Geography framework and its progressive and context-specific conception of territorial path, as expressed by its theoretical assumption "history matters": this joint perspective may open to an alternative and fresh reading of the current dynamics in Piombino and Val di Cornia (Tuscany, Italy), that represent a paradigm case of 'territory in transition'.

Consistent with these academic grounds, the research work aims at testing these points on a case study, that is the analysis of the evolution of the Tuscan industrial town of Piombino and of its surrounding area Val di Cornia.

The Research Project

The study work investigates the transformative dynamics, which are occurring within '*territories in transition*' (Rullani, 2013), by proposing an alternative reading of territorial evolution and identity along a transition.

A '*territory in transition*' may be defined as a place shaped and wrought by an overlap of differing and multifaceted (and sometimes conflicting) development trajectories, tensions and pushes, and which is dealing with a process of reorganization and adjustment, as an effect of the ongoing change of the socio-economic paradigm.

More in detail, the research aims at providing an original contribution to the territorial analysis of Piombino and Val di Cornia (Tuscany, Italy), by developing an integrated and relational reading of the area in terms of 'identity-building': this additional perspective is framed by joining the progressive and path-(inter)dependent definition of territorial trajectory, as provide by Evolutionary Economic Geography, with the relational definition of space, place and identity, as by cultural geography.

Therefore, this research project intends to:

- observe how the socio-economic paradigm transition may affect *territorial re-configuration and re-definition*. This process needs for a multi-dimensional understanding of territory and for the development of a multiple, open and relational definition of territorial identity.

- analyze how a dynamic and hybrid idea of identity may affect the *understanding and evolution of a territorial trajectory*;

- explore and grasp a *relational approach to local and regional development in terms of identity building*, exploring as well its contribution for *territorial strategic planning and policy-making* processes.

The case study represents a paradigm example of 'old industrial region', as defined by Hassink (2010a) as well as a key opportunity to:

- *observe* a territory characterized by a strong, and apparently rigid and bounded vocation along transition;

- *analyse* its territorial transformative dynamics along the transition process;

- *explore* how local and regional development may be conceived and approached in differing ways, depending on different imageries and readings of the territory.

The study intends to investigate, through an 'on field' analysis, the way territorial transition may open Val di Cornia to a new dynamic territorial setting and identity, despite its 'supposed' and commonly perceived closed, static and rigid 'steel'-bound nature.

It also aims at exploring the strategic and political contributions which could rise for regional and local development and planning by a dynamic and multiple definition of identity building.

To accomplish these objectives, the alternative reading of Val di Cornia is articulated, so as to:

- first, *observe* the evolution of the territory toward *trans-territorial configurations,* shedding light on the rise of *identity as a dynamic and polycentric notion*;

- second, *analyze* the emergence and co-existence of differing and multiple narrations as well as approaches to transition, bringing to light *identity as a selective and power-driven process;*

- third, *explore* how a relational definition of identity may open to alternative local and regional development and planning strategy, highlighting the rising of *identity as a strategic and political notion.*

Consistent with its goals, the research project is structured as follow (Figure 1).

The *First Chapter* offers a literature review, focused on the main academic debates in regional studies and regional economic development – in order to outline 'transition'- as well as in cultural geography - in order to provide a relational definition of 'space', place' and 'identity'.

The *first part* of the chapter refers to the Evolutionary Economic Geography framework, in order to define four main and key theoretical tools for the territorial analysis: *path-(inter)dependence* and *lock-in* (Boschma and Frenken, 2006; Martin, 2010; Martin and Sunley, 2006, 2010), *related variety* (Boschma, 2005, 2009, 2013; Boschma and Frenken, 2006, 2007, 2009, 2010; Boschma and Iammarino, 2009; Frenken and Boschma, 2007; Frenken et al., 2007; Martin and Sunley, 2010; Martin, 2010) and *resilience* (Boschma, 2014; Bristow, 2010; Christopherson et al., 2010; Hassink, 2010b; Hudson, 2010; Martin, 2012b; Martin and Sunley, 2013; Pike at al., 2010; Simmie and Martin, 2010).

The *second part* explores the current debate in regional studies and regional economic development in order to shed light on the restructuring and reorganization of global chains and networks and its main causalities, focusing in particular on the *global production networks* (GPN) (Henderson et al., 2002; Coe and Hess, 2011), the *global value chains* (GVC) (Humphrey and Schmitz, 2002; Gereffi et al., 2005) and the *global innovation networks* (GIN) (Cooke, 2013) models.

Main concepts	Theorethical Framework	Theoretical Tools	Main Referencies		
Territorial trajectory Territorial evolution	Evolutionary Economic Geography	Path-(interd)ependence	Boschma and Frenken, 2006; Martin, 2010; Martin and Sunley, 2006, 2010		
		Lock-in	Cooke, 1995; Grabher, 1993		
		Related variety	Asheim et al., 2011; Boschma, 2005, 2009, 2013; Boschma and Frenken, 2006, 2007, 2009, 2010; Boschma and Iammarino, 2009; Frenken and Boschma, 2007; Frenken et al., 2007; Martin and Sunley, 2010; Martin, 2010		
		Resilience	Boschma, 2014; Bristow, 2010; Christopherson et al., 2010; Hassink, 2010b; Hudson, 2010; Martin, 2012b; Martin and Sunley, 2013; Pike at al., 2010; Simmie and Martin, 2010	Alternative reading of the territorial evolution of Piombino and Val di Cornia by a relational perspective	Redesigned approach to territorial development and planning in terms of *territorial identity-building*
Transition	Regional Science and Regional Economic Development	Global chain and network restructuring: global production network (GPN); global value chains (GVC); global innovation networks (GIN)	Henderson et al., 2002; Coe and Hess, 2011;Humphrey and Schmitz, 2002; Gereffi et al., 2005; Cooke, 2013; Parrilli et al., 2013		
		Sustainable transition	Coenen and Truffer, 2012; Truffer and Coenen, 2012; Coenen et al., 2012a		
		Italian Industrial Districts (IDs)	Cappellin et al., 2014; Chiarvesio et al., 2002, 2010; Corò and Micelli, 2007 a,b; Onetti and Zucchella, 2012; Rullani, 2006, 2010, 2012, 2013, 2014; Zucchella, 2006		
		Cognitive Internationalization	Rullani, 2006a; Onetti and Zucchella, 2012; Corò, 2013; Bellini and Hilpert, 2013		
		Knowledge (*Differentiated knowledge bases* approach)	Asheim et. al, 2010, Rullani, 2006b; Cappellin, 2010		
		Proximity	Bathelt, 2011; Boschma, 2005, Bellini and Hilpert, 2013		
Space, place, territory, region and territorial identity	Cultural geography Planning theory	Relational definition of space, place and identity	Harvey, 1990; Lefebvre, 1973; Massey, 1973, 1991, 1992, 1999, 2005; Massey et al., 1999, 2001		
		Region and territory (Scalar/territorial versus relational)	Agnew, 2013a; Jessop, Brenner, Jones, 2008; MacLeod and Jones, 2007; Sassen, 2008, 2013; Allen, 2011; Allen et al., 1998, 2007; Amin, 2002, 2004; Massey, 1999, 2005		
		Realtional approach to territorial development and planning	Healey, 2003, 2006, 2011, 2013; Paasi, 2002, 2001, 2012; Paasi et al., 2001		

Figure 1: Research project. Theoretical framework and structure

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A specific focus on the Italian scenario is also proposed, as described by the research carried out at the *Center for Studies on Technologies in Distributed Intelligence Systems-TeDIs* of the University of Venice by Enzo Rullani, Stefano Micelli and Giancarlo Corò, and by the research works of Antonella Zucchella of the University of Pavia (also Cappellin et al., 2014; Chiarvesio et al., 2002, 2010; Corò and Micelli, 2007 a,b; Onetti and Zucchella, 2012; Rullani, 2006, 2010, 2012, 2014; Zucchella, 2006).

The *third part* analyses *internationalization* (Rullani, 2006a; Onetti and Zucchella, 2012; Corò, 2013; Bellini and Hilpert, 2013), *knowledge* (Asheim et. al, 2010, Rullani, 2006b; Cappellin, 2010) and *proximity* (Bathelt, 2011; Boschma, 2005, Bellini and Hilpert, 2013) as three key features of transition.

The *fourth part* introduces to the dynamic and relational definition of 'space', 'place' and 'identity' as by several Marxist and Post-Marxist scholars in cultural geography (Harvey, 1990; Lefebvre, 1973; Massey, 1973, 1991, 1992, 1999, 2005; Massey et al., 1999, 2001).

It also goes through the debate about scalar/territorial (Agnew, 2013a; Jessop, Brenner, Jones, 2008; MacLeod and Jones, 2007; Sassen, 2008, 2013) *versus* relational (Allen, 2011; Allen et al., 1998, 2007; Amin, 2002, 2004; Massey, 1999, 2005) definitions of region and territory.

A relational approach to territorial planning is also explored through the studies carried out by Healey (2003, 2006, 2011, 2013) and Paasi (2002, 2001, 2012; Paasi et al., 2001).

The research project deals with these concepts as key theoretical tools to observe the current transition process as well as its impacts on territorial identity definition, so as to move forward from static and bounded ideas of territory and region, proper of mainstream territorial development frameworks.

The *Second Chapter* aims at assessing the evolution of an exemplary *'territory in transition*': it proposes the *observation, analysis and exploration* of the evolution of Piombino and Val di Cornia, which may be defined as a paradigm case study to understand the challenges and criticalities deriving by transition.

The research works intends to describe the evolution of Val di Cornia as well as its identity in relation to: the development of the steel industry from the nineteenth century on; the promotion, since the '80s, of a 'diversification' strategy; and finally to the increasing rise of 'weak signals' of change and new territorial 'ferment', which are uncovering alternative local development patterns.

The methodological approach applied to on-field analysis is *Grounded Theory Research* (Corbin and Strauss, 1990). The research also refers to the project "*Dinamiche identitarie, trasformazioni economiche, prospettive strategiche: il caso di Piombino e della Val di Cornia*", developed by the *Istituto DIRPOLIS* and *Istituto di Management* of the *Scuola Superiore Sant'Anna* (Pisa), in order to gather additional on-field data and observations. I've been part of the research group as a PhD student of the programme 'Politics, Human Rights and Sustainability' of the *Scuola Superiore Sant'Anna*.

In conclusion, the case study may give the opportunity to observe the transitional dynamics of a territory, which, at first sight, seems characterized by a strong and closed 'steel-bound' identity as well as by several lock-ins.

The *Third Chapter* aims at developing an additional and relational reading of the case study through the theoretical tools explored d in the first chapter.

The analysis intends to shad light on the dynamic and progressive nature of Val di Cornia's evolution, as well as on its trans-territorial setting and identity multiplicity.

Moreover, several crucial strategic and political contributions for a renewed approach to local and regional development and planning may be unveiled by this alternative reading: this case may indeed be defined as a paradigm example of a still open territorial transition, where *considerations on 'identity-building'*

dynamics may contribute in a significant way to understand and address the evolution of a territory along a transition.

The *Final Considerations* provide an examination of the main steps of the research project. They also offer an additional and more general analysis of the *strategic and political role identity-building could play within a 'territory in transition',* besides *encouraging a new approach to local and regional development and planning, rooted in the idea that 'identity matters'.*

Some opening considerations on the transition scenario and its dynamics

Transition may be defined as a *process of change and adjustment toward a new socio-economic development pattern.* It accounts for the co-existence of conflicting transformative tensions within and between territories, some of which characterized by a '*resistance*' attitude towards change, while others by '*innovative*' and '*proactive*' dynamisms.

This phenomenon is impacting a huge number of territorial and industrial systems, which are attempting to deal with the global chains and networks restructuring as well as with the improvements in ICT and mobility (of both people and knowledge) and new internationalization pushes.

The internationalized and multi-scaled scenario raised over the last two decades is challenging the classic understanding of local and regional development, its geography and hierarchy (Amin, 2004). It moves forward from mainstream local and regional development patterns, rooted in an a-spatial reading of territorial potential, as well as built around hegemonic temporality and dichotomous territorial definitions, such as advanced/backward region, first/third world and developed/underdeveloped country (Massey, 2005).

This new perspective is reshaping the geography of vulnerability and responsibility as well as encouraging new accounts of territorial potential and advantage: on one hand, this shift may have the potential to promote new *inclusive* and *fairer* forms of *co-opetition* and development; on the other, it may

risk to strengthen and fuel *asymmetric* and *uneven* dynamics and interdependences, typical of mainstream patterns and 'grand' narratives.

Indeed, the more vulnerable and fragile regions, as the 'marginal' or 'old industrial' territories, may fall short of the apt capabilities and instruments so to fairly tackle transition and upgrade their position. They may risk to 'succumb' and 'suffer' these dynamisms, rather than 'surfing' and 'exploit' transformations: the transition, together with change in power geography, may do negatively affect the already uneven positioning of several peripheral territories and regions, as proved, for example, by new forms of unequal trans-territorial cooperation, like severe industrial delocalization processes and 'land grabbing' phenomena.

Therefore, as aforementioned, transition is witnessing the emergence of multiple and conflicting territorial tendencies and is manifesting itself differently as well as unevenly within territories. An additional local and regional approach to this phenomenon may open to understand its possible impacts on the micro and meso level, as well as shaping and addressing its emerging dynamics in a fairest way.

The global chains and networks re-organization could lead, in fact, to a *new conception of place-based development* and *territorial potential* that goes beyond the mainstream idea of 'territorial competitiveness' (Boschma, 2004; Bristow, 2011; Cochrane, 2011; Pike et al., 2007, 2011; Porter et al.; 2011).

The paradigm transition ought so require a shift from a competitive model, typical of 'the free market', to a multi-governance model, based both on complementarity and cooperation within and between territories.

This shift has been analyzed by Pike, Rodriguez-Pose and Tomaney (2007 and 2011), who support local and regional development from a "multi- and inter-disciplinary insight", fostering "a dialogue aimed at stimulating understanding and explanation of the problematic of development in different local and regional contexts. This stance promotes an appreciation of politics, power relations and practice in multi-level, multi-agent and devolving systems of

government and governance". This approach is founded on "accountability, democracy, equity, internationalism and solidarity" (Pike et al, 2011).

This challenge may open to develop a new inclusive perspective on local and regional policy-making as well as to a new definition of territory and local capability: it can turn into "an opportunity for a different and more expanded politics of place" (Amin, 2004).

Indeed, over the last decades, a critical assessment of the classic territorial thinking in local and regional studies has resulted in a renewed focus on place-based policies and practices, highlighting the role of the local and the regional scale in the development policy framework (Bristow, 2011; Cochrane, 2011; Hudson, 2011a; Pike et al., 2007, 2011). The widespread and shared growing call for 'sustainability' and 'sustainable development' have encouraged the shift toward a more equal and inclusive thinking, besides feeding a long-term sensitivity towards territorial issues.

Moreover, *such long-term vision ought require strategic and inclusive thinking and planning* in order to be effectively developed and implemented. This approach questions the mainstream prominence of 'competitiveness' in favor of a context-specific and inclusive view of territorial potential, which takes into account the economic, the cultural, the environmental and the social spheres.

According to this perspective, territorial resources and positioning are valued for their relational, qualitative and cognitive components, and so going beyond pure transaction, labor cost and advantage-driven criteria.

Within a place-based perspective, context-specificity and uniqueness, an so territorial identity, should not be pictured as pre-set and static features, but should be rather meant as the particular and progressive *nodal* combination of a multiplicity of trans-territorial flows and interactions, which underlying a distinctive territorial strategic vision.

'Local and place-based' level should not be intended as synonymous of 'closed and bounded', but rather considered as the appropriate scale to manage "the

politics of the everyday" (Amin, 2004), which emerge by multi-level and multi-scale clashes and dynamism.

The relational character of territorial evolution may open to an alternative reading of place and 'politics of place' and, consequently, to a renewed relevance of territorial identity in local and regional development policy-making. This idea highlights the political and strategic nature of territorial identity-building along a transition, which should act as the key instrument to support an inclusive process of selection among conflicting and differing narratives: its relational definition is the key to deeply understand its social and political character, as the local 'synthesis' of multiple and trans-territorial visions.

An integrated approach to the territorial development debate may so offer relevant recommendations to relink the social, the economic, the environmental and the cultural realms into inclusive and innovative regional and local policies. In particular, the relational approach is emerging as a central lens apt to grasp and face the transition process as well as to understand rising multi-level and multi-scale territorial configurations and to manage territorial evolution.

The transformative pushes generated by transition may therefore encourage and support a relational reading of territorial evolution, development and identity as well as a redesigned local and regional planning approach based on a multi-governance model.

An overlook on the case study: the evolution of Piombino and Val di Cornia

Piombino is a Tuscan industrial town, located on the coast of the Tirreno Sea, in front of Isola d'Elba. It surrounding area, that is Val di Cornia, counts with about 59.000 inhabitants.

From the 19th century on, Piombino has stood out as one of the main production sites of the Italian steel industry. The presence of the steelworks has strongly affected the history and the evolution of the whole area over time. In particular, during the last decades, Val di Cornia has been affected by several and cyclical

crises in the steel sector.

In the last century, the presence of the State-owned steel plant *Ilva* in Piombino has exercised a *centripetal* force on the territorial configuration of Val di Cornia, shaping the economic and social landscape around the needs of the steel industry.

Indeed, the steelworks used to be considered as the *main engine* and *attractor* of the local economic system as well as the *prevailing territorial narrative.* This narrow perception of the territory has been shaping steel-bound social expectations as well as steel-bound local identity.

Over the last decade, this sector has witnessed a dramatic decline due to the restructuring of the global production systems and the economic crises, weakening the role of Piombino as the main *catalyst* for the other towns of the valley, besides hindering the hegemony of the 'steel image' over 'other' alternative and multiple local vocations.

Indeed, this long-lasted 'steel-bound' territorial reading, both at institutional and community level, has too often overlooked the presence of dynamic and innovative pushes and alternative narrations.

For too long, the area has been shaped by the bounded relation steel-plant/territory in its local, social, economic and cultural aspects. This symbiotic as well as stereotypical dyad has led to the consolidation over the decades of a perceived static and steel-bound local identity, a single lens through which read and explore the territory: it has overlooked the emergence of 'weak signals'' and 'territorial ferment', which have in turn revealed to be able to reinterpret the local vocation in a multifaceted way, to rethink the role of the local identity (opening to a global scenario) and to propose an alternative and innovative development agenda.

More in detail, the socio-economic symbiosis firm/territory that has characterized the first part of the twentieth-century started weakening in the

'80s, as an effect of the firm privatization (by the *Lucchini* group) and internationalization (by the Russian group *Severstal*).

Despite the deep changes and the increasing conflicting relation between the territory and the plant, the perception of the 'traditional' enclosed local identity has lasted and has continued to exercise a strong influence on local policy-making and territorial strategic planning.

The last dramatic crises have further questioned the leading role of the industry as well as its influence on the local dynamics. In particular, the troubled negotiation and sale process, opened in 2013, which have led to the acquisition of the *Severstal/Lucchini* plant by the Algerian *Cevital* group in 2014, has further stressed the vulnerability of the area. Indeed, the territory has demonstrated and confirmed to fall short in re-discussing and re-thinking its dynamics along the transition.

The crisis has furthermore fuelled the local centrifugal forces as well as the demand for a renewed territorial approach and distinctive identity among the other towns of the valley. This shift has highlighted the limits of a firm-centric and steel-bound geography, which has clearly proved to be unable to innovate itself.

Indeed, the other towns of Val di Cornia are expressing today the need to move forward from the one-way and steelworks-driven convergence toward Piombino. They aim at identifying innovative territorial policies in order to value their own vocations. This growing demand for local distinctiveness emphasises the urge for Piombino to face transition and re-think its role, starting from its peculiar know-how and skills, valuing its strategic location in the center of Italy and in the middle of the Mediterranean area, as well as appraising its logistics infrastructure, such as the seaport.

Despite their potential, Piombino and Val di Cornia are commonly perceived as a static, locked-in and closed territory, trapped between 'steel' overspecialization and rigid forms of sector-driven 'diversification'. Moreover, over the last decades, the prevalence of crisis and emergency-driven mindsets

and short-term policy-making, over the implementation of long-term strategic visions, has inevitably influenced the development of the area, restraining resources and attention on the steel industry priority and needs, besides overlooking and holding back innovative and alternative 'third ways'.

In conclusion, an additional reading of this area aims at deeper exploring the identity and the territorial evolution of Piombino and Val di Cornia along transition: a relational account of space may, in fact, overcome 'binary' and 'static' readings of the territory, typical of mainstream patterns, and it may unveil *alternative* forms as well as opening spatial conceptions to third possibilities and defies dichotomous and hegemonic territorial interpretations.

It may therefore represent a key opportunity to to *investigate the contributions a relational territorial reading as well as definition of territorial identity may uncover for regional and local development and planning*. This approach aims at bringing to light the *political relevance of identity-building in the formulation of a strategic territorial vision along a transition.*

CHAPTER 1

Grasping 'territorial transition': toward trans-territorial configurations?

A literature review

At the beginning of the millennium, the dramatic financial and economic crisis began to unveil its deep and complex roots and causalities, so as to disclose and strengthen the opinion that 'something more' was changing and happening at a global level. In fact, during the last decade, this perception has started to overcome emergency-driven mindsets, typical of short-term and urgent solutions, besides fostering the awareness that a long-lasting structural change in the development paradigm was occurring (Rullani, 2014b)[1].

This original insight has been unfolded by the appearance and acknowledgment of several 'weak signals' of transformation, in addition to reinforce the need for new interpretative ways and further theoretical comprehension of key conceptual paradigms (Rullani, 2006).

Thus, the crisis has highlighted and revealed a wider re-structuring transition process in its *disruptive* and *open* character, moving forward from its financial and economic connotations.

Indeed, *'transition' may be defined as the long-lasting, open-ended and progressive process of structural change in the global socio-economic development pattern and regime.* This shift is generating both conflicting and innovative processes of territorial transformation and adjustment at meso and micro level, aiming to deal with change in the economic, social, cultural and environmental spheres: this phenomenon is today characterizing a number of local and industrial systems under the pressure of globalization and ICT improvement (Corò, 2013; Gereffi, 2005; Henderson et al., 2002; Rullani, 2006a,

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[1] *'Paradigm'* can be defined as the predominant industrial, economic or service "culture" in a "dominant" space. It is different from '*regime,*' meant as its governance system. The integration between 'paradigm' and 'regime' defines the *socio-technical system* (Cooke, 2012b).

2010, 2013) and the commitments to sustainable development (Coenen et al., 2012a,b; Cooke, 2011), all accentuated by the current economic crisis.

In particular, over the last two decades, this shift has risen as the result of crucial pushes and tensions in the socio-economic development paradigm, which have been redefining power relations and reassigning roles and competencies in the world economy: the markets opening to developing and emerging countries (as China, India and Brazil), the consequent impacts on the reorganization of the global production systems and the new international division of labour.

These dynamics have moved forward from mainstream definitions of nations, regions and localities (as developed/developing; first/third world) and have contribute to redraw the global production geography according to new criteria and conceptions, as knowledge (innovation and spillover) and value (creation and capture as low/high value-added).

This process may be observed and analyzed in terms of the *evolution and development of* new *territorial trajectory* within global networks. Indeed, the paradigm change leads to the appearance of redesigned spatial configurations and socio-economic and territorial settings.

The reorganization of the global networks and chains, the emergence of new forms of internationalization, together with a new conception of knowledge and proximity are, in fact, contributing to redefine 'territory' in a dynamic and relational way, besides questioning mainstream ideas of development and opening territorial potential and identity to a new strategic role and centrality.

Also, critics to mainstream capitalistic approaches have risen in favor of a more inclusive idea of territory and production system, based on complementarity/cooperation (versus competitiveness) and multi-governance model (versus hierarchy).

This conceptual shift aims at reconnecting the social and economic perspectives and to overcome uneven spatiality and power asymmetry, which are typical of the mainstream socio-economic pattern (Bristow, 2020, 2011; Cochrane, 2011; Hudson, 2010, 2011a; Pike et al., 2007, 2011; Porter et al.; 2011).

According to this additional re-conceptualization and interpretative way, a number of scholars in the academic community are working in several fields on the analysis and exploration of transition: multiple, sometimes conflicting, readings and approaches are rising within the theoretical debate.

The dynamic and open-ended character of this process denies 'pre-set' and 'off the shelf' definitions and formulas; in fact, a clear definition of a new socio-economic paradigm is still far to be written.

For that reason, it is crucial to *observe, analyze and explore* the ongoing transformative pushes and trajectories *within* territories at the local and regional level. 'On field' observations of the current territorial "*fermento*" and "*ebollizione*" (Bonomi, 2013a) may provide new theoretical and strategic planning tools, through which redefine local and regional development policies in order to deal with transition.

Both empirical examinations and theoretical assessments may contribute to better understand 'what is going on' within territories, so to identify the main dynamics and feature of transition. This approach is especially required for vulnerable and critical contexts, where transformations have more dramatic impacts. At the state of facts, this twofold analysis is the main objective which scholars should preset and reach.

A review of the current literature in regional science, regional economic development and cultural geography is presented in this chapter (Figure 1 in 'Introduction' and Figure 1.1) in order to better understand:

- first, what is meant by 'transition', what are its main features and what are the emerging territorial implications, threats and opportunities under discussion;

- second, what emerges by a relational perspective on space, place and identity production, and how this shift challenges our way to interpret the 'spatial' and the 'territorial'.

Main concepts	Theorethical Framework	Theoretical Tools	Main Outcomes	
Territorial trajectory Territorial evolution	Evolutionary Economic Geography	Path-(inter)dependence Lock-in Related variety Resilience	Territorial trajectory as a progressive and multi-dimensional configuration shaping territorial evolution	*Alternative relational reading of territorial evolution and development along a transition in terms of territorial identity-building*
Transition	Regional Science and Regional Economic Development	Global chain and network restructuring Cognitive internationalization Differentiated Knowledge Bases and Proximity	New trans-territorial geography defined by new forms of interrelation between individuals, firms and territory, and shaped by innovative interactive learning processes	
Space, place, territory, region and territorial identity	Cultural geography Planning theory	Relational definition of space, place, territory, region and territorial identity	Space as *the product of interrelations* Space as an *open, dynamic production process* Space as the sphere of *co-existing multiplicity* Space as a *'power'* and *'political'* issue Place identity as a *multiple, selective and political/strategic process*	

Figure1.1: The research work. Conceptual framework

First, the reference to Evolutionary Economic Geography (EEG) framework offers a significant understanding of what is meant by 'territorial trajectory'. The EEG's foundation 'history matters' provides a key progressive perspective in order to grasp territorial transition analysis.

Second, the literature review of a number of significant contributions in regional science and economic geography aims at outlining the current transition scenario, analyzing its causalities and identifying its main territorial transformative dynamics. In particular, it intends to investigate the rise of multi-dimensional territorial configurations as well as its effects on local and development approaches.

Finally, so *to support and integrate the progressive and path-dependent perspective developed by EEG, this review goes through the relational definition of 'space', 'place' and 'identity' as provided by a selection of studies in cultural geography*.

According to the research objectives, in fact, *a relational definition of territorial identity*, which is often overlooked in regional science, may be required in order to:

- better *grasp territorial transition*;

- bring to light the *political and strategic nature of identity*;

- explore its contributions for a *redesigned approach to local and regional development.*

In conclusion, the review aims at exploring a set of *theoretical and conceptual tools* so as to answer questions about the *main feature of transition,* how territorial transition contributes to *redefine dynamic territorial configurations*, both in terms of development pattern and territorial identity, and finally about the *strategic contributions for regional and local development and planning* so to successfully deal with the paradigm shift.

1.1 'Territorial trajectory' in *Evolutionary Economic Geography* framework

 'How territories are dealing with transformations' and 'where they are going to' are two of the main dilemmas stressed by transition. Due to its disruptive and open nature, in fact, the paradigm shift cannot be 'solved' by implementing pre-set and top-down formulas.

On the contrary, *transition might be defined as an open-ended and long-lasting process, which generates co-evolving territorial transformative and adaptive pushes and struggles, both dialectically and conflictingly*.

 Thus, a progressive and dynamic idea of 'territorial trajectory' is crucial to understand 'where territories come from' as much as to shed light on possible future paths of regional and local development. The main assumption here is rooted in the ongoing idea of 'territorial evolution', which depends on a wider definition of place-specificity as well as enhancing to past, present and future paths. Moreover, the dynamic, long-lasting and continuous nature of transition

rejects by definition static approaches, typical of mainstream models, in favour of a dynamic idea of space-time in order to be defined and analyzed.

Figure 1.2: Main EEG Concepts

To accomplish with the aims of this research work, an excursus of the main Evolutionary Economic Geography (EEG) concepts is central in order to identify a number of key concepts, through which explain what is meant by 'territorial trajectories' (Figure 1.2). The idea of progression and continuity in territorial trajectory definition is, in fact, embraced by the notion of "path".

According to Boschma (2007), the evolutionary approach focuses "on the process and mechanisms by which the economy *self-transforms itself from within*" and deals with economy as a dynamical, irreversible and self-

transformational system (novelty), assigning a central role to knowledge and innovation in shaping these characteristics (Boschma, 2007; Boschma and Martin, 2010b). The evolutionary turn in economic geography enhances this framework, adding a deeper evaluation of the historical time and the spatial localization, so as to analyze and explain territorial trajectory' transformation in as well as its differing impacts on local and regional development: EEG approach stresses the idea that '*history and geography matter*' in the evolution of a territorial system.

Following Boschma (2007; Boschma, and Martin 2010b), "the process by which the economic landscape –the spatial organization of economic production, circulation, exchange, distribution and consumption- is transformed from within over time" constitutes the EEG's main object of analysis.

It embraces an open, dynamic and non-equilibrium approach to evolution, criticizing and rejecting mainstream models based on 'equilibrium thinking' (Boschma and Frenken, 2006). Indeed, according to Simmie and Martin (2010), the evolution of an economic system is strictly dependent on knowledge and "individual economic agents, who can learn, innovate and adjust their behavior", opening to dynamism within the economic landscape and so inherently rejecting any form of equilibrium.

This approach stresses the central role of firms, actors and routines (micro-level), sectors and networks (meso-level) in shaping an economic landscape and in determining structural change (macro-level) over time, revealing a multi-dimensional approach (Boschma, 2007; Boschma and Frenken, 2006)[2].

EEG gives high emphasis to cognitive distance and new forms of proximity as key variables in economic processes and innovative dynamics[3]. It focuses on the

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[2] Routines are defined as "organizational skills, which cannot be reduced to the sum of individual skills. […] Organizational skills, as for individual skills, consist of large part of experience knowledge (learning by doing) and tacit knowledge, which are hard to codify" (Boschma an Frenken, 2006).

[3] These concepts will be developed in the third paragraph of this chapter. Boschma (2005) proposes a new 'proximity' framework, whereby he distinguishes geographical, cognitive, organizational, institutional and social proximity.
In knowledge spillover definition, cognitive distance between agents is considered proportional to novelty value and inversely proportional to absorptive capacity (Nooteboom, 2007).

way novelty, knowledge and economic landscape may co-evolve and shape each other, both as products and producers of change.

Moreover, in addition to consider the 'region' as a significant site of policy-making and action, rather than a mere scale of analysis, it deals with institutions as relevant actors capable in influencing, but not to determining, the economic landscape[4].

Therefore, EEG deals with an economic system as *complex and dynamic* entity, characterized by a certain degree of openness and heterogeneity among networks and agents. In this view, actors are supposed to interlink and interact, in order to mutually shape and influence each other (co-evolve) across time and space, nurturing recursive interrelations at micro and macro level (Martin and Sunley, 2012; Simmie and Martin, 2010).

The application of an evolutionary perspective to economic geography is a relatively young approach, which is still under progressive development and which is striving for a coherent and complete framework and body of literature (Boschma and Martin, 2010a). This perspective has been largely applied and debated on a great number of issues, as network analysis as well as to investigate the evolution of institutions, clusters and firms. Moreover, it is opened to numerous multi-disciplinary contaminations, embracing a large amount of concepts from other fields[5]. The complexity of this framework will not be explored here and it is not my intention or ambition to carry out a complete and exhaustive appraisal of the EEG framework. This review rather aims at stressing and defining some key concepts, which may be central to the analysis of transition and territorial dynamics, besides informing relevant theoretical tools so as to better understand the changing nature of territorial trajectory and its impact on regional development process along transition.

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[4] An evolutionary definition of region is based on the idea that "space is constructed via human action and social relations" across scales and levels, and considers these constructions in a constant process of transition (Christopherson et al., 2010).

[5] For example: biology, Neo-Darwinism, the theory of complex adaptive systems, panarchy.

More in detail, such theoretical tools are: *path-dependence, lock-in, related variety and resilience.*

1.1.1. Path-(inter)dependence and lock-in

Path-dependence is one of the core concepts of Evolutionary Economy, whose recent adoption in Economic Geography has opened a vivid debate about its meaning and application. Shedding light on the implications derived by a geographical approach to path-dependence –*place-dependence*- and grasping its impacts on (uneven) local and regional development are central EEG tasks. This renewed perspective on path-dependence has been deeply analyzed and defined by Martin and Sunley (2006, 2010; Martin, 2010), whose study works constitute the main references of this review.

The EEG approach opposes the idea of "probabilistic and contingent process" to "historical determinism" and predictability. It puts emphasis on the role of *time* in shaping economic landscape and territorial development, assuming that "the past thus sets the possibilities, while the present controls what possibility is to be explored, which only becomes explained *ex post*" (Martin and Sunley, 2006). According to Martin and Sunley (2006), in fact, *path-dependence* process is defined as "one whose outcome evolves as a consequence of the process's or system's own history" and thus, following Boschma and Frenken (2006), "evolutionary theory deals with *path-dependent* processes, in which previous events affect the probability of future events to occur".

These definitions stress the importance of cumulative and incremental patterns and novelty in determining trajectories. This perspective raises questions about path's creation and destruction, besides supporting a "'path as process' approach" to territorial evolution, as affirmed by Martin and Sunley (2006). Elements of 'equilibrium thinking' in evolutionary process are inherently rejected by this ongoing and progressive conception: a 'non-equilibrium' definition is promoted, which describes path-dependence as "a dynamic open historical process by which technologies, industries and institutions evolve

along unfolding trajectories [...]. These trajectories are shaped not only by the sequences of prior developments and influences of earlier events, but also by the evolution of the processes (mechanisms) of path-dependence themselves" (Martin and Sunley, 2010).

Indeed, Martin and Sunley (2010) support "a wider view of path-dependence that allows for patterns and trajectories of development that do not approach or reach an equilibrium state, and that do not require an equilibrium interpretation." This perspective may lead to a new and open interpretation of 'lock-in'.

Defining 'lock-in' beyond a static conception

Lock-in is one of the core notions of the path-dependence model and the most significant in order to explore the way historical contingency and paths' self-reinforcing processes may define a trajectory (Martin, 2010).

The non-equilibrium EEG perspective rejects the equivalence path-dependence/lock-in as well as its mainstream static definition.

This concept has been indeed largely applied in order to analyze the decline of 'old industrial regions', especially during Post-Fordist transition, as well as to explore the negative impacts derived by economic agglomerations (Boschma and Lambooy, 1999; Cooke, 1995; Grabher's, 1993; Hassink, 2010a; Pike et al., 2010)[6].

In this perspective, 'lock-in' mainly refers to 'rigidity' as well as to the loss of dynamism, flexibility and adaptability of a territorial and economic system: in his analyses of the Ruhr's industrial decline and reorganization, Grabher (1993) defines this negative trend as "the trap of rigid specialization"[7]. This notion may be explain in terms of *adaptability/adaptation* trade-off, which Grabher defined

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[6] Hassink (2010a) defines old industrial areas as "the industrial districts of the past, in which initial stages based on geography and networks, such as industrial atmosphere, highly specialized infrastructure, close inter-firm relations and strong support by regional institutions, turned into barrier to innovation."

[7] "*The weakness of strong ties*" (Grabher, 1993), which paraphrases Granovetter's (1973) work "*The strength of weak ties*".

as: *adaptation,* which "leads to an increasing specialization of resources and a pronounced preference for innovations that reproduce existing structures", and *adaptability*, which "crucially depends on the availability of unspecific and uncommitted capacities that can be put to a variety of unforeseeable uses". Consistent with this definition, lock-in is meant as the way "adaptation to a specific economic environment may undermine a region's adaptability". In this perspective, Grabher (1993) provides an innovative three-fold description of the multiple and complex nature of the lock-in process:

- *functional* lock-in derives by rigidity in hierarchical inter-firm linkages;

- *cognitive* lock-in is expressed by fixity and uniformity in the way of interpreting and viewing the world, as well as by the lack of critical skills;

- *political* lock-in is generated by rigidity and closeness within and between institutional structures, commitments and missions, leading to a symbiotic relation between political and industrial systems.

Their co-existence defines the *regional lock-in*, meant as "a set of interrelated lock-ins that manifest themselves at the regional level, but are influenced and affected by both intra- regional and extra- regional factors" (Hassink, 2010a).

According to Martin and Sunley (2006), "we need to understand regional 'lock-in' as a multi-scale process, and one which also has a high degree of place-dependency, rather than as a universal principle that applies everywhere and anywhere and that is inexorable in its emergence and consequences". In addition, this perspective takes into account the role of endogenous causalities in generating and nurturing de-locking processes.

Thus, EEG offers a *dynamic and process-oriented evaluation* of *lock-in*, defined in 'evolutionary' terms, rather than as a state of 'stasis' and 'rigidity': it make a distinction between its positive nature, inherent to path dynamism and

reinforcement (*positive lock-in*), and its negative character, inherent to path rigidity and static nature (*negative lock-in*) (Martin and Sunley, 2006, 2010).

To this purpose, Martin (2010a) suggests to restrain 'negative' lock-in to the analysis of path's declining processes toward stable states and to consider this negative evaluation just as one part of a wider and alternative path-dependence framework: this conflicting definition of lock-in, trapped between equilibrium and dynamism, should lead to "go beyond" lock-in as the central conception of path-dependence, in favor of a broader appraisal of the evolutionary nature of path-dependence, both in terms of path-creation and self-reinforcement.

Defining 'path-interdependence'

Over the last decades, the rising emphasis on innovation, learning and knowledge, as well as on their impacts on regional and territorial dynamics has encouraged a deeper clarification of 'path-dependence'.

Indeed, the acknowledgment of the context-specific and embedded nature of learning and innovation may lead to move forward from sector-framed approach to path-dependence, in favour of a broader but contingent idea, as 'place-based' and 'place-dependent', as suggested by Martin and Sunley (2006, 2010). Time and space, history and geography turned out to be main and intertwined feature of path-creation and destruction processes: path and place mutually influence/shape each other, through time and space. Obviously, a regional focus may enhance and open the concept to higher complexity, due to the multiplicity of actors and components embraced[8].

A wider approach to path dependence may therefore take into account the co-existence of a variety of paths within a region, which in turn contribute to characterize the regional vocation and specialization, depending on regional specific resources, setting and interconnections.

Thus, this perspective opens to the acknowledgment of the co-evolution and

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[8] According to Boschma (2014), "regions (at whatever scale)" are meant as "collections of individual, organizations, industries, networks and institutions."

interrelation of differing paths within a region, "where the path-dependent trajectories of particular local industries are to some degree mutually reinforcing" (Martin and Sunley, 2006). These dynamics may be defined as *path-interdependence*.

Variety and interactions within a regional system rise as central features of path-interdependence. Therefore, regional path-(inter)dependence emerges as a complex and multi-dimensional process.

These interlinks stretches across several and different arenas (economic, socio-cultural, technological, institutional): according to Martin and Sunley (2006), "different industries within a region may be subject to quite different sources/mechanisms of path dependence, some resource based, others subject to particular externalities of localization, some tied to the inertia of large sunk costs of physical or infrastructural capital, still others subject to technological 'lock-in', and so on. The more economically diverse is a region, therefore, the more likely it is to contain multiple instances of path dependence."

Such complexity opens to the possibility that "some degrees of 'multiple *related* path dependence' across the regional economy" may exist: therefore, the level of path-interdependence and, eventually, lock-in within a region may depend on the structure, nature and density of the interactions (Martin and Sunley, 2006). It allows to encourage an idea of regional 'lock-in' as both a place-specific and multi-scalar process (Martin and Sunley, 2006; Martin, 2010).

As by Hassink and his analysis of old industrial areas (2010a), the degree and strength of a regional lock-in (weak or strong) and, consequently, the nature of its restructuring process (adjustment or renewal) depend on the particular and contingent nature of each specific economic-structure and political-institutional context[9].

However, transition is challenging the region-based assessment of path-(inter)dependence, moving forward from the regional scale, in favour of a more

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[9] Hassink (2010a) identifies economic-structural factors (marked industrial mono-structure and specific leading industry) and political-institutional factors (institutional tissue at regional level, national political system, supra-national institutions), which can explain differences between regional restructuring performances.

open and unbound definition: the analysis of "particular local industries" interactions as well as of self-reinforcing processes within and between differing path-dependent trajectories should take into account the multi-dimensional nature of these interconnections and the way it shapes their own evolution (Martin and Sunley, 2006; 2010). This approach allows to uncover the co-evolution of multi-scale and multi-level paths interrelations and interdependencies within territorial trajectories.

The observation and analysis of the territorial transformations along a transition may be supported by such deeper understanding of the mutual interrelations between path-(inter)dependence and local and regional development (both as processes and outcomes), besides bringing to light their multi-dimensional nature.

This complex perspective on territorial trajectory, in fact, questions another mainstream feature of path-dependence and lock-in, which is the distinction between their endogenous and exogenous causalities (Martin and Sunley, 2006, 2010). A multi-dimensional and interrelated explanation of territorial trajectories and their own causalities move forward from this duality - exogenous *versus* endogenous causes- in favor of a multi-dimensional reading in order to account for territorial complexity and context specificity (Martin, 2010). Whilst in evolutionary economy the rise of new configurations and patterns has been mostly described as externally caused by shocks or chance events, the EEG approach highlights instead the complex nature of decline, adaptation and transition processes, besides providing a higher emphasis on the evolutionary, rather than inertial, meaning of path dependence: circumscribing random and unpredictable causations gives room and brings to light the key role of agents, embedded in particular path, and their intentionality as crucial for selecting and shaping trajectories (Martin, 2010; Martin and Sunley, 2006, 2010).

Moreover, the focus on place contingency and variety emphasizes path's renewal and creation as latent processes, which can be branched out of existing and old paths, rather than as mere exogenously caused phenomena (Martin, 2010).

Consequently, this approach supports the idea that differences among place-based resources and interrelations (and territorial trajectories) may lead to identify distinctive ways of facing with both internal negative spirals and external shocks, and therefore to shed light on differing territorial vulnerability. Differences in adaptive capabilities distribution across space are therefore inherent to differing path-(inter)dependence scenarios, even leading to cause uneven local and regional development.

Thus, context-specificity (geography and history) is a central feature of path-(inter)dependence development: the building and appraisal of resources and capabilities, as much as the intentional and strategic role of agents, may influence path-creation and destruction processes over time, supporting new place-based opportunities as well as de-locking process.

These observations lead to deal with other two core issues within EEG framework: first, how *related path-(inter)dependence* between territorial trajectories may develop and support a dynamic and innovative regional economic system, that is *related variety*; second, how territorial trajectories can differently cope with shocks, shifts, decline and *lock-in* by developing adaptation and adaptability, that is *resilience.*

1.1.2 Related variety and regional branching

Following EEG examination, the idea of path-interdependence within a regional economic landscape takes into account the co-existence and interrelation of a variety of paths.

Moreover, according to EEG approach, variety is generated by heterogeneity among agents, embedded in particular paths at several scales, as well as by differing organizational routines and multi-scale knowledge spillovers across space (Boschma and Frenken, 2006; Frenken and Boschma, 2007; Martin and Sunley, 2010; Martin, 2010). This perspective highlights the multi-dimensional character of path-creation and renewal's causalities, at micro (firms), meso (networks and sectors) and macro (spatial systems, as regions, and structural

changes) level (Boschma and Frenken, 2006). In addition, place and context-specificity may be considered key feature of these processes.

According to Martin and Sunley (2010), the cumulative nature of experiences, knowledge and resources across space sheds new light on the nature of path-creation and renewal processes, "in which resources and competences used in old paths may be recombined and reworked to form the basis of purposeful entrepreneurial deviations into new paths". Following this perspective, a territorial trajectory emerges as the outcome of a selective process.

Furthermore, it has been argued that path-(inter)dependence processes are influenced by the degree of interrelations within and between different sectors, which is based on interactive learning and knowledge spillovers, and which require some degrees of cognitive proximity to be enabled[10]. Therefore, a territorial trajectory may be shaped and determined by both the level of relatedness and variety among paths: its development so depends on some forms of selection, defined as "as an open-ended and out-of equilibrium process of economic development" (Boschma and Frenken, 2006).

To this purpose, path-creation and renewal -once assumed as rooted and latent in old and existing paths as well as based on interactive learning and knowledge spillovers- may imply the acknowledgment of some degree of *related variety* within and between different paths, which is meant as "complementary capabilities among sectors" (Boschma and Frenken, 2006; Martin, 2010). Thus, related variety simultaneously favors and is favored by the interactions between an array of sectors and trajectories, as well as by innovation and diversification. Related variety is expected, in fact, to have positive impacts on regional growth both in terms of knowledge spillovers/innovation and diversification, reducing the risks derived by external shocks.

Indeed, variety *per se* does not guarantee development. Instead, it may have positive effects on regional development when a certain degree of relatedness

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[10] This concept will be developed in the third paragraph of this chapter. Cognitive proximity can be defined here as "the extents to which agents' competences are technologically related" (Boschma and Frenken, 2009).

and cognitive proximity is revealed (Asheim et al., 2011; Boschma and Frenken, 2009; Frenken et al., 2007). For that reason, it is important to distinguish between *related* and *unrelated variety* within a regional economic landscape, between as much as within sectors: specialization *per se* (excess in cognitive proximity) or diversification *per se* (excess in cognitive distance, defined as un-relatedness) could hinder knowledge spillovers and innovative processes and, so, hold back regional development.

Defining 'regional branching'

Consistent with the 'related variety principle', specialization as well as diversification requires some degree of technological relatedness between sectors' knowledge bases to be effective (Frenken et al., 2007) [11].

In this perspective, diversification may be defined as a branching process, through which new routines are developed throgh the recombination and modification of the existing ones (Frenken and Boschma, 2007) [12]. In particular, *regional branching* refers to the appearance within a region of "new variety rooted in related activities", able to shape -but not determine- territorial trajectories over time: following Boschma and Frenken (2009), regional branching is nurtured by the appearance of a new sector, grown out of an old sector, as well as by the recombination of different sectors' competences.

Therefore, it may be assumed that regions tend to diversify across sectors, which are related to their existing activities. It proves how a process of structural change is affected and addressed by related variety, revealing a path-interdependence pattern.

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[11] This perspective moves forward from and expands the classical definitions of Marshall and Jacob's externalities in agglomeration economies, respectively derived by advantages in knowledge spillovers between the same sectors (localization economy) and between diversified sectors (Frenken et al., 2007; Boschma and Iammarino, 2009).

[12] Routines can be replicated through firm's reorganization, spin-off's creation and labour mobility (Frenken and Boschma, 2007).

Furthermore, coherent with the 'relatedness requirement', knowledge spillover and regional related variety may not necessarily be regional-bounded. On the contrary, they may benefit from trans-territorial and multi-scale interrelations and networks, depending on their regional absorptive capacity and by different types of proximity (Boschma, 2005; Boschma and Frenken, 2009, 2010)[13].

According to Boschma and Iammarino and their study on Italian regions (2009), "the inflow of extra-regional knowledge is not per se a sufficient condition for ensuring economic growth": in order to trigger growth, the new external knowledge, moved into the territory, should be related and complementary to the regional knowledge bases, but should not be similar or the same. Thus, an optimal level of proximity, and especially cognitive proximity, between agents is required, so as to promote innovative interactive learning and spillover, as well as to avoid lock-ins or un-related variety (Boschma and Frenken, 2010). These considerations lead to assert that regional knowledge flows result to be more "horizontal and combinative" than "vertical and cumulative" (Cooke, 2010b).

Nonetheless, according to Boschma and Frenken (2009), "the reason why branching occurs at the regional level is because it becomes manifest through knowledge transfer mechanisms (such as spinoff activity, firm diversification, labour mobility and social networking) that tend to be geographically bounded".

Thus, leading firms –the ones able to develop interlinks at several levels and to generate innovative knowledge spillover- could play the role of "gateway" so as to attract and spread new related knowledge within a region, depending on the level of absorptive capacity (Boschma and Iammarino, 2009).

Cooke (2010b) defines the capability to promote regional innovation through the enhancement of relatedness and absorptive capacity as "transversality".

Clearly, the higher is variety between sectors, the better the regional positioning in the global production chains is, the more opportunities of diversification can be disclosed within a region. It implies that the conditions and capabilities for

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[13] This concept will be developed in the third paragraph. This notion refers to cognitive, institutional, social and organizational proximity (Boschma, 2005).

promoting related variety and diversification, as rooted in knowledge bases and networking skills, are not uniform among regions, but their differentiation rather contributes to define uneven local and regional development. Regional portfolio, or "regional economic platform" (Cooke, 2010b), as well as its degree of relatedness influence the diversification opportunities and the regional capability to deal with change and transition over time. Asheim et al. (2010) define this process as "constructing regional advantage" (also Cooke, 2010b).

This perspective may shed light on the evolution of a territorial trajectory and a region, as well as on their ability to re-think their development strategy and deal with a paradigm transition over time. In addition, it opens to a renewed local and regional development approach, able to tackle these challenges in term of new strategic planning and policies. How to develop regional adaptive ability that is how to encourage adaptability/adaptation and resilience is explored in the next paragraphs.

1.1.3 Resilience, Adaptation and Adaptability

One of the main questions emerging from the analysis of territorial transition is to explore how a territory may tackle change and shock, and how it may shape and rethink its trajectory in order to successfully deal with the transformation of the socio-economic landscape. During the last decade, in order to deeper understand economic crises and environmental criticalities, the notion of *resilience* has been largely debated among scholars of regional science and economic geography as both a controversial and relevant device to explore regional responses to change (Boschma, 2014; Bristow, 2010; Christopherson et al., 2010; Hassink, 2010b; Hudson, 2010; Martin, 2012b; Martin and Sunley, 2013; Pike at al., 2010; Simmie and Martin, 2010)[14]. The evolutionary definition of 'resilience' has been developed in order to encourage a new spatial reading of the concept as well as to explore the regional long-term ability to recover and

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[14] Similarly to lock-in analysis, resilience theory often refers and is rooted in the study and examination of old industrial regions, which are considered paradigmatic to explore the challenges inherent to shocks and changes and the regional adaptive abilities (Hassink, 2010b; Pike et al., 2010; Simmie and Martin, 2010).

adapt to a shock[15]. The regional and local capability to deal with transformation at several scales and over time is, in fact, a relevant feature of the evolution of a territorial trajectory and an economic landscape.

In addition, mapping the degree and nature of adaptive ability could shed light on uneven local and regional development patterns and vulnerability (Martin and Sunley, 2013). A shock may in fact produce a structural change in the regional system by so affecting regional resilience, along with influencing (positively or negatively) its evolution pattern. A deeper understanding of the way territorial trajectory is affected, at least in part, by cyclic shocks and recoveries may contribute to explain the link between regional resilience (exposure), vulnerability and uneven development.

According to Simmie and Martin (2010), the notion of 'resilience', derived by "its strict Latin root, *resilire*, to leap back or to rebound, [...] refers to the ability of an entity or system to 'recover form and position elastically' following a disturbance or disruption of some kind".

At first, in order to apply this notion to the analysis of urban and regional spatial systems, two main definitions of resilience have been acknowledged within literature[16]: the first, *engineering* resilience, is meant as "the ability of a system to return to a pre-existing stable equilibrium state after a shock" (Boschma, 2014); the second, *ecological* resilience, is based on multiple equilibria and refers to the ability of a region to "change its structure and function in the face of an external shock, and move into a new equilibrium" (Boschma, 2014).

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[15] A shock is defined as a short-term "out of ordinary event" process, which can be exogenous or endogenous and can be manifested at different scales. It is often interrelated to and resulting from a longer, slow and incremental process of change and adaptation (Martin and Sunley, 2013; Pike et al., 2010). The application of the resilience framework to the analysis of both long-term/slow and short-term/shocks phenomena is a debated issue: while some scholars consider resilience as inherent to the whole economic systems' transformations over time, others limit its application to the impact of short and sudden events (shocks), referring only to adaptation/adaptability devices to explain slow burn processes.

[16] Originally, the concept of resilience has been mainly and largely applied to ecological science, in addition to several others disciplines.

The evolutionary turn in the resilience framework open to a third main reading, which, consistent with the EEG approach, rejects any kind of equilibrium in favour of a dynamic definition (Christopherson et al., 2010; Martin, 2012b; Martin and Sunley, 2013; Simmie and Martin, 2010) [17]: *evolutionary* resilience, described as an "ongoing process" (Simmie and Martin, 2010), expresses "the ability to adapt and reconfigure their industrial, technological and institutional structures in an economic system that is restless and evolving" (Boschma, 2014).

This evolutionary notion pays attention to the way a shock and change affect regional ability to react and, mutually, how this ability influences the region's reaction, revealing a dynamic and recursive nature (Martin and Sunley, 2013). Thus, the evolutionary definition enhances the mainstream concept, highlighting two main features: the regional ability to one, absorb a shock and then, to rethink and develop new growth paths.

This perspective allows to move forward from the *adaptation/adaptability* dyad proposed by Grabher (1993) in his aforementioned definition of lock-in[18]. In a EEG perspective, in fact, adaptation refers to "changes within preconceived paths, while adaptability is about developing new pathways" (Boschma, 2014). Resilience is defined therefore in terms of tension, at different levels and scales, between adaptation and adaptability, which intrinsically tend to hinder each other (Boschma, 2014; Pike et al., 2010). This consideration supports the idea of resilience as a multi-scale process inherent to regional complexity (Martin and Sunley, 2013; Simmie and Martin, 2010).

This perspective raises questions about the relation between resilience and path-dependence, in order to solve the adaptation/adaptability tension (Boschma, 2014; Pike et al., 2010; Simmie and Martin, 2010). In fact, the EEG approach deals with path-dependence both in terms of opportunity, latent in

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[17] Critiques on equilibrium thinking in resilience framework are raised also by Bristow, 2010; Christopherson et al., 2010; Hassink, 2010b; Hudson, 2010; Pike at al., 2010.

[18] Ref.: paragraph 1.1.1.

past and existing paths (path creation and renewal) and self-reinforcement (positive and negative lock-in). Therefore, history and past paths can be said to influence both adaptability (path-reorientation and generation) and adaptation (self-reinforcement of existing paths). Regional resilience is so affected by the co-evolution of a variety of path-dependence processes within a region, which has been defined as path-interdependence.

Path-interdependence is so a relevant feature of regional resilience, inasmuch as it shapes regional evolution. In this sense, as affirmed by Martin and Sunley (2012), evolutionary regional resilience goes beyond the "simple dichotomy between continuity (no change) and (complete) change", embracing both continuity (path-dependence) and change (path-creation).

Indeed, a path-interdependent process requires related variety between paths in order to positively promote knowledge spillover, diversification, as well as to generate regional branching. As described in the previous paragraph, variety *per se* is no guarantee of innovation and economic development (Frenken et al. 2007); in addition, variety *per se* is not even sufficient to support resilience and to satisfy both its requirements. In order to avoid a too high degree of relatedness (specialization) as well as un-relatedness (diversification), optimal degree of related (as source of adaptation and self-reinforcement) and unrelated variety (as source of adaptability and novelty) are required within a regional portfolio, in order to support resilience in both its commitments (Boschma, 2014; Pike, et al. 2010) [19].

Therefore, related variety can contribute to move forward from adaptation/adaptability duality, positively affecting resilience (Boschma, 2014). In their comparison between Cambridge and Swansea (UK) territorial systems' resilience and performances, Simmie and Martin (2010) reveal that an optimal level of exogenous and endogenous knowledge is also required to support regional adaptive ability.

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[19] Must be underlined that, according to the 'relatedness requirement' aforementioned, certain degree of absorptive capacity and related variety within each sector and regional branch is required.

Thus, resilience is strictly connected to knowledge spillover and innovative interactive learning processes between agents across several scales. Moreover, resilience depends on the nature of a network structure as well as on its degree of connectivity. Again, in fact, tension between adaptability (excess of fragmentation and openness) and adaptation (excess of density and control) at a network level could hinder regional resilience development. As affirmed by Boschma (2014), equilibrium within a network between loose (adaptability) and tight ties (adaptation) allows to go beyond this duality and to support resilience.

Regional adaptive ability is so supported at a network level by optimal level of (differentiated types of) proximity between agents and network relations, so as to avoid lock-in (Boschma, 2005; Pike et al., 2010).

Thus, regional resilience may be defined as a multi-dimensional process, which can be also influenced by the regional institutional structure: regional resilience can benefit from an enabling regional environment, thanks to a balance between cohesion (adaptation) and heterogeneity (adaptability) of intentions and needs among institutions at several levels, requiring an optimal and fair overlapping among agents' requirements (Boschma, 2014)[20].

Moreover, agents at several levels and scales can influence regional resilience standing on their ability to react and on response to a shock.[21] In particular, specific key agents can become relevant in enhancing resilience when they exercise a 'leading' role, acting as "gatekeepers" within networks, so to attract

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[20] Bristow (2010), Pike et al. (2010), Hassink (2010) and Hudson (2010) express several critiques to the (low) account for institution, politics and power in evolutionary resilience. The convergence between agents' interests and requirements depends on politics and power relations between different agents across several scales and at different levels. Following Pike et al. (2010) in their study on old industrial regions resilience, adaptation and adaptability narratives acquire political relevance in shaping recovery imaginaries and strategies. Policies, consensus and power relations at different levels so affect regional adaptive capacity (Hassink, 2010b; Pike et al., 2010). Moreover, according to Bristow (2010), changes can trigger the rise of alternative discourses. In this sense, this critique privileges the idea of regional resilience as improving territorial "development" over "growth". Thus, this shift can determine the sustainability and inclusiveness of resilience process, both in long and short terms, and consequently influence the sustainability of territorial trajectories.

[21] Due to the heterogeneity of agents within region, resilience is "the outcome of the discrete responses and adjustments of this heterogeneous economic agents and institutions". Each agent's response to shocks reveals to have, at least, some own degree of path dependence (Simmie and Martin, 2013).

and disseminate new knowledge within region, or as "intelligent institutional leaders", able to promote inclusive responses and remedies when facing change and shocks so as to support regional recovery (Boschma, 2014; Martin and Sunley, 2012; Pike at al., 2010).

Resilience framework proves territorial trajectory, its evolution and renewal to be highly context-specific. The way a region adapt and recover to transformation and change cannot thus be simplified through generalized 'winning schemes'. Rather, it requires a redesigned local and regional development framework capable of taking into account place-based peculiarities and differences.

In conclusion, the EEG framework provides relevant theoretical tools to explore in a deeper extent territorial trajectory evolution and disparities in regional performance, focusing on the interrelation between change, transformation and development pattern.

Territorial trajectories are shaped across space and over time by path-(inter)dependence processes at multiple level and scales, whose account for history and geography stresses the high context-specific nature of the territorial evolution. Path-interdependence is mutually interrelated and interdependent with the degree of related variety of a regional portfolio as well as to regional branching process, which are in turn rooted in knowledge spillover and interactive learning processes across different scales.

Territorial trajectories are so defined as multi-scale and multi-level configurations, which are able to affect and define regional evolution. This perspective uncovers the multi-dimensional nature of a region.

The way a region deals with and adapt to shock and change is depends on its resilience, which is itself defined by the degree of tension between regional adaptation and adaptability, and which requires an optimal level of variety, proximity, connectivity as well as agents fair involvement and interactions to be effective.

EEG framework sheds new light on local and regional development approach. The new perspective requires a deeper understanding of the current changes as well as of their impacts on spatial configurations and trans-territorial interrelations. An outline and contextualization of the current transition scenario is so required.

1.2 The transition scenario: the global reorganization of chains and networks

Since the early 2000s, the markets opening to emerging and developing countries as well as the improvements in ICT and mobility (of both knowledge and people) have been shaping the redefinition of the global industrial production systems, as well as their reorganization in cross-border features. Baldwin (2011) defines this "radical change in the nature of globalisation" as the *2nd unbundling*, which revealed from the mid-1980s to the late-1990s and whose dynamics are highly characterized by internationalization, offshore, ICT improvement and supply chain's centrality[22]. These elements impose to differently analyse the industrial production dynamics of the 21st century, compered to the ones of the 20th: if positioning in global supply chain emerges as a key element to development theory, industry can no more "be modelled as a black box linking national factors and technology to national output" (Baldwin, 2011). According to his analysis (2011), "the 2nd unbundling opened a new industrialisation path. Today, nations can industrialise by joining a supply chain – there is no need to build a supply chain. Indeed in some industries the concept of a one-nation supply chain has disappeared. No nation today produces all the parts and components necessary to make aircraft, cars, or electronics. Some nations are headquarter-economies, others are factory-economies, but no one has the whole value chain. This matters".

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[22] Baldwin (2011) identifies two main phases within globalization: steam and 1st unbundling, and ICT and 2nd unbundling process.

These phenomena have been analyzed according to several models and theories, as the *global value chains (GVC)* (Humphrey and Schmitz, 2002; Gereffi et al., 2005), the *global production networks (GPN)* (Henderson et al., 2002; Coe and Hess, 2011) and the *global innovation networks (GIN)* (Cooke, 2013), which aim at explaining the production networks, value creation and knowledge flow as globally fragmented and stretched across different countries and sectors.

The first approach -the *global value chains* (GVC) - describes the governance, upgrading and coordination mechanisms associated to value creation. This process is stretched across different firms along a specific and globally fragmented chain. Within this model a certain degree of vertical/linear (but flexible) hierarchy and power asymmetry is maintained[23].

The second perspective – the *global production networks* (GPN) - focuses on the complexity of trans-territorial production networks over sector-based distinctions, so as to embrace a broader, more inclusive and multi-dimensional approach to production, grasping dialectics in global/local relations[24].

Finally, rooted in innovation systems theories and focused mainly on ICT dynamism, technology and science-based industries, the third perspective - *global innovation networks* (GIN) - describes dynamic production networks and their upgrading as shaped and structured by global knowledge flows. This approach highlights the role of knowledge spillover, innovation improvement and capability building as the main factors in the construction of the economic advantage[25].

Notwithstanding their main focus on production systems and firm's dynamics,

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[23] Following the classification proposed by Humphrey and Schmitz (2002), Gereffi et al. (2005) have identified five typologies of value-chain governance: markets; modular value chains; relational value chains; captive value chains; hierarchy. This distinction depends on the different degrees of interrelation and power between firms, which are determined by the complexity of transactions, the codifiability of information and the capability of suppliers.

[24] The GPN framework is based on three concepts –value, power and embeddedness- and embraces different dimensions and agents–firms, sectors, networks and institutions (Henderson et al., 2002).

[25] Cooke (2013) examines the evolution of the ICT technological sub-system of hard disk drives (HDDs) in Singapore and its less-developed neighbours driven by the presence of US multinational corporations, analysing how innovation development would require a shift from a more stabilizing form of production organization, as the old-established HDDs GPN, to a more dynamic feature, as the emerging GIN in related ICT industries (as cloud computing).

these approaches lay the foundation to better understand the territorial impacts generated by the reorganization of the global networks and chains. Over the last decades, this phenomenon has been encouraging new forms of inter-firms and inter-localities multiple connections within the production and labor market systems, shaping global/local relations within territories in a way which cannot be ignored. A local production system, its dynamics and interconnections are key features of local and regional development, and are determinant to their own position and upgrading in the global chains. Furthermore, the fragmentation/stretching of the global production system brings to light the rising of new trans-territorial systems: such openness and interconnection may allow a territory to compete worldwide on the strength of its own unique and context-specific advantages, as well as to cooperate at global level with other and interrelated territories. Thus, change in the organizational and structural setting of a production system at both local and global level could be defined as one of the core features of the socio-economic paradigm's shift.

In addition to the related threats and power asymmetries characterizing this process (as firms relocations and uneven competitiveness), the evident global openness and dynamism of this phenomenon have contributed, in some forms, to question standard territorial hierarchies and distinctions. It has favored the appearance of new trans-territorial geographies of local/global connections and the activation, at least in part, of upgrading and opening processes in peripheral countries and localities, which are nowadays rising in the global scenario and questioning mainstream development models[26]. Additionally, the analysis of global chains and local/global links under the lens of value creation, networking and knowledge production and sharing (both their inherent rigidities and dynamisms in terms of upgrading and capabilities improvements), contributes to explore local and regional vulnerability by informing a deeper understanding of different territorial performances and uneven development geographies.

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[26] Upgrading is a core part of the GVC approach, even if it is analysed from a global point of view and in relation to the global chain requirements (Chiarvesio et al. 2002). Depending on the form of chain governance, Humphrey and Schmitz (2002) describe four types of upgrading: process, product, functional and inter-sectorial upgrading.

Therefore, following GVC, GPN and GIN approaches, local dimension is no longer sufficient to explain the evolution of local production systems. This awareness can contribute to re-approach local and regional development: in fact, GVC, GPN and GIN support the idea of local economic landscape and localities as an outcome of "overlapping footprints of similar chains and networks", wherein both local and non-local links coexist (Parrilli et al. 2013). In this perspective, local and regional positioning in specific global networks and chains acquires strategic relevance to local development, emphasizing the role of non-local interconnections and "functional links" built on local specificities and capabilities (Parrilli et al., 2004).

Following Parrilli et al. (2013), each of the three models informs local and regional development with strategic elements, whereon to focus in order to tackle the transformative dynamics of the local/global scenario with renewed forms: first, governance and value distribution, whereby influencing the local/regional positioning and upgrading; second, complexity in trans-territorial production networks and strategies, which are comprehensive of multiple levels and scales; third, knowledge flow and innovation, through which shaping networks and strategies. Nonetheless, as stress by Parrilli et al. (2013) in their comparative assessment of the three models, further integration between the several approaches is needed to achieve a more comprehensive "dynamic territorial perspective on regional development in the context of globalization". In particular, a deeper understanding of and account for geographical components and specificities of this phenomenon could inform relevant suggestions to new local and regional development perspectives.

An overlook on 'sustainable transition': embeddedness and multi-scalarity

Concerns for a spatial account of transition also rise in the critique on sustainable transition approaches carried out by Coenen and Truffer (2012; Truffer and Coenen, 2012; Coenen et al., 2012a)[27]. Sustainable transition theory

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[27] Their analyses focus on the Multi Level Perspective (MLP), in particular on the works carried out by Geels, and on the Technological Innovation Systems (TIS).

represents an additional view and way of tackle the paradigm change within literature. This alternative approach focuses on environmental and 'green' commitments, and will be just briefly outlined below.

In this perspective, transition is defined as "shifts or 'system innovations' between distinctive socio-technical configurations encompassing not only new technologies but also corresponding changes in markets, user practices, policy and cultural discourses as well as governing institutions" (Coenen et al., 2012a)[28]. In particular, sustainable transition refers to the shift toward a new pattern as effect of improved environmental performance based on eco-innovation, renewable resources, fossil fuel-free practices and way of living, economic prosperity and societal equity (Truffer et al., 2012).

Relevant considerations for the analysis of territorial trajectory emerge by the analysis of sustainable transition, which can be transposed and combined with alternative, and sometimes overlapping, aspects and suggestions by regional science framework, all advocating for a "multidimensional, dynamic and long term perspective" (Truffer et al., 2012).

In their reviews, Coenen and Truffer emphasise the importance of the multi-scale and multi-level nature of transition and advocate for a renewed geographical and spatial perspective, too loosely explored in the current sustainable transition literature[29]. In particular, *territorial embeddedness* and *multi-scalarity* are considered key factors to territorial transition pathways and evolution analysis, and to understand the spatial unevenness of these processes. These notions offer a "local node/global network" perspective, which takes into account "trans-local and trans-national network relations and institutional interdependencies" (Coenen et al., 2012a,b). On one side, territorial embeddedness describes the degree of interdependence between the socio-

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[28] Socio-technical systems are here defined as "semi-coherently interrelated sets of actors, networks institutions and technologies/artefacts" (Coenen et al., 2012). These systems can change "by destabilizing pressures from the societal context (landscape forces) or by rivalling upcoming socio-technical configurations (the so-called technological niches)" (Coenen and Truffer, 2012). These definitions refer to the Multi-Level Perspective approach developed by Geels.

[29] To this end, they add a socio-spatial evaluation of transition to the socio-technical.

economic behaviours and institutions and the social context, wherein they are inserted (Granovetter, 1985). It accounts for the particularities and contingencies of agents, inherent to the specific spatial contexts, wherein transition occurs. On the other hand, multi-scalarity focuses on "inter-localization" as socio-spatially constructed interrelations across different scales and levels, whereby a set of actors struggles for their goals within transition and exercises power no-hierarchically through networks, coupling local and non-local relationships (Coenen et al., 2012a).

A relational and spatial perspective of transition is so suggested as "an interdependent process between territorialized, local and trans-local networks within the context of (changing) multi-scalar, institutional structures" (Coenen et al., 2012a).

Apart from the differences in approaching transition, this brief review of sustainable transition can inform significant tools to explore the trans-territorial nature of this shift as well as its impact on local and regional development and policies: it emphasises the role of relations and agents (individuals, networks and institutions) in shaping territorial trajectories (power), and accounts for the nature of these interrelations (multi-scale) and their context-specificity (embeddedness).

1.2.1 Italian Industrial Districts facing transition

This paragraph introduces a brief review of the current Italian scenario. In particular, it explores the ongoing debate within regional science about the challenges posed by transition to the Italian Industrial Districts (IDs) (Cappellin et al., 2014; Chiarvesio et al., 2004, 2010; Corò and Micelli, 2007; Micelli and Rullani, 2011; Onetti and Zucchella, 2012; Rullani, 2006, 20013; Zucchella, 2006). Indeed the IDs still represent a paradigmatic territorial model within the academic debate, through which it explores and understands the *relation between the industrial and the territorial*: this additional focus aims to offer new

elements in order to explore the evolution of industry/territory interrelations within transition.

At the end of the last century, the advent of Post-Fordism signed the transition to a new socio-economic paradigm, characterized by flexibility: IDs and local scale (versus national scale) acquired new relevance in the framework of the new paradigm, signing the beginning of the 'rediscovery of territory' in its historic and cultural features[30]. Italian Industrial Districts, and especially Third Italy, are paradigmatic examples of this new development pattern, which generated new firms-network at local level as well as complex social systems (Chiarvesio et al. 2010). In this scenario, territory emerged as the main character and the cement of the industry system, capable to connect the production network-system to the local society, thanks to positive externalities and spatial proximity. In this phase, territory was perceived, and actually functioned, as the main supplier of strategic and competitive resources.

At the beginning of the new millennium, the rise of global knowledge-based economy (ICT improvements) and global chains reorganization (global markets opening) have put into question Post-Fordist and IDs patterns, ascribing a crucial role to single firms within districts as well as redefining the nature of manufacture production (Bonomi, 2013a; Chiarvesio et al. 2010; Trigilia, 2005; Rullani, 2013, 2014a, 2014b). As explained in the previous paragraphs, the rising of open innovative learning processes and multi-scale and multi-level production networks have been jeopardizing the advantages of local production systems derived by territorial location *per se*.

This transformation represents both an opportunity and a threat to local and regional development, entailing the co-evolution of IDs dynamics and, once again, 'territory' redefinition. According to this shift, in fact, territory ceases to

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[30] Traditionally, territory has been represented as the proximity network, through which local society was shaped due to shared and context-specific know-how and immobile local factors. After the parenthesis of the modern era and the first industrialization of the nineteenth century, during which industrial machines and mercantile capitalism have overlooked local boundaries and have treated territory as a 'neutral box', the advent of Fordism in the twentieth century has turned to focus on local specificities in terms of organizational setting and firms identity: in this perspective, territory and local society were shaped by firms needs, becoming "firm specific" (Rullani, 2013, 2014b).

be a self-sufficient and self-defined entity to become part of a global trans-territorial system. In analyzing the current transformation of IDs and territorial systems, several scholars are proposing differing patterns and definitions, which aim to outline possible future scenarios. Openness and internationalization, context-specific knowledge and dynamic territory, cognitive improvement and innovation, multi-scale and multi-level assemblage rise as common denominators within regional studies literature: observing the current evolution of IDs, Chiaravesio et al. (2010) and Corò and Micelli (2007) describe firms within IDs as "active nodes" and "key interface" inside what they call an "open network" emerging model, in the framework of new strategic *'idee motrici'*[31]; in his description of "in-transition territories", Rullani (2013, 2014b) deals with IDs transformation as "nodes" inserted in *"filiere trans-territoriali"*[32]; in her analysis of IDs and firms decline and renewal, Zucchella (2006) embraces the ideas of "re-embeddedness" and "multiple-embeddedness", to explain the possibility that "districts relate themselves to the global space originating similar local systems abroad, or establishing embedded ties with existing clusters, each one representing both a local network and a node of a global network"[33].

At the same time, the debate in economic and regional science, carried out by Italian scholars on possible IDs trajectories in transition, discloses a quite fragile and uncertain panorama: on one side, it reveals a widespread inadequacy among local production systems in terms of organizational, institutional and cognitive infrastructure apt to grasp transition; on the other, it does not lack of

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[31] Chiaravesio et al. (2010) reveal the appearance of an "open network" model, wherein firm in IDs "represents a key interface between local production systems and global economy and plays the role of active node of broader global value chains at a territorial level."

[32] According to Rullani (2013), the functional specialization of each local segment stands on its insertion in particular *"filiere trans-territoriali"*. Territory becomes a "*snodo o ancoraggio specializzato*" of specific trans-territorial chains (Rullani, 2013).

[33] In her analysis on IDs evolution Zucchella (2006) proposes "three main alternative outcomes, depending on context-specific issues: disembeddedness, re-embeddedness, and multiple embeddedness". Re-embeddedness is defined as "a new system, characterized by either a change in the structure of local embedded ties and/or by a novel mix of local and non-local embedded ties" while multiple-embeddedness is considered "a special outcome of re-embedding into foreign contexts".

doses of optimism and potential (Cappellin et al., 2014; Chiarvesio et al., 2004, 2010; Corò and Micelli, 2007; Micelli and Rullani, 2011; Rullani, 2013, 2014b; Zucchella, 2006). The *Made in Italy* expertise, characterized by high product innovation, is nowadays dramatically struggling or declining under the effect of transition, accrued by cyclical national and global economic and institutional crises. The Italian institutional and economic fragility, the lack of strong industrial and research policies and investments, the infrastructural and ICT deficiencies, the impacts of the adoption of Euro and the global open markets on national competitiveness have all negatively influenced and hindered the development of local production systems in the last decades, outlining a gap in Italian competitive advantages (Corò and Micelli, 2007; Micelli and Rullani, 2011). In addition, the endogenous excess of closeness and self-reference, the lack of innovation and openness in many IDs and local territorial systems have hampered advances and improvements in the industrial system.

According to these weaknesses, a new perspective on Italian industry sector and IDs is required in order to generate new innovative paths, as well as to re-position in the global emerging scenario. IDs should improve new knowledge-intensive strategies, besides promoting high value-added systems and opening "connective platforms" in order to interface and interact with global chains (Rullani, 2014b): the Italian industry pattern needs to shift from incremental innovation and 'local atmosphere' policies (inherent to enclosed mainstream production system), to new system innovation policies, aiming to build competitiveness on unique knowledge assets, ICT improvements, innovation and openness (Cappellin et al., 2014; Chiarvesio et al., 2010; Corò and Micelli, 2007; Micelli and Rullani, 2011; Rullani, 2006, 2013, 2014b; Zucchella, 2006). Local and regional development policies should valorize, address and transfer place-based know-how, capabilities and endowments into innovative projects and trans-territorial chains. Intermediate institutions and strategic institutional planning tools are necessary features to this transformation (Corò and Micelli, 2007).

In their works on the development of new and innovative *Made in Italy*

expertise, Micelli and Rullani (2011; also Rullani, 2014b) stress the need for fresh and original strategic policies and visions, called "*idee motrici*", through which develop new innovative products and services aimed to promote local specificities and advantages through sense-making and use innovation. These ideas, meant as visionary and context-specific narratives and interpretations, should be the framework of new industrial production settings and innovation platforms, in turn able to increment and multiply value through global chains. To achieve these goals, transformation needs to be supported by innovative local and development strategies[34].

The exemplary experiences of "*leading firms* and *pioneers*", which are successfully "surfing" transition due to their strategic position in global chains and innovative processes, are considered by scholars a relevant and positive element to the development of new IDs trajectory, encouraging innovation rather than stability (Rullani, 2013; 2014b). Until today, these outstanding and path-breaking subjects have been too often treated as unnoticed signals and detached entities, whereas they could represent key strategic opportunities to local territorial development in the new scenario (Boschma and Martin, 2010b; Chiarvesio et al., 2010; Corò and Micelli, 2007; Micelli and Rullani, 2011; Rullani, 2014b; Zucchella, 2006). According to scholars analysis, in fact, the Italian system is not completely locked in and inertial in respect to transition, but it can count on a certain degree of openness in IDs commercial network and supply chains (Chiarvesio et al. 2010) as well as on a (still too limited) number of innovative and dynamic firms and realities. These dynamism can be optimistically interpreted as positive 'weak signals' of change and should act as triggers and gateways to "*follower*" firms, opening in turn local systems to new global knowledge circuits (Cappellin at al., 2014; Chiarvesio et al. 2010).

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[34] It is suggested that the *Smart Specialization Strategy* promoted by the 2014-2020 EU Structural Funds Policy could respond to this requirement and could represent an opportunity to improve innovative local and regional development policy (Forey et al., 2009; Forey et al. 2012). This approach aims to promote innovation based on the discovery, differentiation and valorisation of place-based and unique capabilities through inclusive governance processes. It aims to develop innovative economic, political and social strategies and trajectories at both local and regional level to compete/cooperate at trans-territorial levels, drive the transition and, possibly, overcome the crisis (Forey et al., 2009; Forey et al. 2012).

1.3 Internationalization, knowledge and proximity: three concepts at the base of transition

The reorganization of global chains and the rise of multi-scale and multi-level territorial configurations, as main features of the transition of the socio-economic paradigm and the new trans-territorial geography, may be explained by the analysis of the evolution of three key interrelated crucial issues: internationalization, proximity and knowledge.

1.3.1 The evolution of the internationalization forms

In the last decades, *internationalization* has been acquiring centrality in the debate about transition: it represents one of the key features and driver of this phenomenon along with globalization, which, since the end of the last century, have accelerated global processes of interrelations and interdependences[35]. In fact, the strengthening of globalization over the '80s -together with its effects on markets and knowledge circuit [36] - has started challenging the mainstream ideas of markets and internationalization: this shift has been demanding local and regional policies to question classical internationalization mechanisms and to recognize the rising of new forms of openness, able to support the new trans-territorial configurations and the 'local/regional' emphasis emerging from transition (Corò, 2013; Onetti et al., 2012; Rullani, 2006, 2014a). However, a deep assessment and implementation of this perspective as well as the evaluation of its impacts on local and regional development are often underestimated (and "*invisible*") in literature as in practice, lacking of qualitative and quantitative monitoring tools and criteria (Bellini and Bramanti, 2008; Rullani, 2006).

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[35] While internationalization refers to the trans-national geographical organization of economic activities, globalization focuses on the internationally functional integration and coordination (Gereffi et al., 2005).

[36] For example, the diffusion within industry of outsourcing and offshoring, the value dematerialization within chains and the advance in knowledge codification.

Over the current transitional scenario, in fact, a new form of internationalization emerges. A cognitive phenomenon shaped by local/global knowledge flows, network relations and ICT improvements is rising in addition to mainstream forms of internationalization: the *allocative model*, rooted in the mercantile or market economy of the nineteenth century, and the *hierarchical model*, based on the multinational and transnational corporations (MNC and TNC) structure and organization (Bellini and Bramanti, 2008; Rullani, 2006)[37].

Indeed, the reorganization of the production processes, shaped by trans-territorial configurations (both multi-level and multi-scale), imposes to shift the focus of competitiveness from sector-driven to functional specialization (Corò, 2013). Allocative and hierarchical models and mindsets alone could not explain this change of perspective, opening to a third, new conception of internationalization, that is the *cognitive internationalization* (Bellini and Bramanti, 2008; Rullani, 2006). It may be defined as the process of knowledge creation and spillover as well as contamination and innovation at global level, which stretches to trans-territorial *filiere produttive* and networks, rather then be restricted to firms and nations. Multiplicative advantage and incremental learning are the main features of cognitive internationalization. It combines and layers different knowledge bases through creation and specialization processes on a local level, and dissemination and exchange on a global level, in a delicate equilibrium between embeddedness and mobility (Rullani, 2006; Bellini and Bramanti, 2008; Onetti et al., 2012). In this perspective, local/global knowledge circuits contribute to shape the international division of labor and production.

Therefore, the rise of dynamic and trans-territorial spatial system and local/global interrelations moves forward from the obsolescent idea of bounded and enclosed spaces, besides requiring new understanding of territorial openness and interrelations, and encouraging new governance models. In this perspective, internationalization is seen as "a *means* through which new skills

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[37] The former constitutes the base of the neoclassical approach to international economics and focuses on the international trade and the allocation of the assets (import/export); the latter is rooted in the fordist paradigm, focusing on the trans-national organization of the production process of business enterprises, especially through foreign direct investments (FDI).

and new competitiveness can be developed or defined" at both local and regional level (Bellini and Bramanti, 2008)[38], defining new strategic axes and tools to local and regional development: creativity (product/process innovation), access (creation/absorption) and multiplication (exchange/sharing) knowledge assets become strategic factors for the local and regional positioning in the global scenario (Rullani, 2006), while innovation and openness rise as crucial drivers for development policies.

Under the pressure of globalization and internationalization, in fact, the dynamic nature of locational cooperation/competition in order to attract and retain value-added functions has challenged the mainstream idea of territorial competitive advantage, both local and regional, enhancing the relevance of place-specificities and immaterial assets (as territorial know-how, skills, competencies, relational networks and local contexts, especially the institutional one). According to this view, territorial openness emerges as a progressive, changing evolutionary process.

In their analysis on international territorial relations, Bellini and Bramanti (2008; Bellini et al., 2008b) have defined this renewed approach to territorial openness as a shift from "policy of internationalization" to the "internationalization of policies", embracing a more inclusive and sustainable approach, which accounts for socio-cultural, economic and institutional dimensions[39].

In conclusion, the rise of cognitive internationalization can be considered as a key concept to explain transition, through which new trans-territorial configurations are drawn and strengthened, and local and regional scales emphasized. It is characterized by a multi-scale, multi-level and multi-

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[38] Emphasis added.

[39] In their work, Bellini and Bramanti (2008; and Bellini et al. 2008b) have identified three phases in this evolutionary process: exploration, consolidation and integration. In their interpretative framework of internationalization, they recognize economic, socio-cultural and institutional assets as the starting point for internalization, which can be promoted through three types of policies: protection, attraction and gate. They also define key factors able to influence internationalization processes: geographic, political and economic factors and social capital.

dimensional nature. This new form of internationalization is based on the evolution of learning and knowledge dynamics and their relevance in shaping development patterns. So, a deeper exploration of these cognitive dynamisms is required, in order to better understand these phenomena

1.3.2 Knowledge shaping trans-territorial relations

The rising concern about knowledge -as main resource- and learning -as key process- in local and regional development is one of the central features of the current paradigm transition, challenging mainstream conceptions of development and promoting new approaches toward territorial policy at various scales. In this scenario, regions and localities have been put forward as strategic dimensions in economic and innovation analysis and policy, emphasizing the role of territory and place-specificities in multi-location innovative processes, and recognizing the necessity of dynamic knowledge bases and competencies to create and maintain territorial advantages.

The debate about learning and space is rooted in the territorial economic approaches of the 80s (as new industrial districts and clusters) and has gone one step further in the 90s, when concepts as *learning region* and *Regional Innovation System (RIS)* acquired relevance in economic geography and regional science in order to explain the transition from Post-Fordism to the knowledge economy paradigm (Asheim, 1999, 2012; Boschma, 1999; Crevoisier et al., 2009)[40].

In the last two decades, the advances in ICT, the markets opening and chains restructuring, along with improvements and costs reductions in digitalization and transport have all fostered the increasing global mobility of knowledge,

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[40] The learning region is defined as "a region characterized by innovative activity based on localized, interactive learning, and cooperation promoted by organizational innovations in order to exploit learning-based competitiveness", opening to the relevance of territory and social capital in economic activities. A broader definition of RIS includes "the wider setting of organizations and institutions affecting and supporting learning and innovation in a region with an explicit focus on competence building and organizational innovations" (Asheim, 2012).

capital and individuals over distance, drawing new multi-faceted geographies, beyond mainstream (regional) and binary conceptions (local/global, local/non-local) of spatial proximity. The shift from knowledge economy 1.0 to knowledge economy 2.0 occurred, as affirmed by Rutten and Boekema (2012).

While cognitive circuits are universally recognized as key components in economic dynamics, new breakthroughs rise in the current 2.0 scenario: the relevance of knowledge as a strategic resource, its multiplying potential, the evolution of its complexity[41], its multi-scale and multi-level interdependency, its high codificability and translation in production processes (both manufacture and services) and the higher emphasis on socio-cultural factors as main elements in its definition (Asheim et al., 2011; Boschma, 1999; Crevoisier et al., 2009; Hudson, 2011b, Rullani, 2008).

The new idea of knowledge, learning and innovation move forward from the mainstream and linear definition of R&D, so as to expand a broader and more inclusive definition of knowledge bases over the scientific ones. It goes past high/low tech distinctions in order to value the innovative potential of a wider set of sectors and branches (Asheim, 2012; Hudson, 2011b). Following Bathelt et al. (2004), "innovation, knowledge creation and learning are all best understood if seen as the result of interactive processes where actors possessing different types of knowledge and competencies come together and exchange information with the aim to solve some – technical, organizational, commercial or intellectual – problems."

In knowledge economy literature, cognitive circuits are commonly outlined as the combination of *codified*, "scientific or engineering knowledge", and *tacit*, "embodied in skilled personal routines or technical practices", knowledge (Asheim, 1999). The effectiveness of mainstream and old-fashioned distinctions codified/global versus tacit/local has been questioned over the last decades. Indeed, these dualities could lead to misinterpret the actual innovative and interactive nature of learning processes, which are characterized by a dynamic and mutual interplay of both local/global interlinks and tacit/codified

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[41] It implies the rise of its variety, variability and indeterminacy (Rullani, 2008).

knowledge, and meant as a process of social interaction among agents within social contexts at different scales (Rutten and Boekema, 2012).

In their alternative analysis of clusters knowledge dynamics, Bathelet et al. (2004) describe localized knowledge processes and global flows dynamics as the idea of mutual reinforcing of "local buzz and global pipelines", where local buzz "refers to the information and communication ecology created by face-to-face contacts, co-presence and co-location of people and firms within the same industry and place or region" and global pipelines are defined as "extra-local sources of knowledge", whose flows require planning, selection and establishment (Bathelet et al., 2004).

Actually, these dualisms should be further transcended in favor of more integrated conceptions of the territorial paradigm, based on multi-location networks and multi-scalar processes: combinatorial dynamics help to understand local specification as "the result of multi-location milieus that achieve specificity together, within the context of globalization" (Crevoisier et al. 2009). Innovation, in fact, should be intended today, at least in some strategic parts, as a territorialized dynamism and combination of localized learning processes and 'sticky' codified knowledge, rather than a black box or a placeless dynamic, as often misled by a slippery and ubiquitous conception of globalization (Asheim, 1999, 2012).[42]

An alternative conceptualization of *differentiated knowledge bases* has been developed by Asheim et. al (2005, 2011) in response to these limitations. Indeed, its threefold original distinction represents a step beyond mainstream dichotomies:

- the *synthetic* knowledge base "refers to economic activities, where innovation takes place mainly through the application or novel combinations of existing knowledge";

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[42] In a first attempt to overcome the tacit/codify strict dichotomy, Asheim (1999) recognizes the co-existence of both tacit and codified knowledge at the base of localized interactive learning processes, wherein contextual knowledge is also composed by "sticky" codified knowledge. He identifies it as "disembodied" knowledge, defined as "the result of positive externalities of the innovation process, and generally based on a high level of individual skill and experience, collective technical culture and a well developed institutional framework, which are highly immobile in geographical terms" (Asheim, 1999).

- the *analytic* base "refers to economic activities where scientific knowledge based on formal models and codification is highly important";

- the *symbolic* base is "related to the creation of meaning and desire as well as aesthetic attributes of products, producing designs, images and symbols, and to the economic use of such forms of cultural artefacts" (Asheim et al., 2011).

According to Asheim (2012), this approach responds to the higher learning complexity and takes into account "the rationale of knowledge creation, the way knowledge is developed and used, the criteria for successful outcomes, and the strategies of turning knowledge into innovation to promote competitiveness, as well as the interplay between actors in the processes of creating, transmitting and absorbing knowledge". Different bases can coexist within a process, standing on the characteristics of the industry and the activity involved: in fact, this approach focuses on the nature of "the specific (or critical) knowledge input on which the innovation activity is based", outlining two modes of innovation, radical (new creations) or incremental (new re-combinations resulting from learning by interacting, doing and using) (Asheim et al., 2011). Moreover, 'differentiated knowledge bases' framework includes a broader and differentiated sensitivity to geographical proximity and spatial implications, which can vary within a learning process, standing on "the different mixes of tacit and codified knowledge, codification possibilities and limits, qualifications and skills required by organizations and institutions" typical of each base, "as well as specific innovation challenges and pressures" (Asheim, 2012). While analytic base may be apter to radical innovation and stretched interactions, characterized by the predominance of codified knowledge, synthetic and symbolic bases may open to incremental innovation and co-localized relations, characterized by the predominance of tacit knowledge.

A dynamic, relational and nonlinear approach to learning and innovation is promoted by this new interpretative view, and defined as "an interactive learning process, which is socially and territorially embedded and culturally and institutionally contextualized" (Asheim and Coenen, 2005). Innovation has both a cumulative character, determined by history and evolutionary trajectories (Cappellin, 2010) and a combinatorial nature, due to its dynamism and variety (Crevoisier et al. 2009). According to this, social capital and institutional context -and so trust and norms, agents and their relations- become pivotal issues to interactions and innovation, as well as territorialized endowments and provisions of know-how and knowledge infrastructures, highlighting the socio-cultural dimension of economic development and going beyond the idea of bounded learning spaces (Boschma, 1999; Crevoisier et al. 2009; Rutten and Boekema, 2012).

Openness, meant as the exploration and exploitation of new knowledge bases- is, in fact, a new and central feature of learning process and territorial competitiveness, as well as a driver to innovation (Asheim, 2012; Nooteboom et al., 2007)[43]. A new understanding of knowledge base within the paradigm transition requires a shift from a territory and firm-bounded idea of knowledge circuits typical the 80s and the 90s paradigm, to the definition of new form of exchange, integration and articulation of internal/external knowledge across knowledge networks globally stretched. This change of perspective open to go past mainstream sector-driven definition of cognitive process, besides expanding to trans-territorial cognitive exchange and spillover under the criteria of *branching* and *related variety* (Asheim et al., 2011; Boschma, and Frenken, 2006; 2009).

Defining the multi-location idea of *Territorial Knowledge Dynamics (TKD)*, Crevoisier et al. (2009) develop the idea of learning processes around the concepts of *mobility*, defined as knowledge "movement within space" toward a

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[43] As defined by Nooteboom et al. (2007) "exploitation is concerned with the refinement and extension of existing technologies, whereas exploration is the experimentation with new alternatives."

new context, and *anchoring*, defined as "the way in which knowledge interacts with its new context"[44]. This twofold interplay varies, according to the local capacity of interacting, mobilizing and anchoring knowledge, and advocates territory and firm for long-term visionary and strategic capabilities.

Opening and recombining context-specificities to external knowledge flows, in fact, require territories to have an adequate *absorptive capacity*[45], in order to be efficient (so to draw new innovative trajectories, to promote successful local and regional development and to create and exploit unique competencies) as well as an optimal equilibrium and interplay between endogenous and exogenous resources (Nooteboom et al., 2007). Therefore, innovation process implies an extension of the pool of agents involved. To be effective and generate innovation, interrelations demand what Nooteboom et al. (2007) define the *optimal cognitive distance* between agents in terms of knowledge bases and organizational forms[46]. Thus, the nature of the agents' interactions as well as regional and local capabilities turns out to be a strategic feature to core territorial positioning and networking. In order to make dynamic knowledge circulate in a productive manner as well as generate and multiply value, the open flexible and horizontal organizational setting of network, meant as localized nodes and multi-scalar interrelations and ties, is required. In addition, so as to be efficient, the multi-scale and multi-level nature of knowledge demands an appropriate inclusive institutional setting (as the multi-level governance) capable to manage a multiplicity of actors and interdependences as well as guaranteeing both flexibility and control. Interactive learning, in fact, move forward from mainstream competitive mindsets to support new complementary and cooperation models as well as connectivity and interactive

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[44] They propose the multi-location approach of TKD as alternative to the Territorial Innovation Models (TIM) in order to exploree the shift of the pattern toward a knowledge-based economy.

[45] *Absorptive capacity* is defined as the dynamic capability to "absorb, understand and exploit external knowledge" (Ter Wal and Boschma, 2011).

[46] Applied to firms and resources heterogeneity, "cognitive distance" is considered proportional to novelty value and inversely proportional to absorptive capacity. Following Nooteboom (2007) "innovation performance is a parabolic, inverted-U shaped function of technological cognitive distance between alliance partners". He also affirms "in exploration, there is a stronger positive effect of cognitive distance on a firm innovation performance than in exploitation".

processes (Cappellin, 2010). In such a dynamic scenario, core positioning and network density rise as strategic issues, encouraging an equilibrium between strong and weak ties: "the strength of weak ties", as described by Granovetter (1973) in his network analysis, is a central feature of flexible structures, pivotal to avoid knowledge redundancies as well as to "bridge" different systems (individuals, groups, societies). It allows fostering both core and peripheral interrelations in new and innovative knowledge flows[47].

The dynamic idea of knowledge and cognitive circuits shaping trans-territorial configuration is challenging the classic idea of "spatial (regional) proximity per se" (Hassink and Klaerding, 2012), besides supporting a new broader definition of interactive learning process and 'spatial distance' in local and regional development. This shift therefore requires a new correspondent dynamic definition of 'proximity' expressed in evolutionary terms.

1.3.3 Redefining 'proximity'

The ongoing changes in the socio-economic paradigm, the restructuring of the global chains as well as the knowledge dynamic setting, which shapes new trans-territorial patterns, impose to carry out a new analysis of the relation between space and learning. In the previous paragraphs a relational and dynamic definition of innovation was offered, which goes past the mainstream spatial definition of knowledge flows, typical of the last century paradigms. Indeed, the learning process underlying innovation may be defined as a broader process of social interaction, focused on agents and their interrelations (Rutten and Boekema, 2012)[48]. According the current global scenario, this perspective requires an additional shift in the spatial definition of learning process, allowing

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[47] The strength of a tie is defined as "a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding) and the reciprocal services which characterize the tie" (Granovetter, 1973).

[48] Agents are intended here as different levels of aggregation: individuals, firms and networks of firms, institutions/organizations and territories.

moving from strictly bounded learning spaces (as region) to more complex "socio-spatial contexts" (Rutten and Boekema, 2012), described by Hassink and Klaerding as a process of "learning in space" (2012)[49]. As previously explored, to unbind the cognitive process does not mean to dismiss or deny the role of geographical proximity in the development of localized learning processes. On the contrary, it allows to broad the idea of space/learning interrelation, besides emphasizing the central role played by complex relational settings in the development of the new paradigm. Following Boschma (2005) and his critique to mainstream approach to learning process and innovation, geographic proximity alone is no longer sufficient or necessary to explain the dynamism and complexity of the current phenomenon. This perspective may lead to assert that geographic proximity is not even sufficient to encourage new forms of local and regional development (while it is, obviously, necessary). Indeed, *proximity* should be broadly intended as a relational and organizational feature "based on similarities and a shared understanding" (Mattes, 2012) among agents, as well as a strategic feature to "reduce uncertainty and solve the problem of coordination, and, thus, facilitate interactive learning and innovation" (Boschma, 2005). Coherently, innovation should be intended as strictly related to the "ability to manage heterogeneous cooperation" as well as to the capability to develop new and multifaceted relational setting, which could permit heterogeneous actor to innovate (Mattes, 2012).

The shift in knowledge and proximity approach well responds to and clarifies the new multi-scale and multi-level paradigm configuration, which is emerging through transition.

The advances made in the 90s by the French School of Proximity and Dynamics, and the distinction between *geographical* –spatial separation and distance- and *organizational* proximity -coordination between actors-, represent one of the

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[49] Rutten and Boekema (2012) describe "socio-spatial context" as developed by "spatially sticky individuals interacting with one another" as well as by their own location specificity, and as a system able to attract external individuals connected to it. The specific overlap of different social contexts generates the place value inasmuch as "spatially sticky individuals are part of multiple social contexts, both professional and social, in their home regions."
Hassink and Klaerding (2012) define "learning in space" as the "knowledge exchange processes between individuals and/or organizations at several spatial scales affected by cultural and relational factors".

pioneering contributions to the proximity debate, whereby a more complex conception of space is taken into account (in its economic and social dimensions) and localized interactive learning process is explained beyond the rigid dyad tacit/codified knowledge (Rallet and Torre, 1999; Torre and Gilly, 2000).

In his critical review, Boschma (2005) proposes a significant evolution of the concept, rooted in Evolutionary Economic Geography, suggesting the fivefold "dynamic proximity framework":

- *cognitive* proximity is defined by the degree of shared cognitive base, necessary to communicate, understand, absorb and process new knowledge successfully[50];

- *organizational* proximity is defined as "the extent to which relations are shared" within and between organizations, as well as being related to the capability to exercise control over uncertainty and opportunism[51];

- *institutional* proximity expresses the degree of shareability of both formal (law and norms) and informal (values and habits) institutions at a macro level;

- *social* proximity is determined by the degree of embeddedness, which defines trust-based social relations between agents at a micro-level[52];

- *geographical* proximity is meant as the spatial or physical distance between agents.

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[50] This concept is strictly connected to the ideas of *absorptive capacity* and *cognitive distance* (Nooteboom et al., 2007).

[51] This concept can be referred to "the strength of weak ties" developed by Granovetter (1973).

[52] This concept is rooted in the *embeddedness* idea defined by Granovetter (1985).

Geographical and social proximity are not prerequisites for the development of interactive learning processes, but could be rather defined as "enablers" and "facilitators" to the implementation of other forms of proximity (Boschma, 2005; Mattes, 2012). Due to improvements in ICT and modes of transport, in the last decades the nature and significance of geographical proximity in innovation processes has been questioned in favor of new forms of *temporary geographical* proximity, which is progressively incrementing its relevance in shaping interactions (Torre and Rallet, 2005; Torre, 2008). Spatial proximity in knowledge transfer is not necessarily synonymous of permanent co-location or localization: nowadays, in fact, time (and simultaneity) and mobility may be considered as key features of innovation, which enable temporary face-to-face contacts as well as new and alternative forms of interactions (as travelling or computer-mediated communication - CMC). It allows to create the conditions for new learning opportunities and to facilitate the implementation of other forms of proximity (Bathelet, 2011; Boschma, 2005; Mattes, 2012).

Interactive learning process and knowledge network can therefore count on different types of proximity. An optimal balance among each type of proximity is required within a network in order to successfully co-evolve as well as to generate and support innovation.

Indeed, according to the nature of the network ties, an optimal distance among each type of proximity is also required, in order to avoid rigid, inertial and *locked-in* patterns, which could hamper innovative processes. Boschma and Frenken (2010) identify this ambivalence as "the proximity paradox", revealing that proximity alone is not a guarantee for innovation. Moreover, according to the EEG approach to network and proximity, they identify a dynamic and recursive correlation as well as a co-evolution pattern between proximity and inter-firm networks. As worded by Balland et al., "in the short run, proximity creates knowledge networks, in the long run, knowledge networks create proximity" (2014). They also suggest that different types of proximity may influence in differing ways knowledge networking and, consequentially, that the spatial evolution of networks may affect the balance among the different types

of proximity: the effectiveness of a network relation could so depend on the development and adjustment of optimal levels of both distance and proximity balance (Boschma and Frenken, 2010) [53].

In her analysis of innovative learning process, Mattes (2012) approaches the "proximity paradox" in terms of balance between "homogeneity", inherent to proximity, and "heterogeneity", inherent to knowledge. The increasing complexity and variety of knowledge bases and cognitive exchange impose to develop a correspondent "multifaceted perspective" on proximity, apt to "shift this problem from defining appropriate level of proximity to arranging the dimensions of proximity". To this aim, Mattes links the 'proximity framework' developed by Boschma (2005) with the 'differentiated knowledge bases' described by Asheim et al. (2005, 2011), besides proposing a new articulated approach to innovative learning process, through which analyze the progressive process of adaptation, trade-off and co-evolution between different types of proximity and knowledge bases[54].

Able to overcome rigid geographical and spatial specifications, these alternative broader approaches to interactions and proximity express the need, inherent to transition, to redefine the idea of 'boundary' as dynamic, relational and cognitive features. Analyzing the appearance of a new European geography, based on macro-regions and inter-regional cooperation, Bellini and Hilpert (2013) considerations on the "'variable geography' of the relational assets of the territories" and on the central relational character of current trans-regional networking and cooperation, lead the authors to propose the "virtualization hypothesis", which describes a certain type of cooperation as rooted on "virtual

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[53] This dynamic approach associates the co-evolution of each type of proximity to a knowledge process: cognitive/learning; social/decoupling; institutional/institutionalization; organizational/integration; geographical/agglomeration (Balland et al., 2014).

[54] In terms of knowledge transfer, Mattes (2012) refers to *synthetic* knowledge bases as reinforced by *cognitive* and *institutional* proximity; *analytical* knowledge bases by *cognitive* and *organizational* proximity; *symbolic* knowledge bases by *institutional* and *social* proximity.

proximity", driven by strategic complementarity and analogy between both strong and vulnerable regions [55].

In conclusion, a new perspective on internationalization, knowledge and proximity brings to light the central role played by agents, relations and cognitive interactions in the definition of the ongoing transition as well as the necessity to move forward from mainstream and bounded idea of space and spatial interrelations. This approach allows unveiling new trans-territorial geography defined by new forms of interrelation between individuals, firms and territory. These emerging ideas of territory and learning go past classic bounded spatial definitions, besides opening to the acknowledgment of unique and dynamic territorialized processes determined by the layering and intersections of multi-level and multi-scale agents and actions. This view does not reject the relevance of 'region' in learning and innovation processes. Rather, region might to be envisioned as a key level of analysis "due to the social and institutional embeddedness of actors creating territorialized learning processes" (Hassink and Klaerding, 2012), even if it ceases to be a self-sufficient and exclusive entity in development policies. Context-specificities, local resources and capabilities, combined to openness and connectivity, become relevant elements in a renewed approach to local and regional development, able to tackle "the capacity of local spaces to become inserted within multi-location and multi-scalar dynamics" (Crevoisier et al., 2009).

The analysis of these new dynamic settings may provide therefore relevant observations and assessments in order to grasp transition in new and innovative way. It encourages a better understanding of what is going on with and within territory as well as of the main features of the new socio-economic paradigm.

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[55] They identify four spaces whereby "re-assemble regions internationally" and produce relational assets apt to regional development strategies: economic, innovation, political and cultural, and identity spaces.

1.4 Defining (social) space, place and identity

EEG framework highlights the progressive and path-(inter)dependent nature of territorial evolution, as supported by its conceptual foundation 'history matters'. Indeed, the transformative pressure generated by transition is bringing to light 'geography' and 'history' as central feature of the evolution of territorial trajectory within the debate in regional studies and regional economic development. Moreover, it is unveiling the dynamic, progressive and relational character of territory.

Indeed, after having analysed transition through a regional science and economic development perspective, this paragraph explores the relational definition of some further key notions -space, place and identity- as carried out by several scholars in cultural geography.

This 'additional' and 'integrative' perspective aims to provide an original contribution to the analysis and understanding of territorial transition as well as new conceptual tools for an alternative and relational reading of territorial evolution.

Indeed, the relational definition of space and place inferred by cultural geography may encourage a *deeper comprehension of 'territory' and 'identity' besides enlightening their power, political and strategic relevance to a renewed approach to territorial development patterns*: *it informs key conceptual and theoretical tools to explore the appearance, interaction and evolution of territorial paths and the role of agents and intentionality* (Figure 1.3)*.*

Therefore, this review is relevant for four main reasons:

- it offers a deeper analysis of space production and practice, focused on *relation* and *interaction*, which is pivotal to define transition, territorial trajectory and evolution;

- it sheds new light on the analyse of *trans-territorial* dynamics as shaped by *multi-dimensional (local/global)* cognitive processes;

- it encourages a deeper understanding of what is meant by *'context-specificity'* as well as a further investigation of *local/global interdependence,* which are key elements to the definition of *nodal configuration* and new forms of *territorial 'co-opetition' and potential;*

- it provides key additional concepts to better explore *territorial evolution* in terms of *progressive and multiple path-(inter)dependence*, besides shedding light on new *political* and *strategic* contributions*.*
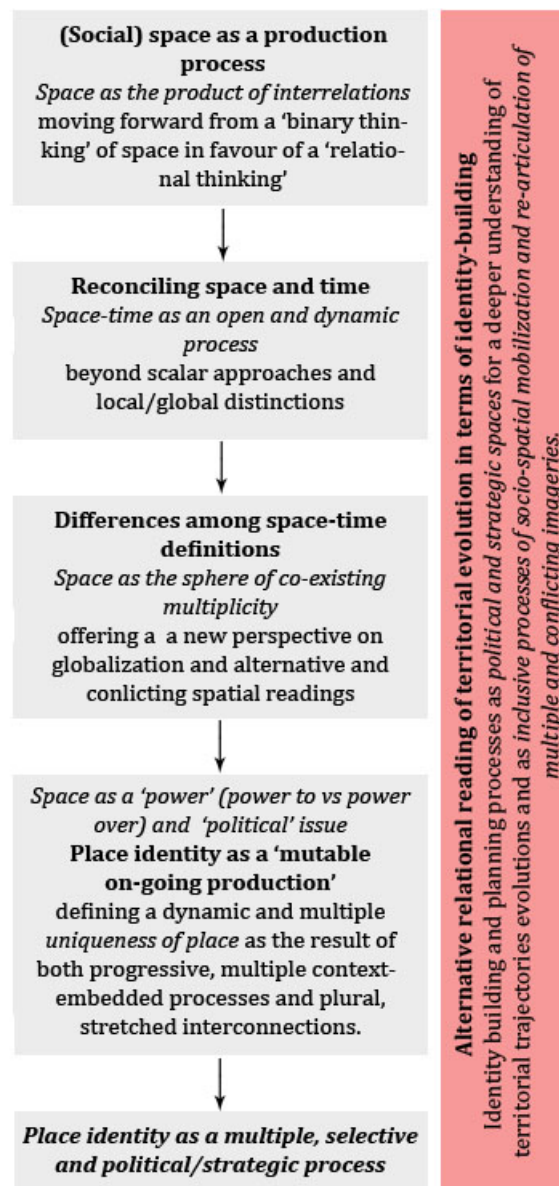
Figure 1.3. Conceptual framework

Thus, a further exploration of what is meant by 'relational construction' of space and place across time becomes necessary in order to answer to several the questions about the evolution of territorial identity within transition, the co-evolution of transformation and territorial identity, and finally about the contributions which arise for local and regional development and strategic planning.

1.4.1 Approaching 'space' as a social production

The transition from Fordism to Post-Fordism between the 70s and the 90s has been fuelling a new debate about how to conceive the spatial realm and its relation to the temporal one. In the 70s, several Marxist scholars in cultural geography have raised critiques to capitalist evaluation of space and time. They aimed to move forward from the dominant 'absolute' and 'static' idea of space, meant as a mere 'box' and 'container': Lefebvre (1973) described this transition as the passage from the mode of production of things (the space of production and produced space) to the mode of *production of space* as such. This alternative and dynamic spatial notion has emerged in response to global increasing variety, complexity and unevenness.

This attempt pointed to move forward from a 'binary thinking' of space in favour of a 'relational thinking'[56], in order to reconcile several dichotomies: physical and social, mental and material, logical and social, ideal and real space, object and subject, time and space). Indeed, this shift is driven by conflicts and contradictions between "(economic) growth and (social) development, between the social and the political, between power and knowledge (*connaisance*), and between abstract and differential space".

Lefebvre (1973) defined this unitary conception as "*the production of space*": according to him, "(social) space is not a thing among other things, nor a product among other products: rather, it subsumes things produced, and

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[56] Relational thinking is defined as "an attempt to reimagine the either/or construction of binary thinking (where the only relations are negative ones of exclusion) and to recognize the important elements of interconnection which go into the construction of any identity" (Massey et al., 1999b).

encompasses their interrelationships in their coexistence and simultaneity […].
It is the outcome of a sequence and a set of operations, and thus cannot be
reduced to the rank of a simple object".

Consequently, this 'complexity' unfolds *(social) space as "a social product"*
(Lefebvre, 1973)[57].

The relational definition of space has been developed in the 90s by several Post-
Marxist scholars in cultural geography under new spatial transformative
dynamism and the rising pressure of globalization. According to Massey (1992):

> "The events taking place all around us in the 1980s—the massive
> spatial restructuring both intranationally and internationally as an
> integral part of social and economic changes—made it plain that, in
> one way or another, 'geography matters'. And so, to the aphorism of
> the 1970s— that space is socially constructed—was added in the
> 1980s the other side of the coin: *that the social is spatially constructed*
> *too*, and that makes a difference. In other words, and in its broadest
> formulation, society is necessarily constructed spatially, and that
> fact—the spatial organization of society—makes a difference to how it
> works"[58].

Therefore (social) space is a *dialectical process*, built on social relations and
material social practices across several scales. It is both product and production,
besides being specific and inherent to a particular society and mode of
production: space is defined "as constructed out of interrelations, as the
simultaneous coexistence of social interrelations and interactions at all spatial
scales, from the most local level to the most global", while, at the same time, "all
social (and indeed physical) phenomena/activities/relations have a spatial form

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[57] Following Lefebvre (1973), space is a threefold process. It embraces: *spatial practice* (the perceived -
derived by the deciphering of space as a mutual interaction), *representations of space* (the conceived -
conceptualized space) and *representational spaces* (the lived - space as directly lived through its associated
images and symbols). Harvey (1990) and Soja (1999) have recalled this distinction in their works.

[58] Emphasis added.

and a relative spatial location. [...] The spatial spread of social relations can be intimately local or expansively global, or anything in between" and can change over time (Massey, 1992).

In this perspective, space cannot be intended as a flat, static and abstract location, but rather *its socio-spatial construction should be intended as differentiated and dynamic* (Massey, 1992; Massey et al., 1999b).

This approach rejects the idea of 'knowledge' as the mere tool to label and classify space into fragmented distinctions. It rather enhances reciprocity between cognitive and spatial realms (as both producer and production). Therefore, 'knowledge' goes beyond its (de)codifying feature, its limitation as 'means' to read, classify and describe space: it is rather defined as part of "a practical relationship, as part of an interaction between 'subjects' and their space and surrounding" (Lefebvre, 1973).

Thus, space and knowledge variety emerge as interdependent and mutually interrelated issues.

Reconciling space and time, history and geography

Lefebvre (1973) proposes an idea of space, wherein "the past leaves its traces" and which is "itself the outcome of past actions": according to him, "social space is what permits fresh actions to occur, while suggesting others and prohibiting yet others". The complex "*present* space" shapes localities and geographies "always, now and formerly" *by mediating* between different natural and social objects, things and relations (Lefebvre, 1973).

Therefore, *its relational character makes space inseparable and interdependent to time definition*: it is "implicated in the production of history, and thus, potentially, in politics", as affirmed by Massey (1992).

Indeed, change could manifest as the outcome of social actions and interactions, which in turn require space to exist and take place. Moreover, 'interactions' themselves imply the presence of variety, that is: *multiplicity requires space*, too.

Space, as the product of these changing relations and social practices, is always in process. Thus, *"integrally space-time" is an open process, rather than a closed and static system* (Massey, 1999).

According to this unitary perspective on space-time, the social can be described in terms of the "real multiplicities of space-time", beyond the dichotomy time (dynamism)/space (stasis) (Massey, 1992).

Transition as a shift in space-time reading

Following Lefebvre (1973) and Harvey (1990), each mode of production reveals a certain type of social space-time construction and interrelation.

In particular, according to Massey (1973) and her critique to classical industrial locations theories, "the space of industrial location is the product of a complex historical process", wherein different behaviours, embedded in specific space and time, are central to the system's nature.

Moreover, as stated by Lefebvre (1973), "examination of the transition between modes of production will reveal that a fresh space is indeed generated during such changes, a space which is planned and organized subsequently".

This perspective may inform central assessments to encourage a deeper understanding of the socio-economic paradigm transition and its space-time reading: it unveils the linkage between the shift in production mode, space practices and production.

The current paradigm transition -underpinned by markets opening, high mobility and ICT improvements- is rooted in and commonly explained by a too often simplified account of 'space-time compression' (Harvey, 1990; Massey, 1999, 2005).

'Flexibility', as the main production mode characterizing the dominant paradigm, has been affecting the definition of space-time production and configuration, previously in the form of Post-Fordism and nowadays in the global chain restructuring. The centrality of speed and mobility (of both individuals and knowledge) has significantly impacted on the socio-economic paradigms across time: the huge increase in services demand has generated

changes in manufacture production modes, ways of living (toward image and sense-making) and innovation (toward process and user innovation). It has also fostered the necessity to rethink skills and knowledge bases in productive processes (Asheim et. al., 2011; Rullani, 2014a,b)[59].

Moreover, as underlined by Massey (1987), the socio-spatial structure of the labour system, including skills and know-how, has been central to the economic, social and cultural reproduction and re-composition of 'flexibility' (especially during transition). In addition, under the pressure of higher mobility and speed in global production systems, its 'flexible' reconfiguration has proved to affect the positioning of a system into the international division of labour.

In the last decades, the predominance of time-focused approach and abstract/flat space idea, based on speed and compression, has been passing over alternative and more complex time-space readings: this approach has made short-term territorial measures and policies, 'pick the winner' and 'off the shelf' solutions to overcome long-term, context-specific and plural planning visions and strategies. In terms of territorial evolutions, the hegemony of the temporal sphere over the spatial one has been hampering the development of what Massey (2005) has called an inclusive "genuine openness of the future".

The production of space unveiling 'multiplicity'

A new understanding of the co-existence of differentiated and plural spatial codes among production modes, defined as "means of living, understanding and producing space", is required in order to grasp transition (Lefebvre, 1973).

According to Massey (1973), in fact, *the shift to a new paradigm should be interpreted as the response to the rise of contingent problems (historical progression)*: it is deeply rooted to the "material conditions of its age, to the nature of economic organization, and to the social relations which may be consequent upon those material condition", that are geographical and historical context. She goes further, stating that a specific way of reading the shift of paradigm is inherent to particular social relations, and may have the power to

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[59] Ref.: paragraph 1.3.2 in this chapter.

influence and address the objective the object of the analysis, as well as the definition and understanding of the phenomenon, affecting therefore "the nature" of the socio-spatial response to the change.

Thus, the 'lock-in' or the establishment of a dominant space-time or production mode inevitably impact on the social sphere and practice. In wider terms, the interrelation and reciprocity between social relations and space-time production lead to conclude *that power relations are always implied in a process of space production*: *space and time can never be neutral, flat or absolute due to their inherent social nature, but are rather 'power geometries'* (Massey, 1992, 1999). 'Power' is not meant only in its negative sense *'power over'*, but its conception is enhanced also to *'power to'*: "as power comes from doing, different discourses, different arrangements and representations may emerge tangentially from supposedly dominant powers" (Massey et al., 1999a).

As will be further explored in the next paragraphs, the coexistence of differing space-time imageries could generate conflicts within the process of definition of new space-time perspective: indeed, divergence in the way of define space, time and value, as well as power asymmetry in needs and objectives can generate struggle and strive for change between differing production modes and alternative space-time: *space emerges as an inherently 'open' and 'disrupted' process* (Massey, 1999).

These considerations imply the co-existence of a multiplicity of trajectories within space and that "multiplicity and space are co-constitutive" (Massey, 1999, 2005).

This perspective offers a "dynamic and politically progressive way of conceptualizing the spatial" (Massey, 1992), which provides new and central contributions for a deeper understanding of territorial redefinition and reconfiguration, as well as for a redesigned local and regional development pattern within transition.

The 'spatial turn' (Soja, 1999) and the relational perspective on space in the analysis of socio-economic paradigm have risen as a critic response to Post-Fordist and 'flexible' patterns. The 'production of space' aims to overcome the dichotomy space/time and rebalance the supremacy of the historical/temporal

over the spatial. Today, the 'unfolding' of the spatial turn is far from being written.

The interrelated and intertwined nature of space-time and production modes opens relevant questions within the analysis of transition: how multiple modes of production co-evolve across space and how multiplicity affects space production; how dominant and alternative patterns may mutually impact each others in this open and dynamic scenario; finally, how these dynamics are challenging mainstream spatial definitions and settings, as regions and localities.

1.4.2 Local/regional/global: are scales effective distinctions?

Since its intensification during the 80s, 'globalization' has often been taken for granted as an inevitable imaginary or pattern. As previously explored, the dominant account of 'space-time compression', inherent to the mainstream definition of globalization, has been supporting the prevalence of the 'temporal' sphere, meant as a dynamic feature, over the 'spatial' one, meant as a static one. According to this approach, 'globalization' has been interpreted as 'one grand narrative', 'one grand temporality' and one main framework wherein to inscribe alternative stories, as critically stressed by Massey (1999) and Agnew (2013a). This temporal approach has been influencing and consolidating the way of reading and defining several territorial phenomena across time, overlooking wider and complex evaluations of space-time.

According to this perspective, for example, territorial readings based on 'temporality' have shaped for decades the definition of the world geography, supporting an account of regional differences and 'winning recipes' in temporal terms by distinguishing 'advanced'/'backward' regions or 'developed'/'developing'/'underdeveloped' countries (Agnew, 2013; Massey 1999, 2005).

At first, the intensification of globalization supported an idea of 'the global' level as a fixed and flat space as well as being misinterpreted as increasing

'neutrality' and 'abstraction'. This a-spatial definition of 'the global' level has been developed as opposed to 'the local' one meant as an extremely concentrated and characterized fortress-place.

At the end of the last millennium, the dual differentiation between the global and the local started to blur in favour of a smoother conception of (sometimes conflicting) local/global interactions and intertwining. Indeed, the scenario disclosed by the new relational conception of space-time was far more complex than a dichotomy.

Following Massey (2005) in her work "*For Space*", where she explores the renewed emphasis and perspective on space, he main and more challenging elements of the spatial turn are three: *space as the product of interrelations; space as the sphere of multiplicities; space as an open process.*

Indeed, as underlined by Massey (1999), differing trajectories can reveal even *within* globalization, and globalization itself can be therefore seen as the acknowledgment of "co-existing of multiplicity" [60].

In particular, in the 70s and the 80s, the shift to a new and more flexible paradigm raised in-between conflicting space-time visions. Indeed, Post-Fordism fostered the debate on the impact of the new local/global interaction and its effects on industrial localization geography and labour market (Amin and Thrift; 1992; Massey, 1973; 1987): on one hand, it supported a renewed emphasis on local and regional agglomeration economies, focusing on the horizontal re-organization of production, as well as on locational and spatial proximity advantages; on the other, it accounted for the rising of a more complex and internationalized local/global system of production, generating what Amin and Thrift (1992) have called "neo-marshallian nodes in global networks"[61].

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[60] Lefebvre (1973) had previously recognized the co-existence of "an unlimited multiplicity or uncountable set of social spaces which we refer to generically as 'social space'. No space disappears in the course of growth and development: *the worldwide does not abolish the local*". The 'whole' set and multiplicity of social spaces, underpinning and characteristic of each production mode, are revealed into the 'space of the planet'.

[61] According to Amin and Thrift (1992), 'representation', 'interaction' and 'innovation' are the core issues at stake in the integration of local agglomerations in the new global/local pattern, which are defined as

The consolidation of Post-Fordism and the advent of the new millennium neither stopped nor resolved space re-definition. Rather, the 'spatial turn' has been fostering the appearance of new and increasing forms of internationalization and local/global integration up to the disclosure of the current transition[62].

The definition of 'territory' between scalar and relational approaches

Once assumed the open and complex nature of local and regional systems, the debate has shifted and focused on the definition and relevance of 'scales', in order to deeper explore territorial interactions and complexity: is the new space-time shaping complex multi-scalar configurations (Agnew, 2013a; Jessop, Brenner, Jones, 2008; MacLeod and Jones, 2007; Sassen, 2008, 2013)? Or is it progressively 'unbinding' spatial and territorial notions and logics (Allen, 2011; Allen et al., 1998, 2007; Amin, 2002, 2004; Massey, 1999, 2005)?

Nowadays, the debate is divided between the identification of definable geographical entities (easily comparable with others), over which specific agents or political arenas can exercise real control and organization, that is the *scalar/territorial* approach, and the recognition of space as a "nodal connection" or "fluid relations" of open, differentiated and mobile political arenas at a variety of scales and forms, that is the *relational* approach (Allen and Cochrane, 2007; Amin, 2004).

The global production reorganization, the rise of globally and stretched network relations and the higher mobility of agents, routines and knowledge, due to the evolution of new forms of proximity and knowledge[63], are fostering new "spatialities of globalization": according to Amin (2002), the local economic system rises "as part of, and inseparable from, proximate and distanciated transactions" and as "the product of varied spatial practices".

"geographical centres, that is, place-bound communities in which the agglomeration and interaction between firms, institutions and social groups acts to generate and reinforce that 'industrial atmosphere' which nurtures the knowledge, communication and innovation structures required for retaining competitive advantage in a given global production filiere".

[62] For a deeper analysis of the evolution of internationalization forms, see paragraph 1.3.1 of this chapter.
[63] For a further exploration of these dynamics, see paragraphs 1.2 and 1.3 of this chapter.

Embracing the *relational spatial perspective*, he proposes a "reading of spatiality in nonlinear, non-scalar terms, a readiness to accept geographies and temporalities as they are produced through practises and relations at different spatial stretch and duration".

This spatiality discloses an idea of place in "non-territorial terms, as nodes in relational settings, and as a site of situated practices" and focuses on "the placement of practices (in contrast to the ideas of place as context or settings)" (Amin, 2002).

On the other hand, a *scalar approach* (or a relational perspective of scalar approach) acknowledges boundaries as key feature in the definition of space and territorial setting, but, at the same time, expands beyond standard geographical criteria.

"*Arguing with regions*" (Agnew, 2013a) is considered an inevitable and remarkable step within the process of "classifying the world by geographical areas", in order to "make sense of" the global re-thinking of territorial and regional settings, besides dealing with practical challenges connected to standard institutions and regional definitions. Moreover, according to MacLeod and Jones (2007), a scalar approach is an appropriate and efficient tool to analyse "the exercise and the transfer of power within the sphere of spatial politics and between scales or territories".

Territory and scale may be both defined as the outcome of social processes and productions; at present, the definition of their boundaries as well as their building process is under debate[64]. Indeed, according to Sassen (2008, 2013), the mainstream "analytic flattening" idea of 'territory' and 'globalization', which limit definition to a single meaning as "one historical instantiation", may be explained by the central and dominant role of the nation-state across the modern era.

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[64] Sassen (2013) defines State borders not simply as a borderline, but as a "mix of regimes with variable contents and geographic and institutional locations". She stresses the appearance of "new types of bordering *capabilities* that shape bordered spaces transversal to traditional state borders".

Indeed, Sassen (2008, 2013), Allen (1999, 2011) and Agnew (1999) reject the equation territory/national-state, defined by Allen as the "territorial trap" [65]. Moreover, Sassen sustains a definition of '*territory*' as a " capability with embedded logics of power and of claim-making, and thus as "part of diverse complex organizational assemblage, with variable performance in relation to authority and rights, depending on the properties of such assemblages".

This definition allows the acknowledgment of different mixes, settings and manifestations of territory and '*territoriality*' as well as of new forms of '*de-bordering*' territoriality over territory [66]. Indeed, under the pressure of transition and globalization, this raising asymmetry between territory and territoriality has been opening -within and across national territories- new spaces and political arenas for alternative conceptions and manifestations of space-time. These new spatialities go beyond national-state and are defined by new and different assemblages of territory, rights and authority.

'Region' between scalar and relational approaches

Since the 80s, the centrifugal pressures generated by the restructuring of the national-state have been encouraging the re-definition and re-conceptualization of several key and standard territorial notions, as region and locality. 'Territory, politics and governance' so become central elements to understand and define transformations (Agnew, 2013b)[67]: according to Allen (2013b), "territory and

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[65] The debate is situated within and influenced by the wider discussion about the role of the national state in the global era and the modern conceptions of power and territorial organizations, as well exposed by Agnew (1999): he attributes the central deficiency of the modern conceptualization to "taking territoriality of states for granted as a fixed feature of the modern world rather than seeing it as the outcome of a number of historical contingencies. The contemporary 'unbundling' of state territoriality provides the most direct evidence for the reshaping of hegemony away from the state-centred practices of the previous epoch".

[66] 'Territoriality' is defined as "the legal construct that marks the state's exclusive authority over its territory". It has been the root and the base of the modern state and international organization and, for that reason, is often misled as equivalent to 'territory' (Sassen, 2006, 2013).

[67] According to Allen (2013b) "Governance, in this construction, extends beyond formal government into the realm of various forms of authority exercised by agents other than states at and across a variety of geographical scales. Politics likewise is not simply the machinations of national politics, elections, and so on, but also the operation of local politics, various forms of supranational political organization, and the nexus between private power and public authority".

related spatial terms (place, space, and territoriality) offer a profitable theoretical lens through which to analyse the workings of governance and politics".

Region has always been a debated concept, challenged by several paradigmatic transformations. In general, it is commonly intended as a geographical unity, distinguishable by other areas, at first in terms of macro-regions and later, since the nineteenth century, in terms of areas distinctions within national borders (MacLeod and Jones, 2007). In particular, the post-fordist vertical disintegration of the production system and the later socio-economic global re-structuring have fuelled a "new regionalism" within geography and regional studies debate: these pressures has led to "*re-think the region*", as worded by Allen, Massey and Cochrane with reference to the evolution of South-East England (1998).

The discussion has introduced a renewed regional focus, sustaining contrasting definitions of 'region' as the "main unit of analysis in several fields".

On one side, what emerges is a *relational, unbounded and dynamic interpretation of 'region'* (Allen et al., 1998; Allen and Cochrane, 2007; Amin, 2004; Massey, 2005), meant "as nodes that gather flow and juxtapose diversity, as places of overlapping – but not necessarily locally connected – relational networks, as perforated entities with connections that stretch far back in time and space, and, resulting from all of this, as spatial formations of continuously changing composition, character, and reach", as expressed by Amin (2004); as relational and discontinuous constructions in space-time, "a product of a particular combination and articulation of social relationships stretched over space" and rooted in their own history, as suggested by Allen et al. (1998)[68].

On the other side, *a scalar approach* supports the idea of region as a dynamic socio-spatial process and product, besides defining it in terms of "classificatory device": a 'functional' definition is offered, which moves forward from standard administrative borders, and which describes regions "as geographical units with

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[68] Allen et al. (1998, 2007) describe the stretching and discontinuity of a region across space in terms of 'hot spot' (places considered part of the 'region' relationally defined, even if situated beyond regional fixed boundaries) and 'holes' (which cannot be 'relationally' defined as part of the 'region', notwithstanding their localization within accredited boundaries).

which to define *contexts* of study of a wide range of social structures and processes" as well as "appropriate territorial units" (Agnew, 2013a). Standing against the critics expressed by several scholars, MacLoad and Jones (2007) reject the 'accusation' of supporting closed, pre-given and static definition of region. According to them, a scalar approach can be seen as a "relational process of scalar structuration", capable to define region and territory as well as scales and boundaries as the outcomes of socio-spatial processes, political struggles and discursive imaginings.

The debate discloses on one side, *a 'non-scalar' interpretation of territory*, which focuses on connectivity and inherently rejects any kind of boundaries and classification (because it would neglect by definition the open and social nature of space-time production); on the other, *a 'functional' and 'scalar' evaluation of regions* "relies on a relative view of space in which the objects and processes of interest are differentiated in some way by how they relate in one region from how they do in another. From this viewpoint, regions are still territorial entities, even though they are integrated differently than when they are thought of as absolute spaces, as with the formal sense of a region" (Agnew, 2013a).

Space as a 'power-driven' and 'political' issue

 A new perspective on globalization, as presented in the previous paragraphs, discloses new readings "about the spatiality of contemporary social organization, about meanings of place and space associated with intensified world-level forces and raised global connectivity" and entails new evaluations of "space/place relations", territories and the social character of spatialities within a 'globalization scenario' (Amin, 2002).

Indeed, *differences among space-time definitions are central to interpret the on-going transitional dynamics: the questions posed by alternative spatial reading of globalization are both conceptual and political. As stated in the previous paragraph, in fact, the social construction of space-time reveals its power nature: this makes the spatial inherently political.*

Specifically, a more articulated spatial evaluation of power emerges in term of power 'relations' and 'geography' as inherent to the spatial (Allen, 1999; Agnew, 1999; Massey, 1999): "spatializing power" aims to "interrogate the ways in which space affects the operation and realization of power […], how it works through key practices and discourses, arranging space and time in ways that help constitute particular effects" (Massey at al., 1999a).

'Territory' emerges as "an important type of spatial arrangement through which power is deployed and experienced but which is not limited to the state as such" (Agnew, 2013b); as "an achievement, not a given; something that is actively produced and practised, relative rather than absolute in its geometry" (Allen, 2011).

The mainstream idea of '*power over*', meant as central influence and control, is enhanced to '*power to*', which focuses on its exercise and practices, on how it is exercised. While in its former account power is defined as a spatial dichotomous property (power/powerless, dominant/subordinate), hierarchically concentrated, centralized and localized, in its latter conceptualization it is enabled and mobilized over space and time as the product of focused social (individual or collective) actions. In the first case, power is '*instrumental*' to be imposed *on others* (*domination*); in the second it is '*associational*' power to be exercised *with others*, to promote collective and inclusive action (*collaboration*) (Allen, 1999).

This perspective opens to a stretched and network-oriented spatial account of power, built on social interactions, and meant as 'map' and 'geometry' of power. The notion of "power-topologies" described by Allen (2011) enhances mainstream geometric setting of power localization (as territory and networks) in order to picture new architecture of power based on interactions and interrelations between powerful and non-powerful actors, moving forward from classic definition of proximity and distance[69].

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[69] The topological perspective on regions and place politics, as sustained by Amin and Allen, implies a nodal vision of the local, wherein different scales of practice and social action are brought together. Topology considers distance and proximity, proper of classic geometric conception, as non-exhaustive indicators to analyse space and things. It relays on the idea that "certain characteristics of things retain

Indeed, the mobilization of power -within networks and across space- changes its nature in accordance with a variety of modes of power and interaction, as well as specific space-time (Allen, 1999, 2011; Massey, 1999): *mediation* (a mix of proximity, distance and reaching) may be considered as an intrinsic feature of power practice and geometry, besides becoming a key tool to manage and to tackle with the impacts that the transitional 'spatial turn' impose on power settings.

The contributions of a relational perspective on territorial patterns and politics

As previously affirmed, *the hegemony of one space-time imagery or 'grand narrative' over others (power domination) risks leading to conceptual and political entrapments: shifts in spatiality and politics' imagery can be necessary to tackle with the changes and challenges posed by transformations and transitions* (Massey, 1999). In particular, an alternative definition of 'globalization', triggered by an open and disruptive space-time conceptualization, advocates for an account of multiplicities, differences and openness of the future so to admit possibilities of change. Thus, opening globalization to a new conception of the spatial implies dealing with the political: to "spatialize" these hegemonic narrations "completely change their character [...], it opens them up to the generation of novelty, to the appearance of new narratives, to a future which is less predictability inscribed in the past" (Massey, 1999).

According to Allen et al. (1998), *re-thinking territory in relational terms* unfolds region as "a complex and unbounded lattice of articulations with internal relations of power and inequality and punctured by structured exclusions".

On the other side, as stated by MacLeod and Jones (2007), the *scalar approach* supports the appearance of new *multi-level governance* system, inasmuch "little opportunity" is seen in detaching unbounded (or topological) networking and openness from the "prosaic" political reality.

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their integrity despite being twisted or stretched out of the shape" (Allen, 2011), so that, in this sense, it focuses more on the nature and the composition of spatial relations and interactions.

However, this approach supports a relational conception of spatial scales in the attempt to resolve the binary opposition between the scalar/territorial and the relational: whilst Allen (2011; Allen et al., 1999, 2007) criticises the "overextension of scale" as aiming to hinder the plural character of actors and territorial processes across space (so over proximity/distance), Agnew (2013a) warns against an excess of 'un-bordering' regional approach, which could excessively loosen the "ontological significance of regions for practical life": he affirms that "thinking relationally, then also involves a recognition of the connections drawn through material closure, as much as it does of those constructed through theoretical opening"[70].

On the contrary, Allen does not reject the idea of territory and scale per se, rather underlining their limitation in grasping transition and the spatial turn.

Similarly, Amin (2002) affirms that the relational territorial perspective does not deny the scalar character of politics itself, typical of standard institutional and organizational settings and practices, but *it proposes an alternative and enhanced reasoning to interpret globalization and offers new focuses to possible and more inclusive development policies and strategies*[71].

What differs, according to Amin (2004), is *the way to interpret political objectives and the real "being political" of the regional and local levels*: territorial policies cannot be simplified by inward and outward, closed (control or defence) and open (attraction or internationalization), global and local distinctions. Amin (2002) instead interprets territorial entities, as localities and regions, in terms of "juxtaposition" of a variety of politics at different levels: this new perspective stresses the shift "from the politics *of* place to politics *in* place".

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[70] In drawing the conclusion of the collection on "*Human Geography Today*", Allen et al. (1999) go further, stating that "structures still exist in the form of material closure, no matter how much they may be wished away discursively. Thinking across binaries can aid the process of their dissolution, but their unquestioned imposition in the world at large is a testament to the solidity of power configurations and assemblages which are likely to be unmoved by theoretical nuances".

[71] In exposing his relational approach to new 'spatialities of globalization' and its critics to scalar approach, Amin affirms that "those concerned with the politics of regulation and governance associated with globalisation are right to note the very real and felt contest of jurisdiction and control between local, national, and global state and non-state organisations. They are right to stress that globalisation -however intended -has unleashed a rigorous restructuring of the rationale and spaces of formal politics. [...] My aim has not been to question scalar politics, but scalar reasoning that precludes other interpretative and political possibilities."

Amin (2004) identifies two kinds of politics, each one defining its one spatiality: the *politics of propinquity* and *of connectivity*. The former refers to regions and cities in terms of juxtaposed variety and geographical proximity, while the latter describes them in terms of flows and interconnections[72].

Similarly, Allen and Cochrane (2007) advocate for inclusive *networked regional governance* and arrangements, which account for a continuous process of negotiation and networking across an array of fields, levels and scales between governmental and non-governmental agents and which focus on interrelated and interdependent relations.

According to them, what is emerging is a "regional assemblage" in terms of space-time and power, which is not shaped by hierarchies and specific territorial authorities or institutions, but is rather defined by contingent capabilities, interplay and power negotiation between an array of actors, alternative visions and strategies across space: *the core issue of the relational/scalar debate is neither the evidence nor the obsolescence of borders, but how territory and politics interact and mutually shape each other.*

Sassen (2008, 2013) stresses the relevance of new and distinct territorial complex capabilities, raising from new 'de-boarding' spaces across national boundaries and new distinct territory's assemblages, which make "legible asymmetries between state's sovereign jurisdiction and the territory itself"".

In conclusion, tensions between the 'real' and the 'constructed', the 'scalar' and the 'relational', the 'fixed' and the 'mobile', the 'local' and the 'stretched' should to be resolved through a plural and multiple approach to territory and region, capable to "both reflect differences in the world and ideas about the geography of such differences" (Agnew, 2013a). Besides, these tensions are inevitably connected to the application of 'old-fashioned' languages and terms, typical of standard and mainstream spatial settings and thinking, to 'new' and alternative territorial conceptions: contradictory terms inevitably generate confusion and misleading.

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[72] These concepts are developed in the paragraph 1.4.3.

The attempt to move forward from this duality is fostered and supported by a relational definition of (socio) space-time setting that goes beyond strict local/global distinctions. *This relational view bring to light open territorial configuration as well as intertwined interrelations, acknowledging the existence of multi-scale and trans-territorial trajectory, de-boarding spatiality, co-existing and interactive multiplicity. Dealing with the spatial turn and the territorial and regional re-thinking are central questions to the analysis of territorial trajectory and of the spatial re-configurations, which are rising through transition.*

In addition, the debate about relational conceptions of space and region have been fuelled by a renewed and emerging interest on localities and places (Agnew, 2013; Allen and Cochrane, 2012; Amin, 2002, 2004; Harvey, 1990; Jones and Woods, 2013; Massey, 1991), which, according to Jones and Wood (2013), could represent a 'bridging concept' and a way to resolve the tensions previously outlined and due to their contingent and relational nature.

At this point, a further clarification is required to grasp this 'multi-territorial' and 'dynamic' account: what about space and place? This question leads to tackle the 'grand absentee' within the transition debate, which represent one of the key issues (too often overlooked) at stake within the transition debate: what about 'territorial identity'?

1.4.3 Defining 'territorial identity': a political issue

The emphasis on the power and political character of space has disclosed the complex spatiality and variety of production modes. In particular, it has stressed the impossibility to strictly describe and define closed and static space-time and to accept single and pre-set imagery in the current transition.

The multiple, plural and complex nature of an alternative conception of globalization opens to new plural trajectories and place policies, and rejects the 'grand narration' of space-time compression and the local/global contraposition (Massey, 1991).

This shift has started to put into question standard spatial and territorial settings and definitions, besides generating new definitions of territory as, for example, 'nodal formations' (Amin, 2004), 'regional assemblages' (Allen and Cochrane, 2010, 2012), 'de-boarding territories' (Sassen. 2008, 2013).

How to approach the relational space and new ideas of territory in terms of development policies and patterns is still an open question, even if some attempts have been made in order to reconcile and 'ground' the contraposition between territorial/scalar and relational conceptions (Agnew, 2013a; Jones and Woods, 2013; MacLeod and Jones, 2007).

Aside from these tensions, both approaches finally acknowledge territory as a socio-spatial production as well as shedding light on the complex set of agents involved.

In conclusion, the relational perspective brings to light *the social (and so power and political) nature of territorial building and setting, as well as the co-existing multiplicity within a new conception of globalization, going beyond mainstream, binary and unilateral evaluation of space production.*

Redefining 'globalization' in terms of multiplicity

According to Massey (1991, 1999, 2005) and Harvey (1990), an a-spatial definition of 'globalization' based on space-time compression is neither an exhaustive representation of our experience of space and place, nor an inclusive and exhaustive way to analyse the complex co-existence of multiple and differentiated spaces. In this perspective, globalization rather constitutes a dominant 'grand narrative', based on the duality temporality (dynamism)/abstract space (stasis), which generate dichotomous representations of the world.

On the contrary, it is possible to identify variety and plurality also among 'time-space compression' experiences and practices across the world.

The open, disruptive and social nature of space-time stresses the co-existence of a multiplicity of trajectories, readings and power geometry, which in turn unveils its mutual interrelation with the process of production of space (Lefebvre, 1973,

Massey, 1999, 2005). This perspective fuels what Thrift (1999) defines a "non-representational theory", which rejects a "representation of the world from the world, because we are slap bang in the middle of it, co-constructing it with numerous human and non-human others for numerous ends".

Consequently, 'globalization' can be seen as a "making of spaces", as a co-existence of a multiplicity of trajectories, as a product of stretched and changing social relations (Massey, 1999, 2005) and, following Amin (2002), "as an exhortation to see place/space as mobile and intersection trajectories, in the context of new terms of intersection and movement".

A key question pushes forward with the exploration of space/place and the attempt to reconcile the local and the global: "how in the context of all these socially-varied time-space-changes do we think about 'places'?" (Massey, 1991).

A new relational conception of 'place' over local/global distinctions

As stated by Massey (1991), this perspective on globalization and space opens to an alternative interpretation of *place*, according to which "what gives a place its specificity is not some long internalised history but the fact that it is constructed out of a particular constellation of social relations, meeting and weaving together at a particular locus".

Places are "nodes in relational settings" and "sites of situated practices" and are defined as "the embodiment of virtual or immanent forces and as the temporary spatiotemporalization of associational networks of different length and duration" (Amin, 2002).

Therefore, place is no longer a static, inward, nostalgic and enclosed entity, wherein 'sense of place' is confused with nostalgia, rootedness, defence and protection. Massey's central idea of "*global sense of place*" emerges as the perception and experience of a specific mix and variety of outward and different local senses of place. As suggested by Amin (2002, 2004), the "topological" sense of space and place, "made up of influences that fold together the culturally plural and the geographically proximate and distant".

In this perspective, place can be intended as "a particular, unique, point of their

intersection" as a "*meeting* place" (Massey, 1991, 2005).

This reconceptualization of how we experience space-time is purely and undoubtedly relational and unbounded. It sustains 'place' as "articulated moments in networks of social relations and understandings", which go far beyond place itself (Massey, 1991).

On the other side, a 'territorial approach to the relational nature' of localities aims to reconcile the tension between these two contrasting perspectives by defining localities as dynamic, analytical 'frames' of social, economic and political phenomena: places are shaped and defined by the "acts of locality-making" and so are free from fixed boundaries (Jones and Woods, 2013). In this perspective, localities are spatially focused but not spatially constrained: while assuming the necessity of some forms of delimitation of actions' space (material and imagined coherence), this approach also suggests to shift this focus (delimitation) from the process of bordering per se to the process of 'locality-making' (construction, negotiation and contestation), whereby localities are transformed into a socio-economic-political assemblage (Jones and Woods, 2013).

In conclusion, the definition of place itself must consider the local-global interactions and 'real relations' (economic, political, cultural and social) occurring within a territory.

In both definitions, the relational approach moves forward from the local/global dualism and the dichotomous reading of place, which is expressed in terms of 'lived'/'local' as opposed to 'abstract'/'global': local/global mutuality become as grounded as concrete; they come together and are dialectically intertwined (Massey, 2004).

Place identity as a 'mutable on-going production': the political and power character of identity

Place specificity emerges as the result of both *progressive context-embedded processes* and *plural and stretched interconnections*. According to this definition, '*the uniqueness of place*' rises as a dynamic, rather than static, characteristic (Massey, 1999, 2005). As stated by Thrift (1999), places are always incomplete and disclosive, and "like societies, places can be make durable, but they cannot last".

The idea of a dynamic and multiple uniqueness of place rejects the definition of a single, closed and static spatial identity: according to this, in fact, even identity can be re-defined in relational as a "mutable on-going production" (Massey, 2004). Massey goes further, stating that "if it is now recognised that people have multiple identities then the same point can be made in relation to places. Moreover, such multiple identities can either be a source of richness or a source of conflict, or both" (Massey, 1991). Moreover, to use Massey's (1999) words:

> "thinking space in terms of interrelations, and imagining places/regions as interlockings of those interrelations, clearly reflect a shift of a similar kind to that involved in conceptualizing difference/identity as constituted not through the closure counter-positional boundedness, but through an understanding of the links and relations by which 'entities' more generally are constructed. Just as place may be thought of as open articulations of connections so too may constructions of difference and identity".

Place identity building is so understood as a *progressive and multiple* as well as a *plural and dynamic process*, which cannot be crystallized in static feature and which is *relational, hybrid and differentiated*. For that reason, (social) space and place identity are multiple and multifaceted by definition and may not be pictured as enclosed entities. This perspective rather agrees and contributes to define territory as a node of a wider network and as the site of overlapping

interrelations, as well as shedding light on asymmetry or dominant dynamic, which characterize territorial settings and evolution.

Indeed, the production of place identity requires *space, multiplicity, and interrelations*: *power* emerges as an intrinsic feature of identity building (Harvey, 1990), *making place identity (building) inherently political.*

Therefore, if the acknowledgement of the relational and multiple nature of space, place and identity is a significant step in order to develop new way to grasp territorial evolution and transition, how to deal with and manage 'multiplicity' is strictly related to how power and identity are defined. How to rethink space, place and identity, both conceptually and empirically, expand to the political sphere, stretching across a variety of scales and a plurality of forms and actors (Amin, 2004).

Multiplicity/identity building as part of a *political process* opens new challenges to how we think and read territorial evolution and trajectories.

Place identity building as a local/global process

The relational character of space and uniqueness reveals the interrelated and intertwined nature of the local/global and enlightens its impact on space production and definition: *the local and the global are disclosed as co-produced.* Thus, interactions both at local and global levels mutually affect their own relation and form.

According to this perspective, the global cannot be univocally defined as a space of domination over the local: place and locality can be also said to act as "agents in globalization" (Massey, 2004, 2005).

In fact, the local "is implicated" in either constructing or challenging the global, but the nature and the intensity of its impact depends on its positioning and insertion into the wider global system, and so on the nature and intensity of its extended interrelations: it depends on the political nature and the power geometry of its stretched relations and geographies, whereby place identity is constructed.

Local and global mutuality, and the way it is managed, defines new geography and definition of both responsibility and vulnerability.

The local/global interdependence opens to two types of geography of place and identity building: first, as 'inwards' and 'internal multiplicity' or 'juxtaposed heterogeneity'; second as 'global sense of place' or 'sites of multiple spatial connectivity'.

They correspond to two kinds of politics of space, 'politics of propinquity' and 'politics of connectivity' (Amin, 2004, Massey, 2004)[73].

The latter geography of 'outward' identity enhances the sphere of politics of place: it opens their discussion and definition arena to a whole variety of external networks and interrelations, through which local identity is produced and which include conflicting and alternative visions.

This idea had been early expressed by the "*trial by space*" proposed by Lefebvre (1973), which describes how relevant and differing visions are able to produce and generate (or appropriate) space when confronted with other values and ideas on a worldwide scale. *Mutuality unveils the ability of the local level to influence and challenge the global, as well as opening the local to the possibility to impact and build the global in accordance with the local positioning within a global system, its relational and power settings. In this perspective, the definitions of place and identity are rooted in local/global interrelation.*

The former 'inward' geography of identity is at the same time "shaped by the issues thrown up by living with diversity and sharing a common territorial space", and derives by experiencing and contesting place as a "lived space" (Amin, 2004). It recalls the 'representational space' early proposed by Lefebvre (1973) and the 'thirdspace' described by Soja (1999), which are defined as the space of codes, images and symbols, of 'inhabitants' and 'users' (Lefebvre, 1973) and as "a meeting place", a space for new and alternative thinking, struggling, acting, imaginary, and so "of radical openness", where dichotomies are

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[73] For a definition of 'politics of propinquity' and 'politics of connectivity' (Amin, 2004), see paragraph 1.4.2.

overcomed (Soja, 1999)[74].

Spatial heterogeneity and diversity, juxtaposition and overlapping make place the political arena of antagonisms and conflicts, cooperation and negotiation, claims and struggles.

In this light, politics of place in local and regional agenda and arena is envisaged as an open and dynamic issue, instead of by defined by pre-given and imposed recipes: they rely on "a *vision* and a set of political priorities established out of an open but fair power-play between agonistic actors and their competing and often conflicting claims" (Amin, 2004)[75]. This is what Amin (2002) means with politics *in* place, that is *plural, open and contested spatialities of involvement*.

As previously explored, 'power over' logics are challenged by rising and pressing 'power to' dynamisms: spatial production emerges not as an issue of how power and capabilities (to) are concentrated and localized (domination), but it is rather determined by how power is actually practiced (mode of power) and how capabilities are mobilized and mediated (empowerment) (Allen, 1999). Thus, spatial openness and plurality are prerequisites for "the possibility of politics" (Massey, 2005).

Therefore, *politics is no more intended as a 'grand story' of 'one narrative', but its spatialization in terms of heterogeneity, juxtapositions and multiplicity has evolved into a plural and radical openness, and its concerns are no more about differences alone, but about how spatial differences and identities are built.*

A key conceptual turning point can be traced in-between 'rethinking space' and 'spatializing politics', aiming to explore a renewed approach to local and regional development and planning from a relational perspective.

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[74] 'Representational spaces', as stated by Lefebvre (1973) "need obey no rules of consistency or cohesiveness. Redolent with imaginary and symbolic elements, they have their source in history –in the history of a people as well as in the history of each individual belonging to that people". Lefebvre recognized three types of space in the process of space production : *spatial practice* (the perceived), *representations of space* (the conceived) and *representational spaces* (the lived). Soja (1999) recalls this threefold distinction distinguishing: first space (perceived space), second space (conceived space) and third space (lived spaces).

[75] Emphasis added.

The selective character of place identity

In a relational perspective, identity building generates new and different spaces in the form of 'power geometries' (Massey, 1999): this "*spatialized social power*" infers "the co-constitution of spaces and of identities", whose relational nature and co-existent multiplicity make place a "site of negotiation" (Massey, 2004).

To be more precise according to Massey (1999, 2005), *power, plurality and interrelations make identity inherently political and open to change and future*: place, identity and power are so strictly interrelated.

At the same time, due to their plural and open nature, space and identity building can generate clashes or conflicts between different imaginaries, trajectories and 'senses of place'.

In this perspective, Massey (2005) defines the spatial as the dimension of new social processes and of the arrangement of potentially discordant or concordant narratives: stories and narrations, in fact, are not internalized within space itself, but come out of "the interaction and *the process of constitution of identities*".

Therefore, identity building can be defined as a question of 'choices' between different place imaginaries and trajectories: *'identity building' emerges as a collective construct and a selective process of diverse and conflicting narratives* (Massey and Jess, 2001).

Contestation on place identity is a progressive process, which is rooted in the past and pointed toward the future, beyond place itself.

This consideration sends us back to the geographies of identity and the politics of place proposed by Amin (2004) and Massey (2004), and their implication in terms of responsibility and vulnerability. *Conflicts, selection and power are so central to place and identity building:* selection and contestation determine the prevalence of some imageries and senses of place over others. This process unfolds and draws new power geographies, whereby new identities are defined

and asymmetric spaces and development patterns reproduced (Massey and Jess, 2001).

How to manage negotiations and clashes between conflicting and moving identities and trajectories, characterized by different (but contingent) spatialities and temporalities, is the main challenge for politics and a further key issue in transition analysis. Indeed, according to Massey (2005), dealing with spatial complexity is a tricky question:

"For this has to be an intervention into a constellation of trajectories which, though interacting and undoubtedly affecting each other, have very different rhythms. There is no coherent 'now' to this place [...]. It means that the negotiations of place take place on the move, between identities, which are on the move. It also means, and this is more important to the argument here, that any politics catches trajectories at different points, is attempting to articulate rhythms, which pulse at different beats. It is another aspect of the elusiveness of place which renders politics so difficult."

Place identity building in territorial planning

The narrative, plural and relational definition of identity inevitably impacts on territorial development and planning instances and processes, overcoming sector-driven and fragmented approaches (Healey, 2006a; Paasi, 2012).

Supported by the 'new regionalism', since the 90s a rising relational conception of territory has been fostering the debate about local and regional identity both in theoretical and empirical terms (Jones and Woods, 2013; Paasi, 2002, 2012; Paasi et al., 2011)[76].

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[76] It must be underlined that many features and processes of social and collective identity building exist; locality and region are just two, even if significant, forms of identity construction, which varies contextually.

In a relational perspective, space and place -the objects of planning analysis and practices- are to be intended as complex entities. This means that their definition goes beyond inside/outside dualism and expresses the co-existence of a plurality of meaning or senses of place.

Following Healey (2006a), "in this perspective of relational complexity, planning activity can be understood both as part of an effort of collective imagination about place qualities, and as a set of relational webs which, intersecting with other relations, can produce substantial resources and constraints on other relational dynamics".

According to Paasi (2002, 2012; Paasi et al., 2011) and his analysis of Finnish provinces, the discursive, conflicting and dynamic feature of regional identity reveals to be a constitutive part of regional "*institutionalization*" process, whereby region and identity are shaped, reshaped and established in their institutional, social, symbolic and territorial aspects. This process goes beyond the region itself, embracing both the 'inside' and the 'outside'.

In this perspective, Paasi (2002, 2013) identifies two dimensions in identity building: the '*identity of region*', constructed by an array of actors in order to present their view of the region, and the '*regional identity or consciousness*' that is the sense of identification of the people (insiders or outsiders) with the region, in its wider and relational terms.

In the last three decades, both national and supranational institutions have played a significant role in identity 'institutionalization' processes. But these planning processes have often mislead the nature of territorial identity: they have limited its definition to 'identity of region', constraining its imagery in pre-given "context-bound expression" of 'material' meanings, according to 'mainstream' competitive logics of regional and local development.

Moreover, this "'thin' conception of scalar relations" has misrepresented territorial complexity, sustaining 'devolution' and 'supranational governance' processes, typical of 'bounded' approaches. On the contrary, a relational territorial reading must promote the idea of "complex governance processes, through which concepts of spatial organization are mobilized with the ambition

of accumulating sufficient allocative, authoritative and imaginative force to shape both the materialities and identities of particular places" (Healey, 2006a).

According to Paasi (2012), "while regional planning occurs today in the relational context of 'soft spaces' and 'fuzzy boundaries', borders may still effectively disturb and limit both visionary thinking and planning practice".

A scalar approach to planning strategies and development policies mobilizes identity as something to be 'manipulated', rather than discursively 'constructed'. Indeed, discursive identity building enhances socio-spatial or 'regional consciousness' and social action, embracing all the plural and wider interrelations whereby it is produced (Paasi, 2002).

An 'old' scalar account of space and territorial configurations can lead to exclude and overlook some key relations and to restrain the evaluation of diversity.

'Transformation' is not just a question of new imageries per se, but it resides in the understanding, selection and 'travel' of plural imaginations, of both spatial and governance processes. It accounts for 'power to' mobilization and mediation within identity building process across several and different arenas: as stated by Healey (2006), strategic spatial planning is "a dynamic yet stabilizing force".

Thus, a wider evaluation of place, which assumes multiplicity as a plurality of conflicting spatial conceptions, leads to conceive planning as a question of responsibility and legitimacy.

A *relational approach to strategic spatial planning* "is therefore decidedly not "comprehensive" in its approach" (Healey, 2006): it is a *fairly selective process, strictly focused to the contingent and relational dynamics ("distinctive histories and geographies") of a particular and unique place.* It must account for borders and cohesions, as much as for tensions and conflicts, for "different timescales of different kinds of relations", for both fixities and fluidities; it must recognize and mix co-existent multiplicity in order to grasp the plurality of spatial experiences and senses of place, the relational territorial complexity and dynamics, whereby identity is put "in places" (Healey, 2006).

The 'relational turn' in territorial reading can open new spaces for a renewed idea of identity building in planning approaches and visions, overcoming closed, static and stereotyped definitions and 'old' competitiveness constrains.

These conceptual shifts reassign identity building and planning processes to political and strategic spaces and favor a deeper understanding of territorial trajectories evolutions. In this perspective, in fact, territorial identity building and planning are meant as inclusive processes of socio-spatial mobilization and re-articulation of multiple and conflicting imageries.

Identity production, in fact, rises as a 'political' question concerning 'power geometries', as sustained by Massey (1999, 2005). New tools to inclusive mobilization and power mediation have already emerged (as new forms of partnership, participation and multi-level governance), which, "although usually centred within state organizations, may affect economic actors and citizens by altering the geometry of institutional spaces and the flows of influence and accountability" (Healey, 2006a).

In the current transition scenario of rising relational complexity and identity dynamism, of great multiplicity and conflicting tensions, planning and identity building are increasingly significant -as well as challenging- issues to space re-definition. The socio-spatial vision, which emerges by identity building and planning process (that is conflict, mediation and selection), can turn into the main strategic guideline, platform and framework for a renewed approach to territorial evolution and local and regional development: how to coherently translate spatial and relational complexity and multiplicity, especially through transition, into renewed and inclusive territorial planning visions and development policies is still an open and urgent question to resolve.

CHAPTER 2

The Case Study: Piombino and Val di Cornia, 'no more, not yet'

This chapter analyses the past and ongoing development dynamics in Piombino and Val di Cornia (province of Livorno, Tuscany, Italy). Over the last decades, the territory has been affected by a string of dramatic crises in the steel industry sector, which has represented for almost a century the pillar of the local socio-economic system as well as the local territorial identity. This case is a paradigmatic example of a still unresolved and open territorial transition across time and space, where evaluations on the evolution of the territorial identity may unveil an innovative and alternative framework to new local planning and development policies and strategies.

2.1 Methodology

The evaluation of the development dynamics in Piombino and Val di Cornia opens to *observe*, *explore* and *analyse* the challenges and criticalities connected to transition. At present, several council towns of the valley region share the urge to review and re-think their own genuine and distinct territorial identity as well as their local development strategy: global and local pressures, together with the economic crises have, in fact, weakened the role of Piombino as the main *catalyst* to the other municipalities of Val di Cornia, in particular Campiglia M.ma, San Vincenzo and Suvereto. This change has stressed the narrow and limited nature of the steelwork-bound development pattern of the area, as wall as its obstacle to the innovation of the local production system across time and space.

The case study may therefore be defined as a paradigmatic example of 'old industrial region', as by Hassink (2010a)[77], giving the opportunity to:

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[77] He refers to 'old industrial regions' as the territories, whose socio-economic dynamics have remained trapped into rigid and outdated dominant patterns during Post-Fordist transition, between the 70s and the 90s. Ref.: Paragraph 1.1.1, note n. 8 of this thesis.

- *observe* a territory characterized by a strong and apparently rigid and steel-bound vocation;

- *analyse* its development dynamics throughout transition;

- *explore* how development strategy may be envisioned and approached in differing ways, depending on a variety of territorial imageries and readings.

The applied methodological approach is *Grounded Theory Research* (Corbin and Strauss, 1990). According to Corbin and Strauss (1990), this qualitative approach relies on two principles: one refers to change, while the other "pertains to a clear stand on the issue of 'determinism'". Indeed, first, as worded by Corbin and Strauss (1990), phenomena are considered not "as static but as continually changing in response to evolving conditions", that is "an important component of the method is to build change, through process, into the method"; second, "actors are seen as having, though not always utilizing, the means of controlling their destinies by their responses to conditions. They are able to make choices according to their perceptions, which are often accurate, about the options they encounter". In sum, this approach acknowledges the progressive and intentional nature of territorial trajectory. Furthermore, as affirmed by Corbin and Strauss (1990), "grounded theory seeks not only to uncover relevant conditions, but also to determine the way the actors respond to changing conditions and to the consequences of their actions. It is the researcher's responsibility to catch this interplay".

According to the grounded theory approach, data collection and analysis should by considered as interrelated processes, inasmuch as "the carrying out of procedures of data collection and analysis systematically and sequentially enables the research process to capture all potentially relevant aspects of the topic as soon as they are perceived. This process is a major source of the

See also Boschma and Lambooy, 1999; Cooke, 1995; Grabher's, 1993; Hassink, 2010a; Pike et al., 2010.

effectiveness of the grounded theory approach" (Corbin and Strauss, 1990). The data gathering is predominantly interactive, as well as carried out by a variety of sources.

In particular, the research process aims at exploring and analysing the progressive transitional dynamics ongoing in Val di Cornia, focusing on how the evolution of the local steel industry as well as its cyclic crises have been impacted throughout time the territorial development pattern and setting.

At first, data and assessments have been gathered between 2012 and 2014 through desk-research, press and literature reviews[78]; finally, field observations have been carried out between 2012 and 2013.

The research also refers to the project "*Dinamiche identitarie, trasformazioni economiche, prospettive strategiche: il caso di Piombino e della Val di Cornia*" developed by the *Istituto DIRPOLIS* and the *Istituto di Management* of the *Scuola Superiore Sant'Anna* (Pisa, 2013) between 2012 and 2013[79].

Field assessments have been conducted through open and semi-structured interviews, especially to institutional actors, due to the lack of participation of several stakeholders (in particular in port service and logistic sector).

Moreover I participated between 2012 and 2014 to several conferences, events and meetings about the local and territorial development of Val di Cornia.

The analysis also refers to the data collected in 2013 through *CATI – Computer-Aided Telephone Interviews*[80], conferences and focus groups developed by the *Scuola Superiore Sant' Anna* research team in the framework of the "*Dinamiche identitarie, trasformazioni economiche, prospettive strategiche*" project.

In conclusion, grounded theory acknowledges the dynamic and progressive nature of the phenomenon under analysis, besides highlighting to the strategic

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[78] As for example, institutional documents and planning reports at several levels, local and national newspapers, statistic collections and historical researches.

[79] I took part to the research group as PhD student of the programme 'Politics, Human Rights and Sustainability' of the *Scuola Superiore Sant'Anna*.

[80] The study of the *Scuola Superiore Sant' Anna* (2013) has examined perceptions at community level about the vocation and nature of the territory through several *CATI – Computer-Aided Telephone Interviews,* conducted in 2013 on a sample of one thousand inhabitants of the area (Sant'Anna, 2013).

role of actors and intentionality in shaping the local scenario and territorial vision. It has allowed to identify several relevant key concepts, which, once '*grounded*' in the real data and observations, have led to the identification of the main units of analysis, in order to observe and examine the complexity of the phenomenon through specific categories and their "explanatory power" (Corbin and Strauss, 1990).

In particular, it opens to the development an alternative territorial reading of Piombino and Val di Cornia in order to:

- *observe* several strategic *external/internal* actors as *proactive/resistant* agents in a transition scenario, depending on *dynamic/static and multifaceted/steel-bound* readings of the territory;

- *analyse* their *core/peripheral* role in supporting an *alternative development agenda, as opposed to 'steel' diversification/specialization strategies;*

- *explore* their *leading/follower and locked-in* role in building *hybrid and multiple identity as opposed to steel/non steel* identity, *highlighting the relational and strategic character of the territorial identity building process.*

Paraphrasing Bonomi's words (2013b) *it has permitted an alternative analysis of the Piombino and Val di Cornia's territory as caught up in the clash between 'how it used to be' and 'how has not become yet'.*

Accordingly, this chapter is organized in three parts: in the first and the second sections, the territory and the local scenario are observed by maintaining the focus on the evolution of the steelworks over time as well as its impacts in shaping the local socio-economic landscape and its whole complexity: that is '*how the territory used to be*'; in the last section, the study explores several

attempts and local territorial planning policies carried out by the local administration over the last decades in the framework of 'diversification' strategy, as well as the emergence of alternative and spontaneous territorial '*boiling over*', '*ferments*', '*agitation*' and '*weak signals*' (Bonomi, 2013a; Rullani, 2006, 2013): that is '*what Piombino and Val di Cornia are not yet*'.

2.2 An overlook on the main scenarios

Over the last century, Piombino has stood out at national level as the second steel industrial site (and as one of the few integrated steelworks, together with Taranto), thanks to its leading role in the production of special steel and long products (as rail track fabrication)[81].

Its blast furnace, named '*Afo4'*, which used to constituted the core of the system, has been quenched in April 2014, marking an significant turning point in the history of the plant's evolution, besides severely impacting the local and national steel production rates.

At present, Val di Cornia counts with three main steelworks: the most relevant and debated is the *ex-Ilva/Lucchini/Severstal* plant, today *Piombino Siderurgica,* recently taken over by the Algerian *Cevital* Group; the *ex-Magona d'Italia* plant, at present owned by *ArcelorMittal* (the French-Indian group considered one of the world steel 'industrial colossal'), and the *TenarisDalmine* plant owned by the Italian-Argentinian *Techint* group.

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[81] An integrated steelworks includes a complete system of steel production composed by: coke-oven plant, agglomerate, blast furnace and steelworks. Until its own dismissing, Lucchini plant was the only Italian integrated steelworks specialized in long products and the second of the two remaining blast furnaces in Italy, together with Taranto (Il Tirreno, 2014c). Italy counts today with 38 steel plant in 17 cities functioning on electric furnaces, which have produce the 71, 8% of the total Italian steel production in 2013. The remained part has been produced by the blast furnace in Piombino and Taranto (Federacciai, 2014; pagina99, 2014b).

MONDO / World

PRODUZIONE DI ACCIAIO
Steel production
2013

UNIONE EUROPEA / EU

PRODUZIONE DI ACCIAIO
Steel production
2013
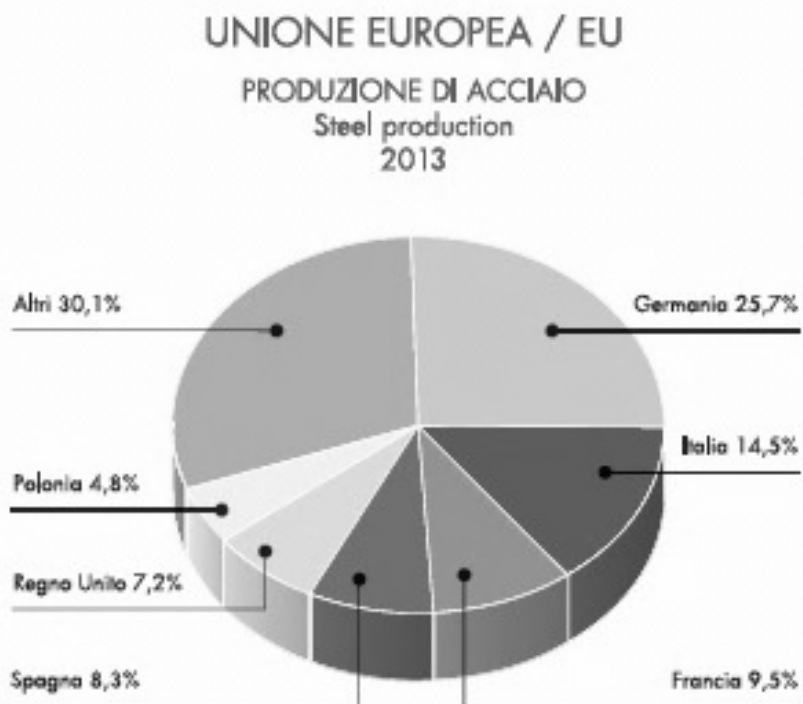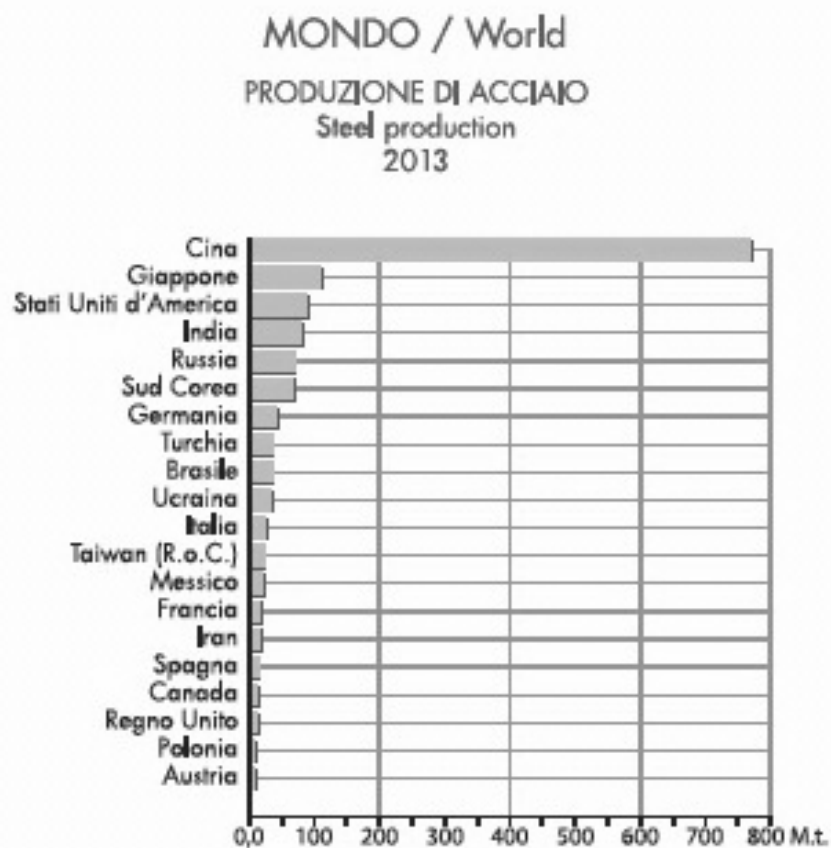
Figure 2.1 (Source: Federeacciai, 2014)

2.2.1 The Italian and European scenarios

The industrial success of Piombino started to decline in the '80s. Its progressive and still ongoing negative dynamics may be included into a wider scenario of global crisis of the sector, generated by steel overproduction at global level. The crisis of the Piombino's steelworks is just one issue of a broader debate about the future and the obsolescence of the steel industry models. Indeed, from the beginning of the 2000s on, the European and Italian steel sectors have been decreasing both in terms of production and employment rates as effect of the global crisis as well as rising competition. The decline of these regions has persisted notwithstanding (and because of) a positive and optimistic future perspective on the sector due to the increasing production rates at global level and the impressive growth of the steel industry of several emerging countries (as China and India) (European Commission, 2013; Federacciai, 2014) (Figure 2.3)[82].

Taranto and *Ilva* (Puglia), Terni and *AST/Thyssenkruup* (Umbria) plants are, for example, other two paradigmatic Italian in-transition territories, which, together with Piombino, are feeding the debate, at national and international levels, about the failure and the future of the Italian and European (steel) industrial model. The debate has expanded from the local to the regional, from the national to the supranational[83], up to the global (facing the pressure and

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[82] In few decades China has become the first steel producer worldwide, covering almost the 70% of the global steel production in 2013 (about 779.000.000 t. over a total of 1.606.737.000 t.); EU is the second world producer: about 166.000.000 t (2013), but its production is still the 27% under the pre-crisis level (European Commission, 2013; Federacciai, 2014). Italy is positioned at the eleventh place at the global level (24.080.000 t.) and at the second place at European level (14,5% of EU production), after Germany (25,7%) (Figure 2.2 and 2.3). Between 2000 and 2013 Italian steel sector has been decreasing from about 40.000 employees to 36.047(shifting from about 70.000 worked hours to about 55.000), while between 2007 and 2011 at European level the employment in steel industry has decreased of the 10% (around 40.000 job places) as an effect of the crisis (European Commission, 2013; Federacciai, 2014). Notwithstanding the negative scenario, over the last decade the European and Italian export levels have fairly maintained positive trends.

[83] For example, by the development of the '*EU Steel Action Plan*' promoted by European Commission (2013), which aims at sustaining European steel production recovery and innovation, and at tackling the deep crisis that has been affected the sector over the last decade. It is correct, in fact, to refer to an '*European steel production system*' due to EU positioning in the global chain and to the complex composition of the system itself: in 2013 it counted with 500 production plants across 23 different EU States Member (European Commission, 2013). The main questions tackled by the EU plan are the promotion of innovation and sustainability, the support and promotion of EU internal demand, the

growth of China, India and other emerging countries); it has also stretched from politics to public opinion as well as from the economic and the political to the cultural, the social and the environmental spheres.

The first data provided by *Federacciai* on the Italian steel production 2014 picture a quite negative national scenario, meanwhile recovery at both national and global level seems far to be achieved (IlSole24 Ore, 2014d)[84].

Figure 2.2 (Source: Federeacciai, 2014)

2.2.2 The scenario of Val di Cornia

Over the last century, the presence of the steelworks in Piombino has exercised a *centripetal* force on the territorial setting of Val di Cornia (and way beyond, extending its influence to South Tuscany), playing a pivotal role within the local socio-economic system (Burgalassi et al. 2009).

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development of an international regulation, the access and regulation to energy and raw material supply.

[84] Since 2011 and as an effect of a huge decrease in steel production (which amount to about - 4.000.000 t) the Italian steel industry is still struggling with decline and crisis. In addition, the extinguishing of the blast furnace in Piombino in 2014 will negatively impact the national production evaluation of 2014. According to Federacciai, compared to October 2013 the production in October 2014 has decreased of the 5,4%. Whilst this data also reveals a slightly increase (about the + 1,5 %, + 20.444.000 t) over the last 10 months, the growth rate is still insufficient to a complete recovery (Il Sole 24 Ore, 2014d).

Inhabitants		
	2002	**2014**
Val di Cornia	56.394	58.501
Campiglia Marittima	12.536	13.312
Piombino	33.874	34.535
San Vincenzo	6.533	7.007
Sassetta	548	532
Suvereto	2.903	3.115
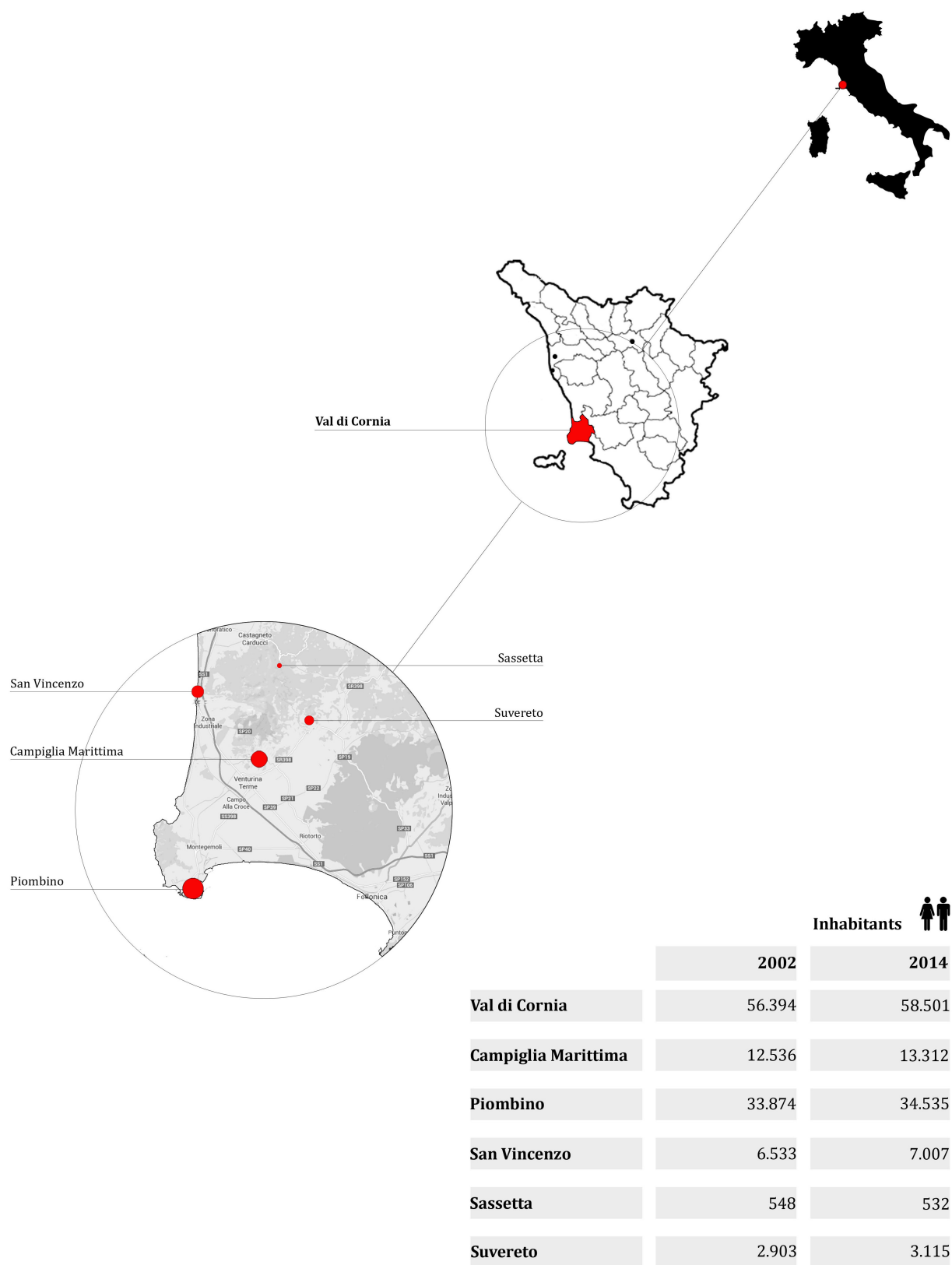
Figure 2.3: Val di Cornia and demographic statistics (Cles, 2005; Istat 2002, 2014)

As described in the preparatory analysis for the *Piano Strutturale d'Area* of Piombino, Campiglia Marittima and Suvereto, carried out in 2005 by the *Centro di ricerche e studi sui problemi del lavoro, dell'economia e dello sviluppo* (CLES, 2005; Circondario VdC, 2007), since the end of the nineteenth century, the development and enlargement of the steel plant have been shaping the demographic dynamics as well as the labor market of the whole Val di Cornia, acting as a central *catalyst* and employment attractor for the valley: for a long period, the steel industry has been *perceived* as the main socio-economic motor of the area.

Indeed, the evolution of the steel industry have deeply led and impacted the territorial demographic dynamics over time, at first, generating an impressive population growth and later, from the '80s on, a progressive population decline: at the end of the nineteenth century, in fact, Piombino was a small sea town of about 3-4.000 inhabitants, which grew as effect of the massive industrialization and the enlargement of the steel plant up to almost 7.000 at the beginning of the twentieth century and to about 40.000 inhabitants during the 70s, until declining today as effect of the crisis (2014) down to about 34.500 inhabitants (CLES, 2005; Istat, 2014). Similarly Val di Cornia's population, which grew up to about 63.000 inhabitants during the '70s, counts today with about 58.500 inhabitants[85] (Figure 2.3 and 2.4).

The socio-economic symbiosis, expressed by the steel plant/territory pair and which marked the first part of the twentieth-century, started weakening during the '80s as effect of the process of privatization and internationalization of the main *Ilva* steelwork. Notwithstanding the deep change of the local steel industry sector and the increasing conflicting interrelation between the territory and the

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[85] According to the data gathered by Istat (2014), Piombino counts with 34.535 inhabitants. Val di Cornia (which also include Campiglia Marittima-13.312 inh., San Vincenzo -7.007 inh., Sassetta, 532 and Suvereto-3.115 inh.) counts with about 58.500 inhabitants. At the beginning of the millennium (2002) Piombino counted with 33.874 inhabitants, while Val di Cornia with about 56.400 inh. Thus, aside the crisis, population growth in the new millennium has turned to be slightly positive as an effect of foreign immigration flows (Data on http://demo.istat.it) (Figure 2.1).
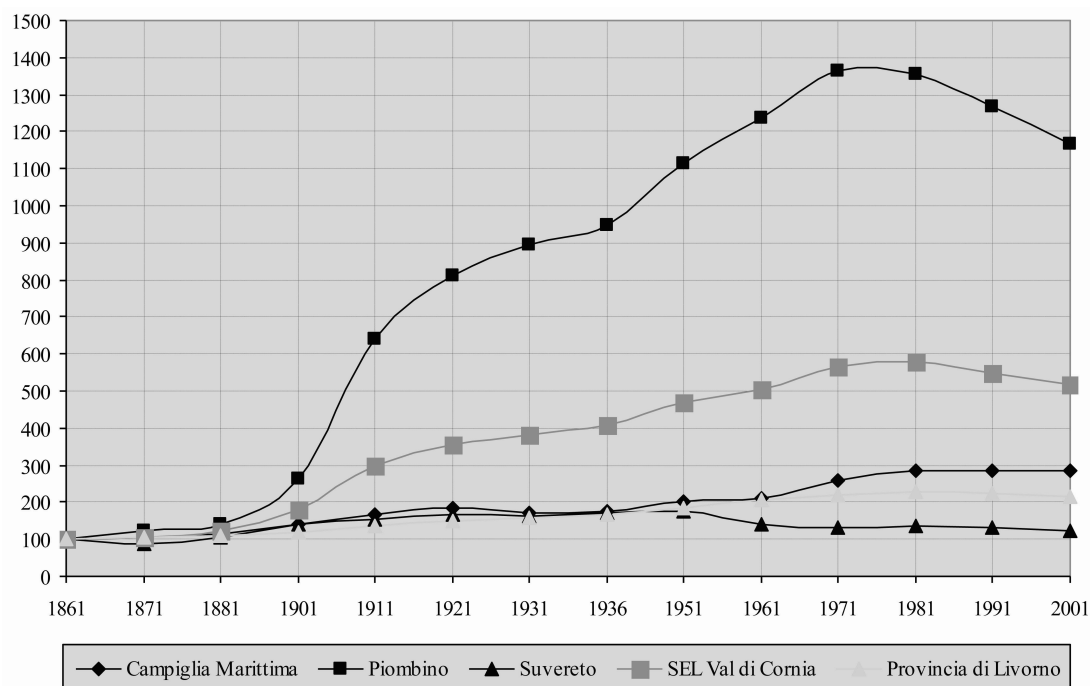
Figure 2.4: Demographic dynamics in Val di Cornia (Source: CLES, 2005)

plant, the steelworks has continued to exercise a strong influence on territorial policies and strategic visions[86].

As described in the analysis carried out by CLES (2005)[87], the presence of the steel plant has indeed impacted the local labour market over the decades, stretching its influence way beyond Piombino's municipal borders. Such dynamic is as also explored by Burgalassi et al. (2009) in their investigation of the relational fluxes in the valley, defining Val di Cornia and Piombino as, respectively, an '*attractor*' system and centre.

From the '90 on, a string of crises have definitively call into question the long-lasting leading role of Piombino and its steel industry, weakening its ability to shape and guide the local territorial system, as well as fostering *centrifugal*

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[86] From this point forward, 'steel' can be intended not as the material per se, but as the local economic, social and cultural system, the imaginary and the social construction connected to the factory and generated and crystalized by its presence over time within the territory.

[87] According to CLES (2005) can be observed that despite in 2001 almost the 80% of the manufacturing occupation was concentrated in Piombino, the industrial employment was similarly distributed (about 30%) across the inhabitants of the several municipalities of Val di Cornia.

pressures among the towns of Val di Cornia and promoting a renewed *polycentric* territorial approach (Bracci, 2012; Burgalassi et al. 2009).

Indeed, at the beginning of the '80s, the labour force employed in the steel *filiera* topped way over the 45% of the whole extra-agricultural one, while in 2001, according to CLES (2005) analysis and Istat census data, it reduced down to the 20%[88].

Notwithstanding this decreasing trend, in 2001 the employment in manufacture sector was still largely dependent on the steel industry chain (about the 75% of its employees).

It is worth considering that the decrease in the steel sector has mostly affected the three main steel plants of the area, while the satellite activities of the *filiera* have mainly maintained their employment rates: while the labour force employed the main plants has been decreasing from the 40% of the total extra-agricultural employment in 1991 to the 15% in 2001, the employment rate in the satellite firms has shift from the 5% to the 4%. Indeed, at that same critical period, a local increase of SME in the manufacture sector has occurred (Burgalassi et al. 2009).

Moreover, as effect of the crises, the unemployment rate in Val di Cornia has been growing over the last decades, shifting from the 6,5% in 1991 to almost the 10% in 2014, and topping way over the 30% in terms of youth unemployment in Piombino: these percentages are over the national and regional average, but lower under the provincial one (Il Tirreno, 2014a; CLES, 2005).

Unexpectedly, the data on the occupation in Val di Cornia (Istat, 2001, 2014; CLES, 2005) prove that industry and manufacture[89] might not be considered as the main sectors in terms of employment in the area, notwithstanding their influence on the territorial dynamics: in fact, tertiary and services sector correspond to almost the 60% of the employment rate (concentrated mainly in

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[88] Around 7.500 people were employed in the whole industrial sector and 6.100 in the industrial sector in the strict sense.

[89] Which in 2001 employs about the 30% of the labour force (CLES,2005).

commerce and public administration sectors) both at Val di Cornia and Piombino's level. According to the CLES's analysis (2005), the service sector in Val di Cornia lacks in innovation improvement, revealing an unexpressed potential, especially in the transport, communication and logistic branches and tourism sector.

In addition, Val di Cornia stands out for its strong agriculture and viticulture vocation, positioning as the third Tuscan agricultural basin. As by the CLES study (2005) and Burgalassi et al. (2009), consistent with these premises, agritourism sector has witnessed a significant increase over the last decades, boasting of high growth rate (way beyond the provincial average) and turning out, therefore, as promising field for the development of the area[90]. Indeed, the progressive positive trend in the service sector in Val di Cornia may be ascribed to the recent growing evolution of the tourism sector (Burgalassi et al., 2009).

	Beginning of the '80s	the '90s	the 2010s
ArcelorMittal	1.500	1.000	550
TenarisDalmine	1.000	500	100
SeverstalLucchini	8.000	4.500 2.200 at the end of the '90s	2.000
The steel filiera	12.000	--	5.500

Figure 2.5: Employment in the steel *filiera* (Source: Bracci, 2012; Burgalassi et al., 2009; CLES; 2005; Il Tirreno, 2014c; National Bill n. 576/2013)

According to the *National Bill n. 576/2013*, at present the whole steel *filiera* employs about 5.500 people: about 550 employees in the ArcelorMittal plant; about 2.000 workers in the Lucchini/Severstal steelworks; about 100

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[90] In Val di Cornia, according to the Istat Census 2001, agriculture employed about the 7% of the working age population. In this sector, differences can be identified in employment distribution among the several municipalities: while in Piombino employment in agriculture corresponded to the 4%, in Suvereto it was up to the 20% (CLES, 2005). In 2007 agritourism facilities has doubled compered to 1998. The impact has been particularly significant in Suvereto (Burgalassi et al., 2009). It has not been possible to access to the data of the last Istat Census 2011 at relative to job rates per sector at municipal level.

employees in TenarisDalmine plant and at least 1.500 job places in the satellite activities (Figure 2. 5)[91].

2.3 The history of Piombino: 'steel-bound' dynamics shaping the economic landscape

An excursus on the history and evolution of Piombino's industry as well as its effects on Val di Cornia over time are fundamental steps to investigate and explain the ongoing transitional dynamics: while the long-lasting decline of Val di Cornia may be ascribed to the global and national crises, it might also be explained as the outcome of the implementation, at local level, of a set of short-sighted development measures and policies.

Piombino, as well as its industry pattern and territorial dynamics, can be considered an archetypal example of the evolution of development models over the 20th and 21st centuries, pictured as: a paradigmatic fordist plant during the first half of the last century, characterized by a concentrated and vertical integrated production system as well as by the central rulership of the national-state; over the second part of the 20th century, as a post-fordist industry system, stretched across the territory as effect of the disruption of the vertical plant's production system (outsourcing) and the plant privatization; over the 2000s, as a complex territorial system challenged by globalization as well as by internationalization and global chains and networks reorganization.

Undeniably, the local socio-economic landscape has been, and is still deeply affected by the presence of the steel industry as well as its inheritance: the territory may be defined as a 'steel-bound' system due to its '*radici di ferro*' and its '*futuro d'accioio*', as worded by Bracci (2012) in his analysis of the evolution of Piombino.

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[91] Theses data do not take into account the distinction between Cassa Integrazione Guadagni (CIG) or other types of social security cushion and actual employment. At the beginning of the '80s ArcelorMittal, Dalmine and Lucchini employed, respectively, about 1.500, 1.000 and 8.000 workers and one decade later about 1.000, 500 and 4.500 people (Burgalassi et al., 2009; CLES; 2005; Il Tirreno, 2014c) (Figure 2.5).
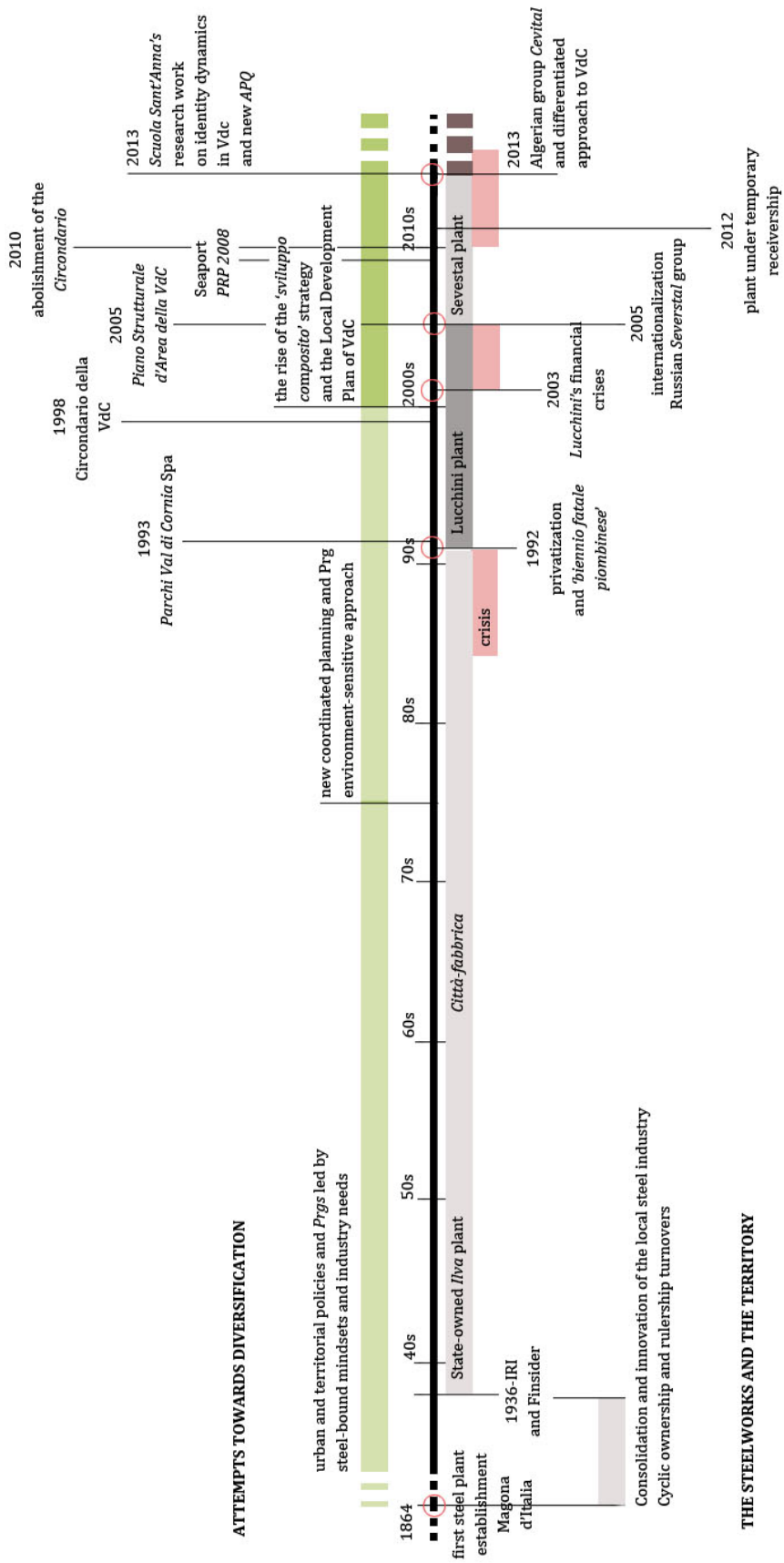
TIMELINE: The territory and the steelworks and attempts towards diversification

ATTEMPTS TOWARDS DIVERSIFICATION

urban and territorial policies and *Prgs* led by steel-bound mindsets and industry needs

new coordinated planning and Prg environment-sensitive approach

1864 — first steel plant establishment Magona d'Italia

1936-IRI and Finsider

State-owned *Ilva* plant

Città-fabbrica

40s · 50s · 60s · 70s · 80s · 90s · 2000s · 2010s

1993 *Parchi Val di Cornia Spa*

1998 Circondario della VdC

2005 *Piano Strutturale d'Area della VdC*

2010 abolishment of the *Circondario*

Seaport PRP 2008

2013 *Scuola Sant'Anna's* research work on identity dynamics in Vdc and new *APQ*

the rise of the 'sviluppo composito' strategy and the Local Development Plan of VdC

1992 privatization and 'biennio fatale piombinese'

2003 *Lucchini's* financial crises

2005 internationalization Russian *Severstal* group

2012 plant under temporary receivership

2013 Algerian group *Cevital* and differentiated approach to VdC

crisis

Lucchini plant

Sevestal plant

Consolidation and innovation of the local steel industry
Cyclic ownership and rulership turnovers

THE STEELWORKS AND THE TERRITORY

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In the first mid of the last century, Piombino soon became synonym for 'factory and working class': the impressive development of the plant, its deep entrenchment with the social sphere, as well as the steelworks' spatial and visual impact, the overlap of the urban and industrial tissues and the steel-bound territorial imaginary fostered by mass media, are just some of the elements, which have generated and fed over time the development of the stereotypical 'Piombino/steel' pair (Bianconi, 1970, reprinted ed. 2013; Bracci, 2012).

2.3.1 The development of the steelworks between the nineteenth and the twentieth centuries

The history of Piombino and its 'steel vocation' are rooted in the ageless Etruscan iron lore and craftsmanship.

The first steel plant established in Piombino in 1864 due to the strategic geographical position of the area in the middle of the Mediterranean Sea and its proximity to the several mines located in Isola d'Elba and inshore.

At this period, in fact, Italian steel industry was extremely underdeveloped compered to other European countries, in terms of both production rate and innovation, requiring therefore a real improvement in its competitive skills and technological infrastructure.

Almost since its establishment, the steelworks in Piombino has been characterized by a string of crises and innovative recoveries: between the 19th and the 20th centuries, the site stood out in the European and national scenarios for its outstanding and pioneering innovations of the production system. Meantime, the seaport and railway infrastructure witnessed a quick develop in response to new industry needs and increasing demands (as the supply of raw materials and commercial trade) (Bracci, 2012; Il Tirreno, 2014b)[92].

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[92] Between the nineteenth and the twentieth century, Piombino steelworks witnessed several crises as well as ownership and management turn-overs: the establishment of the first steel plant, *Magona d'Italia,* in 1864 by Alfred Novello; the establishment of *Ferriera Perseveranza* in 1865, which at the end of the century shifted to the *Credito Mobiliare Italiano* and was run by ing. Dainelli (which introduced significant innovations in production system and local infrastructure); later, the plant changed its name in *Stabilimento Metallurgico,* which closed before the IWW; the establishment of *Altiforni e Fonderie di*

Two events points marked the end of the 19th century: the establishment of a new plant by the English society *Spranger Ramsei*, which took over the *Magona* factory, and the creation of the *Società degli Altoforni e Fonderie di Piombino,* which established the second coke blast furnace and the first integrated steelworks of the Italian country (Bianconi, 1970, reprinted ed. 2013; Bracci, 2012; Lami, 2000). At the same time, despite the innovations implemented in the production system, the hard and unsafe working and living conditions fuelled the first trade unions and workers' mobilizations and strikes (Bianconi, 1970, reprinted ed. 2013; Bracci, 2012)[93].

In 1911 the *Società Altoforni Piombino* joined the *Ilva* group. During the First World War, the Bondi family took over all *Ilva* steel industry, creating *Ilva-Acciaierie di Italia* group.

As effects of the First World War and the financial crises that hit Bondi family, *Ilva-Acciaierie di Italia* was taken over by the State, at first by the *Banca Commerciale Italiana,* and in 1936 by the new public *Istituto per le Ricostruzioni Industriali (IRI)* and *Finsider*, which aimed at improving and renewing the steel production system.

2.3.2 The 'città-fabbrica' between the '50s and the '80s

After the Second World War, the '50s decade opened to a new era, marked by a process of re-construction[94] and re-innovation of the steelworks guided by the *Sinigaglia recovery plan* (promoted in 1948 by the national government), as well as by the increasing presence and struggle of workers and trade unions (Bracci, 2012).

Piombino, at first under the ownership of Benini family in 1897 and later, since the beginning of the 20th century, under the the Bondi family, which implanted the first integrated steelworks (Bracci, 2012; Bianconi, 1970, reprinted ed. 2013; Il Tirreno, 2014b, Lami 2000).

[93] In 1910 and 1911 the plant employed about 2.500 workers.

[94] During the IIWW, the port and about the 70% of the plants' structures were destroyed (Bracci, 2012; Lami, 2000).

Piombino: the *Magona* plant (the first established in the area; *Lucchini*'s workers
in the '90s; the blust furnace (Source: Il Tirreno)

The '60s Piombino landscape may be pictured as a recognized and solid steel industrial town (Lami, 2000): the massive steel industry expansion crowned Piombino as a significant economic catalyst to Val di Cornia, capable to attract a huge quantity of labour force into the town. Such dynamism generated an impressive demographic and urban evolution, as well as the sprawl of the urban tissue and new working-class neighbourhoods. In fact, in the '60s the *Ilva* plant by itself employed about 6.000 workers, while steel production rate grew up to almost one million of tons per year.

In 1961 the *IRI*-run *Ilva* group expanded over new steel plants across the country, turning its name into *Italsider*. The new State-run institute planned to implement several development projects at local level, in order to reorganize its main sites, so as to reinforce and support the national steel production system. At this period, a new blast furnace (the biggest at European level) was implanted in *Ilva/Italsider* Piombino industrial site, leading in turn the steel production potential of the plant up to 2 millions tons per year (even if the real production settled around 1,5 millions tons).

Moreover, in 1960 the *Dalmine* group established a new steel factory in the area, in addition to the *Ilva/Italsider* and *Magona* plants (Il Tirreno, 2014b; Lami, 2000): Piombino was quickly and deeply turning into one of the biggest steel production sites at European level.

Between the '60s and the '80s, the *Ilva/Italsider* production planning moved the focus of its specialization on the production of special steel and long products, besides carrying out several processes of re-innovation of the production system.

In this period, the local steel industry (meant as the whole complex of plants and satellite activities) was employing around 12.000 workers (Bracci, 2012).

Over these decades, the State-run steelworks has been gaining further prominence over the area, so as to influence, and even shape, the whole local territorial system, including the socio-economic, cultural and political sphere.

Bracci (2012, also pagina99a) describes in detail the '60s Piombino landscape: over this decade, the political sphere permeated the industrial one, and vice

versa, so as to mix up entrepreneurs and parties' needs and mindsets; the presence of the steelworks, as well as its territorial impacts, became strong and pervasive (visually and spatially) due to a short-sighted approach to urban planning and industrial area management, which led the industrial tissue to overlap the urban one; the prevalence and expansion of the steel industry let no room to the development of neither significant local entrepreneurship nor distinctive competitive expertise and skills in other sectors.

In addition, throughout the 20th century, the growth of the steel industry 'imposed' itself on the local development dynamics as a social model, so as to address and influence the ambitions and the plan of life of the new generations: *Ilva/Acciaierie* and *Magona* steelworks were indeed perceived as the unique and main sources of opportunity and decent future thanks to certain salary and stable work. Meantime, working class and trade unions strengthen their presence, becoming a key feature of the local cultural and social spheres.

Indeed, as by Bianconi (1970) and his analysis on the rise of the working-class, and Bracci (2012) and his exploration of the local 'steel' history, at this period Piombino was envisioned as the '*città-fabbrica*', which Bracci defines as an enclosed, self-sufficient and steelwork-bound entity, which lacked of any exchanges between differing life-styles.

Furthermore, due to its massive prominence over the territory, *Ilva* plant used to be commonly and familiarly called '*la fabbrica*', notwithstanding the presence of other steelworks in the area (Bianconi, 1970, reprinted ed. 2013; Lami, 2000). Between the '60s and the '80s, indeed, the State-run *Ilva* has offered in a variety of educational and cultural opportunities to the workers and their families as well as a range of leisure entertainments. These services used to constitute the only form and source of cultural and social incentive for the local community (and the new generations): the steelworks acted as a supplier for the workers' families of a wide array of free services as well as new chances (such as social and cultural associations, sport centres, organized journeys, theatre activities) (Bracci, 2012). As depicted by the interviews carried out by Bracci (2012), at this period, the presence of any kind of cultural (or similar)

municipal department would have been redundant as well as unnecessary, because of the activities and services supplied by the State-run *Ilva* steelwork.

Meantime, the plant witnessed a string of management turnovers, as proved by the constitution of the *Acciaierie di Piombino SpA* run by *FIAT* and *IRI-Finsider* at the beginning of the '70s (which represented the first case of private participation in this public company), and the establishment in 1984 of the *Deltasider S.p.A.* (Bianconi, 1970, reprinted ed. 2013; Bracci, 2012; Lami, 2000).

2.3.3 The privatization of the Ilva steelworks and the workers mobilization over the '90s: a dramatic turning point

In the second half of the '80s, the increasing crisis of the steel sector marked a dramatic turning point in the development of the steel industry at Piombino and national levels, beside dragging Val di Cornia through a long and progressive declining process: over the '80s the *Ilva* plant labour force reduced from 8.000 units (at the beginning of the decade) to 4.000 workers (at the end of the decade), causing and fuelling strong trade union reactions. Indeed, in response to the shock, Ilva resorted, for the first time, to unemployment insurance measures, as *Cassa Integrazione Guadagni* (CIG), and social security cushion mechanisms (with the support of European plans and funding).

A new *Ilva SpA* constituted at the end of the '80s in order to rationalize the *IRI/Finsider* steel sector under crises. *Finsider* and *Italsider* soon disappeared and, between the '80s and the '90s, *IRI* started dismembering the whole Ilva system: for the first time, the State-run steel industry opened to privatization (Bianconi, 1970, reprinted ed. 2013; Il Tirreno, 2014b; Lami, 2000)[95].

This phase marked the beginning of a string of crises in the steel sector at European, national and local levels, which would have been characterizing the flowing of the last decades, besides impacting the common imagery and perception related to the steelworks and the working class (Bianconi, 1970, reprinted ed. 2013). In particular, the local scenario changed dramatically over

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[95] In 1995 Riva bought the Ilva Taranto plant (Bianconi, 1970, reprinted ed. 2013).

the '90s: in 1992 a gradual process of privatization of the *Ilva* plant began, which led, few years later, to the acquisition of the factory by the *Lucchini* group, which in turn became on of the biggest company in the Italian steel industry sector.

In the mid of the '90s, as effect of the crisis, the ex *Ilva/Lucchini* plant's labour force was reduced to about 2.200 employees, meanwhile the whole industry of Piombino registered a loss of about 6.000 jobs, compered to the previous decade (Comune di Piombino, 2007).

This dramatic and crucial phase has triggered many trade unions and workers' actions, struggles and mobilizations, which have marked the history of Piombino between the 1989 and the 1993. Workers and trade unions, in fact, strongly opposed to the privatization and re-structuring of the *Ilva* plant, to the job mobility and losses (as early retirement, *CIG* and layoff, which affected about 2.000 workers in four years) as well as to the dismissal of the recovery *Utopia Plan* (Bianconi, 1970, reprinted ed. 2013; Bracci, 2012; Lami, 2000)[96]: the most representative actions have been the '*13 days strike*' of 1990 and the well-known '*38 days strike*' of *Ilva*'s workers at the beginning of 1993[97].

These years are known as the "*biennio fatale piombinese*": at this period, in fact, the 'steel-bound'/'*piombinese*' identity was perceived and envisaged as opposed to the 'outsider' and 'outlander', which was mainly embodied by the *Lucchini* group, engendering for the first time a deep sense of detachment between the steel plant and the territory (Bracci, 2012).

Across this decade, while the steel production rate overtook two million tons per year, the already hard and precarious working conditions within the plant increasingly got worst due to the lack of maintenance and obsolescence of the production system (especially of the busted furnace) (Lami, 2000). Finally, after

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[96] The Utopia plan's objectives were to re-launch the national steel production through a set of localized interventions. In the particular case of Piombino, it aimed at moving the plant to a new site out of the town, in order to create a new innovate factory and production system, and at clearing and recovering the old industrial areas. The plan was dismissed due to the lack of national financial resources and to its incompatibility with private industrial needs, both at national and European level, and the interests connected to the privatization of Ilva (Bianconi, 1970, reprinted ed. 2013; Bracci, 2012; Lami, 2000)

[97] In 1993, after a first referendum, ended with the refusal by workers and trade union of the Lucchini re-structuring plan, the strike concluded with a second referendum, during which the plan was approved 'in grief' by a slight majority.

several (fatal) accidents in the work place, thanks to trade unions and workers' pressure, the basted furnace was completely renovated and a new security plan implemented (Lami, 2000; pagina99, 2014a).

2.3.4 The internationalization of the Lucchini/Severstal plant in the twenty-first century

The '90s dramatic crises and struggles fed a new awareness amid the local administration and the community, unveiling the urge to re-think the territorial development pattern as well as calling into question the predominance of the steel industry over other and different sectors (Bracci, 2012).

The phase of re-structuring and re-innovation of the steel production system, together with several new institutional attempts toward local economic 'diversification' were interrupted in 2003 by a new economic and financial crisis, which shocked the *Lucchini* group, moving one more the focus of the public attention toward the future of the steel plant[98].

In the meantime, moved by the environmental concerns relatively to the critical levels of air pollution (especially in the *'Cotone'* neighbourhood), the local administration through the *Ordinanza comunale n.24*, guided by the then-mayor Gianni Anselmi, *imposed*[99] on *Lucchini* group the restructuring and renovation of the coke-oven plant, in order to reduce and restrain the air pollution emissions and the environmental impacts of the steelwork.

In 2005, the economic crisis of *Lucchini* 'ended' in the sale of the 60% of the steel plant's quotes to the Russian *Severstal* multinational, considered one of the biggest industrial group of the steel sector.

A shared feeling of insecurity about the future as well as a sense of fragility and scepticism has characterized the plant's ownership turnover and internationalization. Once more, the crisis forced local stakeholders to reflect

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[98] Meantime, the *Lucchini Siderurgica* group was transformed in 1998 in *Lucchini SpA.* In 2003, under the leadership of Enrico Bondi, it turned into a financial holding, whereof Piombino steelworks constituted a Business Unit named *Lucchini Piombino SpA*.

[99] '*Ordina*' in the original form.

about the role of the factory and its relation with the territory, as well as to review how 'steel' was experienced and perceived among community. Indeed, these needs have been fed over the years by a common and widespread feeling of disappointment and wariness, as well as by a series of frustrated expectations. Indeed, during '*Lucchini* age', the steelworks has been more and more perceived among local community and administration as abdicating its function as the main source of cultural, social and economic opportunities, uncovering a deep gap between Lucchini management's interest and the local needs.

Notwithstanding, some forms of bond to the steelworks persisted in Piombino, inasmuch as 'steel' kept to be commonly acknowledged at as the main, as well as necessary, economic pillar of the territorial system, albeit in a weaker way. The shared sense of wariness toward the steelwork, accrued during the negative experience of the *Lucchini*'s ownership, disappeared, at least in part, thanks to the promising strategic business plan developed by the Russian *Severstal* group. Indeed, the arrival of *Severstal* engendered new concrete and high expectations among local institutions and community (Bracci, 2012; pagina99, a,b): as described by several economic and institutional stakeholders during the interviews carried out by Bracci (2012) in 2006, in a scenario characterized by uncertainty and concern toward the future, a renewed common hope for a fertile and positive relation between the territory and the steel industry spread among local community and administration. Consistent with these expectations, indeed, the *Severstal* business plan aimed at enlarging the blast furnace capacity so as to increase the steel production up to three millions tons (Il Tirreno, 2014b; pagina99, 2014a).

Therefore, despite the dramatic decline and crisis of the sector and the reshaping of the steelworks, steel industry kept to be perceived as the main and central economic sector of the local system, whereas the 'diversification' strategy (albeit perceived as inevitable) was re-scaled mainly to a supplement and complement policy.

Notwithstanding the prevailing and shared 'hope for a new age', the privatization of *Ilva* in the '90s and the internationalization of *Lucchini* in the 2000s definitively ended the strong (almost 'symbiotic') interrelation between the industry and the territory: since its establishment, *Lucchini* plant was perceived in a conflicting way, as necessary to local development as well as detached from the local system, incapable therefore to generate additional and proactive impacts in the social and cultural spheres. More in detail, the private ownership of the plant fell short of local expectations (of the local institutions as well as of the community) as it proved to be unable to express a broader and sincere interest and concern toward the development of the territory, as well as to ensure in Piombino the 'positive territorial feedbacks' that the State-owned industry used to engender thanks to the implementation of a set of social and cultural policies.

Apparently, these conflicting perceptions were not sufficient to encourage a radical change in the local *forma mentis*, both at institutional and community levels in order to adapt and shift to a new paradigm or to renounce to backward-looking and nostalgic expectations. This local enclosed and rigid mindset has been favouring over the last decades the prevalence of a 'resistance' approach to local development, instead of a 'proactive' one (pagina99, 2014a,b).

In 2010 a further financial crisis hit the *Severstal/Lucchini* plant, crashing the local renewed hopes about the future and opening a new and long phase of sale negotiation and re-structuring of the steelworks. The split-up of Lucchini and Severstal led in 2012 to declare the financial insolvency of the *Severstal* group and to put the plant under temporary receivership, administrated by Pietro Nardi.

Such shock accrued once more the local feeling of diffidence and disillusion toward the 'private ownership', the 'outlander' and the 'outsider', signing further distance between the 'territory' and the 'steelwork' as well as highlighting the vulnerability of the local system. However, whilst steelworks kept to be perceived as a necessary feature to recovery as well as a crucial pillar

of the local economic system, a pervasive and shared sense of alarm and disappointment further fuelled the advocacy for new and alternative local development policies and strategies. These conflicting feelings once more deeply spread among large part of the community, including several institutional actors and entrepreneurs.

Moreover, the Val di Cornia's on field analysis has uncovered a negative feeling of wariness toward the local administration (and 'politics', in general) as well as frustrated expectations growing among several entrepreneurs, which perceived institutional political goals and actions as too narrowly focused on the main steel plant.

As described in the next paragraphs, two different realms and conflicting perceptions seem to coexist in Piombino in this period: one bounded to (or even caught up in) a mainstream and backward-looking definition of 'steel(works)'; the other open to new, innovative and alternative ways of thinking 'steel(works)' as well as affecting other fields.

Indeed, accrued by the global and national economic crisis, the decline of the last decade has been affecting and impacting several sectors, other than the steel one, such as tourism, agriculture and seaport activity (which strictly connected to the steelwork).

In the meantime, in order to sustain Piombino recovery and face the crisis, the local and regional administration, guided by then-mayor Gianni Anselmi, together with the regional government and the Port Authority started pressuring on and negotiating with other institutions at several levels: the supranational one, in the framework of the *UE Steel Action Plan,* carried out by the European Commission, and the national one, through the *Accordo Programma Quadro (APQ)* signed by regional and local authorities (included the Port Authority) as well as the national government.

The APQ has been signed in accordance to the art. 27 of the *Decreto-legge n. 43-26 aprile 2013* (converted into the National Bill n.71/2013), which listed Piombino as an *'area di crisi industriale complessa'*. The *APQ* should allocate significant financial resources (almost 200 millions of euro allocated by the national government) for the steelworks' recovery and the clearing of the old

industrial areas, the seaport and local infrastructure development, as well as for the innovation of the steel production system and its satellite activities.

In this dramatic scenario and consistent with the *APQ* guidelines, over the last two years, the temporary receivership guided by Nardi has been leading the steelworks (and its almost 2000 employees) through a new, complex process of business restructuring, negotiation and sale. Moreover, the persistence of the crisis imposed the extinguishing of the blast furnace *Afo4* in April 2014.

Once again, a new state of uncertainty about the future has been feeding the dual and conflicting local attitude toward the steelworks and its management as well as the local administration: the negotiation phase has been characterized by a string of false promises, frustrated expectations and boosted illusions, further fostering the common feelings of diffidence and resistance toward the 'outsiders'. Indeed, at the beginning of 2014, a new acquisition plan advanced by the Arab society *Smc*, guided by Khaled al Habahbeh, completely changed the negotiation scenario, opening to a 'mysterious' and (even too) notable opportunity (Il Tirreno, 2014p). The Arab project aimed, in fact, at the complete acquisition, re-localization, restructuring and recovery of the steelworks as well as the safeguarding of jobs. Over the spring 2014, the "Arab dream" soon turned into a "nightmare" (Il Tirreno, 2014 q): despite the keen attitude of the local administration, in fact, Nardi warned about the vagueness of the offer as well as about the risk to court a dangerous 'bluff' and fraud, insomuch as the *Procura della Repubblica di Livorno* started to investigate on Khaled and the *Smc*'s activity (Il Tirreno, 2014s). These events irremediably affected the credibility and reliability of the Arab project. Indeed, Nardi's concerns soon revealed to be valid and the *Smc* plan was definitively excluded from the negotiating table, strengthening the deep sense of alarm and wariness among the local community (Il Tirreno, 2014r). This experience opened to a new negotiation phase, characterized by prudence, low profile and limited expectations.

Finally, the negotiation and sale deal ended in November 2014 in the selection of the business plan put forward by the Algerian *Cevital* multination group (specialized in agribusiness) to the detriment of the Indian group *Jindal South West* (IlSole24Ore, 2014b,c; Il Tirreno, 2014g; La Repubblica, 2014b,c,d).

Consistent with the *APQ 2013*, the selection process was conducted in accordance to specific criteria, such as the promotion of a sustainable and environmental-sensitive approach to steel production as well as of a long-term and diversified territorial development perspective on, in addition to give priority to a prompt restart of the steel production and the safeguarding of the jobs (included the ones connected to the satellite activities).

More in detail, the resources, which *Cevital* aims at allocating on the steelworks recovery as well as in additional economic activities, should amount to about 400 million euro: indeed, its business plan aims at re-organizing and re-innovating the steel production system of the new '*Piombino Siderurgica*' plant through the establishment of two electric furnaces, in order to safeguard the re-employment of the almost 2000 *Severstal/Lucchini*'s workers and to maintain the production rate up to two millions tons per year (La Repubblica, 2014c,d; Il Tirreno, 2014i). Moreover, consistent with the differing and multi-sector nature of the group[100], *Cevital* plan intend to promote a broader approach to the economic recovery and development of Val di Conria, encouraging additional agribusiness activities, supporting the creation of new employment (and especially of female occupation) as well as strengthening the logistic hub of Piombino, including its seaport in strategic Algerian-Europe trade routes (La Repubblica, 2014b; IlSole24Ore, 2014c; Il Tirreno, 2014h,i,n).

Notwithstanding the past and recent criticalities and negative feelings, the whole Piombino and Val di Cornia's community (included local institutions and trade unions) has welcomed *Cevital* plan with optimism and satisfaction (Il Tirreno, 2014i).

However, in the meantime, also Magona/ArcelorMittal is tackling a deep crisis, which has led the company to suspend several production lines and to reshape the labour force, resorting to the *CIG* and other social security cushion mechanisms (as '*contratti di solidarietà*', which affect the almost totality of its 560 workers): its destiny, which is strictly interrelated to the future of the

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[100] Cevital group includes a wide array of societies, which encompass several sectors: the agro-industrial (agriculture, renewable energy, shipping and trade by sea); the automotive sector (the distribution of heavy vehicles, public works equipment and auto); the building sector and multimedia; the industrial sector (glass production, electronics, raw materials), the retail and logistic sector (Il Tirreno, 2014h).

Taranto steel industrial site, is still uncertain as well as threatened by probable reshaping and sale deals, or even closure and dismissal plans (ilSole24Ore, 2014a)[101].

2.4 Territorial '*ferment*' and '*weak signals*' in Piombino and Val di Cornia

The crisis, which shocked Piombino and Val di Cornia at the end of the '80s, unveiled the vulnerability of the steel-bound socio-economic system.
It opened, for the first time, to debate about the local multifaceted vocations as well as about the possible future scenario of the territory. Nonetheless, over the last decades (not even during the deep crisis of 2005 and 2012), a real alternative development model failed to emerge: while the implementation of an additional development strategy fell short to impact in a significant way the local dynamics, it has nonetheless allowed to lay the foundations for a future debate, representing anyway a significant advancement toward change and 'diversification'.

From the '90s on, the local institutions have begun to shift, at least in part, the focus of their political goals toward the appraisal of sectors 'other than the steel one' (such as the tourism one and the seaport activity). Some common goods as the sea, the cultural heritage, and the natural and archaeological parks started to acquire new relevance within public debate as well as planning policies. It allowed to implement between the '90s and the 2000s some pioneering development projects as well as new and more inclusive local planning policies. Unfortunately, the string of economic crises and shocks, which has hit the steel industry and the local system since the '80s, have been hindering the effort of several private as well as institutional actors, aimed at encouraging a broader local economic variety. This trend has been weakening and jeopardizing the efficiency and the long-term sustainability of the planning measures as well as continuity within the public debate about alternative development pattern.

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[101] ArcelorMittal together with Marcegaglia group aim, in fact, at the acquisition of the *Ilva-Taranto* steelworks. It would imply the dismissing, and probably the closure, of ArcelorMittal plant in Piombino (il Sole 24 Ore, 2014a).

Indeed, public attention as well as development policies have commonly been perceived as led by steel-bound and focused mindsets as well as narrowed to the steelworks needs and shocks. Such approach has been feeding a stereotypical and limited view of the territory, besides diverting public resources from 'other' goals and development patterns (Bracci, 2012; pagina99a,b; Stile Libero, 2014c). Notwithstanding discontinuities and postponing within the 'alternative' public debate, from the '90s on, the need to rethink the territorial development priority as well as the development strategy of Val di Cornia started to be perceived as an unavoidable and central issue.

In the next sections, the research goes through a selection (even if not exhaustive) of local public as well as private development projects and activities, which have clearly allowed to set free, with mixed success, new and alternative paths for the local development. More in detail, it explores some 'spontaneous' experiences, often unnoticed within public debate, which uncover innovative territorial *'ferment'* as well as '*weak signals'* of change in the local development paradigm, disclosing new '*alternative imageries*' of the territory and '*gateway'* for new territorial trajectories to be implemented.

2.4.1 Attempts of 'diversification' through territorial and urban planning and public debate over the last decades

Until 1975, the Val di Cornia's urban and territorial policies and planning goals were led by steel-bound mindsets and industry needs, so as to manage the plant enlargement, the demographic growth and the urban sprawl. This narrow approach to urban and territorial planning has resulted in the implementation of a set of sector-driven and uncoordinated local plans, the *Piani Regolatori Generali (Prg),* and urban policies, in turn engendering the overlap of the urban and industrial tissues. These measures have been often designed in response to the steelworks needs and priority, and overlooking other social, environmental and cultural criteria and concerns (Bracci, 2012; Circondario VdC, 2007).

The rise of coordinated planning between the '70s and the '80s

Fed by a fervid regional and national debate, in the '70s the town councils of Piombino, Suvereto, San Vincenzo and Campiglia M.ma acknowledged the need for further coordination in urban and territorial planning, so to achieve new territorial goals and promote innovative development strategies and actions, apt to embrace the economic, the social, the environmental and the cultural sphere in a more systemic way. In 1975, this redesigned approach led to establish a new "*ufficio di piano*" of Val di Cornia as well as new political and technical committees ("*comitato politico*" and "*comitato tecnico*")[102].

In 1979 the new planning system led to the approval and implementation of the coordinated *Prg,* designed from the future territorial scenarios pictured during the first '*conferenza economica comprensoriale*' of 1976 (Circondario VdC, 2007).

In order to deal with the local 'excess of specialization' as well as with unbalances in the local production system of the valley, the coordinated *Prg* was modified between the '70s and the '80s in order to identify new industrial areas and develop the SME sector (Circondario VdC, 2006).

Over the '80s, the coordinated planning system enhanced so as to include the municipalities of Monteverdi Marittimo and Sassetta, while some of the *Prg*'s goals were redesigned. Thus, according to the new regional legislation, in 1986 the territory of Val di Cornia was officially identified as the "*Associazione intercomunale 25 'Val di Cornia'*".

Notwithstanding the significant improvements in territorial planning coordination and integration, at this period, the industrial vocation of Piombino and Val di Cornia was far from being called into question. Indeed, the new coordinated planning system fell short of the apt tools to correctly design and manage the industrial area, which in turn lacked of any type of internal

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[102] The "comitato politico" dealt with the political administrative strategies and their compliance with technical provisions; the "comitato tecnico" was in charged of the analysis, project and elaboration of the technical planning tools; the "ufficio di piano" was the administrative office and the operational instrument of the system (Circondario VdC, 2007).

functional zoning (being identified as an indistinct whole), as well as any form of schedule and organization of the possible and planned interventions (Circondario VdC, 2006).

The dramatic change in the '90s and the first advocacy for 'diversification'

Something dramatically changed between the '80s and the '90s as an effect of a new steel industry crisis, which forced once more the local administration to deal with the manifest vulnerability of the local system. For this purpose, the inter-municipal association's intent was principally to implement new development measures and policies, aiming at: tackling the rising unemployment; reshaping and lowering the industrial commitments in favour of a new environment-sensitive approach (in terms of resources' protection and appraisal); strengthening the local infrastructure (seriously underdeveloped); and finally supporting the development of 'other' sectors, as the agriculture and the tourism. In order to achieve the goals, three strategic priority sectors of intervention were identified: the communication and the transport infrastructure, the environment and the landscape, the urban and industrial areas.

Planning coordination allowed the inter-municipal association to identify common strategies in order to implement a set of integrated and diversified pilot projects, which should have functioned as main territorial planning guidelines for future actions.

With the exception of Sassetta and San Vincenzo, the new coordinated act and *Prg* were approved and implemented between the end of the '80s and the '90s by the town councils of Val di Cornia.

Over the '90s, the *Prg* adopted the planning guidelines provided by the *Utopia* recovery plan (despite its dismissal). Its modification, approved in Piombino between the 1994 and the 1997, aimed at enlarging the port infrastructure, reshaping the industrial area and redesigning its relation with the urban as well as protecting and appraising local resources. These goals were framed in order

to respond to a renewed environmental concern and sensitiveness, as well as to the rising need for a new 'diversification' strategy and the dramatic decline of the industry sector. For the first time, the local *Prg* was structured so as to: re-organize, reshape and reduce the industrial areas (internal zoning), releasing a large amount of space for the implementation of new and alternative projects and activities; pay a specific and central attention to the landscape and the environment as well as to the archaeological, historical and cultural resources of Val di Cornia; encourage their protection and appraisal, framing a special focus on the local parks system (about 8.440 he) (Circondario VdC, 2006, 2007; Comune di Piombino, 2007)[103].

The planning measures aimed at the industry reshaping generated the backlash of the recent-established *Lucchini* group against the local administration, which in turn rejected the majority of the requests and complains expressed by *Lucchini* during the public observation phase as provided by the planning process.

The Parchi Val di Cornia S.p.a.

This renewed approach to territorial policies led in 1993 to the creation of *Parchi Val di Cornia S.p.a.*, a pioneering territorial experience, acknowledged at national and international level as an 'innovative practice' in park management and planning: this project has been able to generate socio-economic, as well as political, cultural and environmental impacts on the territory, besides joining public and private sectors and participation at national and local levels. Originally, in fact, the *Parchi* was born as a public-private society in charge of the management, protection, promotion and appraisal of the natural and archaeological parks and museums of Val di Cornia, through one integrated and coordinated system, and endorsing the territorial imaginary of '*Costa degli Etruschi*' (Sbrilli, 2009a)[104].

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[103] In the *Prg* of the 90s the industrial areas, which in the '80s *Prg* amounted to 9.630.000 m^2, were reduced of 3.198.000 m^2 (Circondario VdC, 2006; Comune di Piombino, 2007).

[104] The *Parchi Val di Cornia* includes: Parco Archeologico di Baratti e Populonia, Museo Archeologico del

In the scenario of steel crises and workers' struggle, this initiative responded to the need expressed by the local administrations to rethink the territory and its own vocation in a more complex and multifaceted way: it aimed at offering an alternative image of the area -other than the industrial one- and at generating new positive socio-economic impacts on the territory, even in terms of employment. In particular, the *Parchi* was supposed to become a relevant and leading actor for the local development system, besides encouraging new quality tourism and collaboration with universities and other education systems.

Part of the first success of *Parchi Val di Cornia* derived precisely from the action of the coordinated territorial planning system, which triggered its creation, encouraging the formulation of a shared territorial vision and institutional will.

This innovative coordinated planning system was strengthened in 1998 by the creation of the *Circondario Val di Cornia*, the inter-municipal institution in charge of the urban and territorial planning of the area. The *Circondario* aimed at embodying and spreading a new, shared and sustainable vision of the territory, and to move the focus of the local development policies from the protection of the local resources towards their proactive (even economic) appraisal and valuing (Bracci, 2012)[105].

In 2004, due to a change in the national legislation, the *Parchi* turned into a public company (Sbrilli, 2009b), losing its main successful and distinctive character and its flexible feature, until turning today into a 'broken mechanism' (IlSole24Ore, 2013). At present, the efficiency of the *Parchi* model has been call into question due to its lack of financial autonomy (it relies entirely on public financial resources), the imbalanced management of its resources as well as its crystallization into a 'success path' designed twenty years ago and so no longer fitting to the present dynamics. Therefore, the strength, which used to derive by

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Territorio di Populonia, Parco Archeominerario di San Silvestro, Parco Costiero della Sterpaia, Parco Costiero di Rimigliano, Parco Naturale di Montioni, Parco Forestale di Poggio Neri Centro di documentazione di Villa Lanzi, Rocca di Campiglia and Museo del Castello e della città di Piombino. (http://www.parchivaldicornia.it/index.php)

[105] The Circondario included Piombino, Campiglia M.ma, Sassetta, San Vincenzo and Suvereto.

its underlying shared territorial vision, is dramatically weakenin [106] . Nevertheless, over the last two decades, the number of visitors has increased over the last fifteen years of the 155% (in 1993, it amounted to around 163.000 presences); moreover, the *Parchi* employs today about 65 people and collaborates for the development and promotion of its activities with about 34 different enterprises (pagina99, 2014b).

The map of the *Parchi Val di Cornia* (Source: http://www.parchivaldicornia.it)

[106] According to its statute and some innovative financing mechanisms introduced at the beginning of the 2000s by the then-president Zucconi, the main financial resources are supposed to derive by municipal quotes, as defined by the annual *Conferenza dei Sindaci,* and mainly by parking fees (and other services). These resources were supposed to be re-invested in the management and valorisation of the local parks, museums and other local resources, and in part to be re-distributed between the five municipalities, which constitute the society. Actually, these procedures are not respected: a huge part of the parking fees are directly (and apparently not equally) attributed to Piombino, missing furthermore the main and original objective of the *Parchi*, which is to reinvest in and valorise local resources and heritage, generating positive socio-economic impacts within the territory (IlSole24Ore, 2013; Il Tirreno, 2014d,e).

The rise of the 'sviluppo composito' strategy in the 2000s: the Local Development Plan and the 'Piano Strutturale d'Area'

A quite optimistic and positive scenario could be pictured to describe the end of the last millennium. At the end of the '90s, the success of the *Parchi* as well as the dramatic crisis of the steel sector fed a growing call for 'change' and 'diversification' among local administrations, marking, at least apparently, a turning point in the institutional approach to local development policies.

In their analysis of the local economic landscape and evolution, Burgalassi et al. (2009) describe the rise, in the 2000s, of a 'composite, integrate and multi-polar development', especially due to the growth of the tertiary and tourism sector, which encouraged a new spatial distribution of the economic activities, turning the Piombino-centric territorial setting of Val di Cornia into a polycentric configuration.

However, a comprehensive, long-term and shared strategic vision was still missing, hold back by the persistent 'state of emergency' in the steelworks sector, as well as by conflicting and unresolved concerns toward the future of the steel plant and the territory (Bracci, 2012).

Due to changes and evolution in the national and regional legislation, and consistent with a new definition of '*governo d'area vasta*', in 2001 the *Circondario* began to frame a new and innovative coordinated plan, the *Piano Strutturale d'Area 2005-2020*, which included the municipalities of Campiglia Marittima, Piombino e Suvereto. The plan, implemented in 2005, aimed at providing a new, shared and sustainable vision for the local development in order to encourage a more inclusive policy-making process*.*

The strategic measures provided by the plan responded to the guidelines identified by the '*Local Development Plan of Val di Corni*a', carried out by the *Istituto Regionale Programmazione Economica della Toscana - IRPET* in 2002 (Circondario VdC, 2007) and commissioned by the *Circondario*.

The *Local Development Plan* clearly (and for the first time, formally) expressed a diversification development strategy, in addition to strengthen the idea of

'sustainable development' as a central strategic element for local territorial policies.

This change of perspective may be considered as an important step along the acknowledgment of the hybrid vocation of the area: indeed, the plural nature of Val di Cornia used to be barely perceived by the different municipalities of the area as a territorial advantage and a strength factor.

The Local Development Plan adopted this approach by recommending the '*sviluppo composito*' agenda (composite development). According to this strategy, territorial vocation should have enhanced so to embrace the service and quality tourism sector, the infrastructural development (as the seaport, highway and railway), the old industrial areas clearing, the urban requalification, the heritage valuing as well as the appraisal of the rural areas. At the same time, this vision kept acknowledging the central and vital role of the industrial sector, as well as its expertise and skills, by supporting SME activities and the identification of new industrial areas.

The *Piano Strutturale* has adopted all these elements in its main strategic goals and priority, as well as acquiring the '*sviluppo compositio'* and the sustainable development agenda as its two main guidelines: the Plan, in fact, identified the industry sector as the engine of the local economy, besides acknowledging the urgent need for further innovation, as well as advocating for the appraisal of other territorial vocations, and for a 'multi-sector development model'[107].

Moreover, the regional *Piano di Indirizzo Territoriale (PIT)* of 2010, and its description of the relation urban/rural tissues, expressed a call for a new strategic approach to Val di Cornia, which should allow to develop a new vision able to value, rather than obfuscate, the knowledge base of each element ('addend') of the system, besides supporting Piombino as the main hub, capable of defining the development agenda and the opportunity for the valley.

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[107] According to the Plan, a scenario of Piombino without the steelworkswas considered "unreasonable", at least in the short term (Circondario VdC, 2007).
Should be underlined, that despite its objectives, the positive '*scenario di piano*' (the future perspective) delineated by the plan for 2020, until now has not been coherent with the real evolution of the territory: the scenario elaborated for 2020 predicted a reduction in agricultural employment; the maintenance of the employment rate in the industrial sector and a development of 'other' sectors.

Actually, a real implementation of these measures delayed: indeed, the *Local Development Plan* has never had the sufficient time or public attention to be applied and acquired in its main features by the local administration (and even community) due to the insurgence in 2004-2005 of the *Lucchini* plant's crisis. Moreover, while approved in 2007, the *Piano Strutturale (PS)* took many years to be implemented at each municipal level (by means of the elaboration and approval of the *Regolamento Urbanistico-RU* and the *PRG's* modifications): all three *Regolamenti* were finally approved between the 2011 and the 2012, at the beginning of the *Severstal* crisis and eleven years after the beginning of the planning procedures. This long-lasting process and the numerous modifications of the plans over the years have altered and weakened the coordinated nature of the vision supported by the plan.

In this scenario, the *Circondario* has represented a relevant and central tool for encouraging new forms of networking governance and coordinated planning, until its abolishment in 2010 by means of a national law, marking the end of a long and innovative practice of coordinated local planning. According to on field interviews to several institutional actors, this event has had a significant part in the weakening of the local territorial system, as well as representing a step beyond in the evolution of Val di Cornia and a loss for the effectiveness of future territorial activities.

Debating 'Acciaio' and community awareness

At the beginning of the 2000s, despite the persistent state of uncertainty about the future of the steel industry, the urge to re-think the development pattern as well as to acknowledge the multifaceted vocation of Piombino and Val di Cornia was just partially perceived at local level: as by Bracci (2012), the idea of 'diversification', which spread mostly among the local administration by as well as outside the territory, was barely acquired and shared by local community.

In 2010 the novel "*Acciaio*" by Silvia Avallone opened and fuelled a burned public debate about the stereotypical 'steel' identity of Piombino, at least as perceived and pictured by the 'outlanders'. In 2012, the movie "Acciaio", directed by Stefano Mordini and based on the novel, has further fed the discussion.

The story tells about the everyday life of two teenagers in summer 2001, during the 'Lucchini's age'. The novel takes place in a fictional peripheral worker's neighbourhood of Piombino, which the *Piombinesi* have identified as the '*Cotone*' and '*Poggetto*' neighbourhoods.

The narration includes many controversial descriptions of several sensitive issues, as the quality of life in the workers' blocks, the territorial socio-environmental impact of the plant, the hard working conditions (included fatal accidents in the work place) within the factory, the workers' home environment (often drawn as violent and *machista*).

In the novel, Piombino, the steelworks and their grey and grave descriptions are described in antitheses to the flourishing landscape of the Isola d'Elba, envisioned as a perfect realm as well as a place where to escape reality, so close but, apparently, out of reach.

The community of Piombino strongly rejected the rough portray drawn by Avallone, affirming the need and the desire to offer, despite everything, an alternative and less degrading narrative of the life in Piombino as well as of the steel plant itself. Actually, the scenario pictured by both the novel and the movie let no room to hope and positive feeling toward the future of the territory as well as of its denizens (especially young people).

The community of Piombino strongly rejected the idea of the 'steelwork' as synonym with violence, ignorance and degrade, as well as its hopeless and stereotypical description. Furthermore, some of the critiques pointed out by the inhabitants still express a sort of sense of 'moral obligation' and gratitude towards the 'State-run plant age' due to the services as well as the chances

Figure 2.6: The book cover of the novel "Acciaio" and the
poster of the movie "Acciao"

offered to the community during the '60s and '70, which have positively affected and addresses the future of many[108].

Furthermore, the *Piombinesi* also expressed the need not to be pictured by a steel-bounded identity, but to be defined by their complex and hybrid identity. In conclusion, many significant questions and claims on the local identity have emerged during the debate, opening a new space for the contestation and analysis on the local imagery, as perceived outside and inside the territory.

Trying to implement 'diversification': urban and territorial projects and planning in the 2000s

Despite the complex dependence and focus on the plant cyclic crises, from the '90s on, the local administrations have played a quite relevant role in defining a different development framework, aiming at dealing with environmental claims and containing the negative impact of the plant, reshaping industrial areas through a more sensitive approach to urban planning, encouraging (even if partially) new economic sectors as well as apprising the local resources. Several actions and projects have been implemented during the 2000s in order to accomplish with these goals across several sectors and fields, such as: the seaport and its enlargement; the agriculture and fish farming sectors; the quality tourism and the nautical sectors; the cultural and sport events and the requalification of the historic centre.

According to the interviews carried out by Bracci (2012) to some key institutional actors, whilst the '*sviluppo composito*' agenda inspired some of the actions carried out by the local administration over the 2000s, this approach has been developed more as extra and complement to the main 'steel' strategy, rather than be considered as an innovative, key and alternative development pattern.

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[108] These observations have been gathered by the newspaper review and by the work of Bracci (2012), as well as being supported by the critiques clearly expressed by several *piombinesi* during the official presentation of the movie 'Acciaio' (and the public debate between the audience and the movie director) carried out at the Cinema Arsenale of Pisa in 2013.

In order to support diversified development trajectories, several projects were included in the *Piano Strutturale d'Area (PS)* of Piombino since 2007. Moreover, consistent with the national legislation, they also aimed at redesigning the urban/industrial relation as well as to recover and value the old industrial areas (Circondario VdC, 2006, 2007) [109].

Consistent with the measures provided by the '90s *Prg*, since the beginning of the 2000s until today, these projects have been developed (even if not always successfully) by means of several modifications of the *Prg* in force ('*Varianti al Prg')* as well as by the elaboration of the *Regolamento Urbano*.

More in detail, over the 2000s, the local administration of Piombino has developed the project '*Città Futura*', aiming at redesigning the buffer zone between the urban and the industrial tissues as well as encouraging environmental and social transformations as means of urban requalification and citizen participatory processes in the *Cotone-Poggetto* neighbourhood (Comune di Piombino, 2009).

In addition, order to accomplish to the *Prg* and national requirements, the *Città Futura* project was intended so as to manage the clearing and recovery of the old industrial area of the '*Cantiere Siderco'*, acquired by the local administration in 2001: the area is a buffering zone between the industrial and the urban areas of about 30 he and located at the entrance of the town. The projects were expected to provide the town with a scientific and technological park and an enterprise incubator, as well as with the '*Parco del Ferro e dell'Acciao'*, which should have included a Museum and an archive dedicated to the history and the evolution of the steel industry, plant and craftsmanship.

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[109] In 2000 the Piombino industrial area, including its seaport, has been listed in the '*Piano Nazionale di Bonifica e Recupero Ambientale*' by the Ministry of the Environment as *'Sito di Interesse Nazionale' (SIN)*.
The projects described in this section, together with the seaport and infrastructure development plans, have been carried out in the framework of the *Progetto Piombino* (Piano Regionale di Sviluppo 2011-2015), the *APQ Piombino-Bagnoli* of 2007 and the *Accordo per la bonifica del SIN di Piombino* in 2008 (later revised and recently substituted with the *Decreto aree di crisi n.43/2013*, the national law 576/2013 and a new *APQ* in 2013) aiming at the release, clearing and recovery of the old industrial areas, supposed to be implemented thanks to the resources allocated by the European funding plans.

The project, which for the most part was not implemented due to the lack of financial resources, has recently been adopted by the new *APQ 2013* [110].

Over the last decade, the Port Authority and the local administration have successfully framed (at least, until today) the '*Complesso Integrato della Nautica*' project, in order to encourage the development of the 'sea-related' alternative vocation of Piombino as well as new forms of tourism (Comune di Piombino, 2011), as provided also by the Piano Strutturale d'Area.

Furthermore, this project intends to turn Piombino into a key nautical logistic hub, due to the attractiveness of its proximate coasts and its strategic location (next to Sardinia, Corsica and the Tuscan Archipelago)[111] and to the presence of the seaport as well as of a system of anchorages and marinas along the coast (as Baratti, Terre Rosse and Salivoli).

Indeed, according to the interviews carried out in in 2013, local administrators and technicians agreed on the fact that Piombino might be unable to compete in the nautical sector with other close destinations, at least in terms of sheer attractiveness, while it could stand out as a logistic node.

A new integrated nautical complex generate a whole new *filiera* in the nautical sector, in addition to attract new resources and create new jobs. It would allow to support a more solid development model, compered to mere tourism promotion. The project, which should create about 1.500 new moorings, is structured into two different districts, whose construction and management have been assigned through public procedures between 2012 and 2014 to two distinct private companies[112].

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[110] http://www.piombinocittafutura.it/home/

[111] Moreover, as affirmed by one of the interviews, nautical sector does not guarantee economic growth per se, but it generates development and employment by mooring, maintenance and repairing activities (that is when the boat is stationary and docked, especially during the winter): for example, a15m boat can generate about 5/7.000 euro per year.

[112] The *Poggio Batteria* District, which should host about 800 ships of 10-40m and the localization of the main port services, and assigned to the Society *"Porto Turistico dell'Arcipelago"* (Florence); and the *Foce del Cornia* District, assigned to the Cooperative "*La Chiusa Pontedoro*" (Arci Pesca and Lega Navale), which should host 800 boats under the 10m, a fishing port of about 57 mooring, a fish market and am area of 10h to the development of shipbuilding and maintenance activities

Furthermore this project intends to respond to the exigencies of the local administration to further valorise the 'sea' as a key resource so as to promote the sea economy *filiera*. The nautical districts, in fact, aim also at encouraging the fishing activity by means of the creation of a new fish market and a new bigger fishing port.

Moreover, triggered by some success private initiatives, the local administration intends to encourage the development of the fish-farming sector and design a new plan in order to manage the sector expansion and promotion, as well as the assignation of the fish-farming areas. To this purpose, a new zone apt to this activity has been identified in the sea of the Follonica Gulf.

Intensified by the global crisis, another deep shock has been hitting the Val di Cornia from 2011 on, seriously threatening and impacting the future of steelworks. The *Severstal/Lucchini* Group failed to successfully implement the business plan proposed in 2008 as well as to satisfy the local expectations.

Once acquired the urgent need for change in the development pattern, the town councils of Val di Cornia (Campiglia Marittima, Piombino, San Vincenzo and Suvereto) together with the Port Authority, have commissioned in 2012 to the *Scuola Superiore Sant'Anna* of Pisa the research "*Dinamiche identitarie, trasformazioni economiche, prospettive strategiche: il caso di Piombino e Val di Cornia*", in order to analyse the territory's identity and identify a new possible development perspective*.* The research (Sant'Anna, 2013) investigated the complexity of the scenario of Val di Cornia, highlighting the multiple vocation of the area, besides offering an additional innovative gender approach to the territory's analysis as well as an alternative focus on foreign immigration. The study uncovered a widespread sense of wariness toward the local public administrations as expressed by several stakeholders, together with a growing call for more openness to external business as well as support for the steel-bound satellite activities and the SME in other sectors, especially in terms of

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The Port Authority maintains the property of the areas, so as the management of the fishing port. The two societies are in charge of the elaboration and implementation of the respective *Piani Regolatori Portuali* and of the management and promotion of each district thanks to a 90 years-concession

training and innovation. The co-existence of two conflicting realms has been observed in the industry sector, which may be defined in accordance to the nature of their relation with the steelworks: on one hand, the plant-dependent firms are the ones struggling with the crises and expressing growing concern about the future, while on the other, the firms which do not depend on the steelworks, are experiencing innovative and successful development paths. Indeed, as explored below, the study carried out by the *Scuola Sant'Anna* identified several distinctive and success stories, which describe how new and alternative territorial trajectories have been developed in a variety of sectors, branching out from local expertise thanks to openness and innovation, besides moving forward from old-fashioned and steel-bound territorial mindsets.

As aforementioned, the last steelworks crisis and 'emergency' ended in November 2014 with the sale of the steelworks to the Algerian group *Cevital*. The Algerian project has stood out over the others thanks to its diversified approach to the territory and its resources, as well as to its ability to offer a wider vision of the Val di Cornia's future (Il Tirreno, 2014h,n).

Moreover, town councils are exploring the possibility to create a new '*Unione di Comuni'* in Val di Cornia (which could expand to Val di Cecina) in order to deal with the abolition of the Provinces and to accomplish with the new Tuscan regional legislation: after years of weak and insufficient inter-municipal collaboration, it might open to new and inclusive forms of governance and territorial coordination in several fields (Il Tirreno, 2014f).

The ongoing fragile phase of crisis has already marked a further turning point along the process of transition and redefinition of the territory: this perspective may be further sustained by a brief look at of the evolution of the seaport.

2.4.2 A new perspective on the seaport of Piombino

The evolution of the seaport of Piombino could be defined as one of the main territorial 'outcomes and impacts' of the steel industry presence and, at present, as one strategic but unexpressed resource and potential for a new local development pattern.

From the 19th century on, the activity of the port has depended mostly on the steel industry's activity. Its steel-bound development scheme has been creating a sort of detachment from the rest of the territory, besides failing to integrate and collaborate with other local economic actors.

According to the newspaper review (Il Tirreno, 2014o) and the interviews carried out in 2012 to Port Authority and other stakeholders, an effective strategic vision of the territory should intend the seaport gateway and hub for the whole territorial system, instead of depict it as an isolated realm. *Vice versa* the seaport itself needs an active economic landscape and territory in order to develop: it could represent an opportunity as a 'gateway' for the local economic business, through which anchor the European and international trade routes, as well as a 'window' for the promotion of an integrated and diversified local territorial system. Improved collaboration and interaction between the seaport and strategic local actors could favour new opportunities as well as supporting territorial upgrading in manufacture, agriculture and tourism sectors.

However, at present, the port has not available the apt infrastructure to satisfy to the local SME's needs, which in turn advocate for a stronger collaboration. Little can be said about the logistic sector, due to a lack of participation of the subjects involved.

The seaport in the twentieth century

Since the Etruscan age, Val di Cornia has represented a strategic node in the Mediterranean trade routes (and especially in the trade of raw material from Isola d'Elba). However, the seaport of Piombino massively expanded and grew just at the end of the nineteenth century, due to the establishment of the steelworks, and witnessing in few years an impressive tenfold increase in the

maritime traffic (from 28,000 tons to 323,000 tons between the 1887 to the 1908, topping 700.000 tons in the '30s).

Consequently to its destruction during the IIWW, over the '50s the port was completely rebuilt. Over the '60s and '70s, the commercial traffic reached an amount of 4 millions tons of goods. Meantime, the growth of the tourism sector opened to the promotion of the passenger traffic and the creation of new maritime routes to Isola d'Elba, which soon topped the quantity of one million passengers[113]. In 1965 a new *Piano Regolatore Portuale (PRP)* was implemented in order to deal with the port enlargement and new stelworks' needs. The first *PRP* has been in force until 1989, when the seaport-planning authority and competence shifted from the national to the regional level. In the same year, the *PRP* was modified (*Variante I al PRP*) aiming at reorganizing the port functional structure, until then designed to respond to the needs of *Magona d'Italia*, *Ilva* and *Dalmine* plants. Whilst the presence of the steel industry strengthened the port specialization into solid bulk cargoes and steelworks products trade, other pressures, as the increasing differentiation of goods and passenger traffics, started to impact the harbour evolution.

The evolution of the seaport in the 2000s: the 'Piano Regolatore Portuale 2008' and the 'Accordo Programma Quadro 2013'

In 2001 a further modification of the *PRP* was approved, the *Variante II* (CLES, 2005), which aimed at dealing with the main structural, functional and logistical criticalities of the port like: the deficiencies in the inland infrastructure as well as in the connection and access to the national mobility system; the lack of a proper internal zoning within the port area apt to define functional, organization and distribution sectors, leading to the overlapping of the passenger, industrial, fishing and commercial areas; the lack of proper quays, extended open spaces as well as the insufficient dock depth (of max. 10m).

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[113] Ref.: *Piombino Port Authority* http://www.ap.piombinoelba.it

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In the meantime, the Ministry of the Environment listed the industrial and port areas of Piombino as *'Siti di Bonifica di Interesse Nazionale',* according to which all interventions in these areas had to be preceded and accompanied by soil clearing and recovery operations, as provided for by the *APQ Piombino-Bagnoli* of 2007, recently dismissed*.*

The new *PRP,* which was drafted in 2008 and approved by the Region in 2013, and which is in force today, identifies the development of the local infrastructure as the main foundation as well as precondition for its successful and effective implementation (Figure 2.7).

At present, its implementation may count on the resources allocated by the *APQ 2013* (about 112 millions euro) in the framework of the *Decreto 'Area di crisi industriale complessa' 43/2013.* In order to completely accomplish with the goals of the new 2008 Plan, the Port Authority aims at attracting additional resources thanks to the participation of private actors.

More in detail, the *PRP 2008* aims at reorganizing the seaport area in three different functional sectors: the industrial, the commercial and the steelworks sector; the *EU Motorway of the Sea* sector; the passenger and RO-RO[114] sector. Thanks to the extension of the SS. 398 and of the railway, each area should be equipped with its own access, in order to overcome functional overlap and car congestion. The Plan also intends to significantly strengthen the seaport infrastructure by extending the quays (from 2.300 to 6.500 m), the open areas (from 125.000 to 1.100.000 m^2), besides increasing the depth of the docks up to 15 m. A greater amount as well as availability of open areas, together with the presence of deeper docks could lead in the future to open the seaport activity and traffic to container shipping and cruise tourism (Autorità Portuale, 2008)[115].

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[114] The EU strategy "Motorways of the Sea" aims at introducing "new intermodal maritime-based logistics chains in Europe, which should bring about a structural change in our transport organisation within the next years to come" (http://ec.europa.eu/transport/modes/maritime/motorways_sea/index_en.htm).
The RO-RO (Roll on/Roll off) ships are devoted to the transport of wheeled cargo and do not require the use of other devices during loading and discharging phases.

[115] Notwithstanding these deficiencies, the port is today listed as Port of National Interest, together with other Tuscan ports, as Livorno and Carrara.

Figure 2.7: The PRP 2008 (Source: Autorità Portuale Piombino)

The *PRP 2008* also aims at diversifying the seaport activity in order to overcome its weak points and vulnerability, which derive by the steelworks-dependent nature of its development.

The interrelation between the port and the steel industry, and so its vulnerability is a central and evident question, as confirmed by one of the interviews in 2012, according to whom the port activity might depend for the 70% on the steel production. By the interviews has also emerged that, notwithstanding its reliance on the steel industry, the port evolution has never been synergic with or integrated to the steelwork: it has been rather a 'cold' interdependence characterized by a lack of fruitful dialogue between the two parts. However, over the decades the seaport has strengthen its specialization in dry bulk, registering a high prevalence of import over export.

To clarify the scenario, according to the data provided by the Port Authority (Autorità Portuale, 2013), due to the crisis and decreases in steel production levels, between 2007 and 2008 Lucchini and Magona's freight traffic has

respectively shifted from 6.055.000 and 831.000 tons/year to 3.316.000 and 543.000.

Indeed, after the positive trend of 2007 and consistent with a general framework of industry and trade crises, the trade traffic in Piombino has registered a dramatic decrease: from about 8.300.000 tons/year in 2005 up to about 9.000.000 tons/year in 2007, down to about 5.220.000 tons/year in 2009 and up again to about 6.000.000 tons/year until 2012 (Figure 2.8). Due to the crisis, in 2013 the traffic reduced to 5.246.475 tons/year (about -12,7% if compered to 2012), which correspond to about the 1,1% of the Italian traffic and to the 16th position in the rank of the main Italian ports[116].

	Freight traffic (tons/year)
2005	8.286.271
2007	9.001.660
2009	5.220.828
2013	5.246.475 about -12,7% compered to 2012

Figura 2.8 Freight maritime traffic-Piombino (Source
Data elaborated by *Assoporti*)

In particular, when focusing on dry bulk trade data of 2013, Piombino went up to the 8th position in Italian ports rank, registering a transit of about 3.954.000 tons (almost the 80% of the total traffic in Piombino and the 5,5% of the national amount). The data 2013, compared to 2012, witnessed a loss of the 6%

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[116] The total amount of traffic at national level in 2013 corresponded to about 461.000.000 tons/year. In 2013 the transit in Piombino of liquid bulk amounted to about 18.000 tons, the RO-RO traffic to around 650.000 tons (Data elaborated by Assoporti. Available on: http://www.assoporti.it).

in dry bulk freight and of the 30% in the RO-RO shipping (Data elaborated by *Assoporti* and *Autorità Portuale* di Piombino)[117].

Another relevant feature of the seaport of Piombino is its touristic vocation, which predominantly expresses in terms of passengers' *transit*, rather than *attractor*.

Indeed, for what concern the passenger traffic, Piombino is the fifth port in the Italian rank and the first in the Tuscan one: in 2013 it registered a transit of 3.062.652 people (over a national amount of 41.500.000). This data is slightly superior to the 2012, but inferior to the trend of the last decade, during which it reached about 3.800.000 passengers between 2005 and 2007. Almost the totality of the transit was directed to Isola d'Elba, followed by Sardinia and Corsica.

The data 2014 produced by the Port Authority and updated to October 2014, refers of about 2.900.000 passengers transiting in the seaport, registering a small increase compered to October 2013, but refers also of a decrease in October 2014 of about the 30% in the freight transit, if compered to 2013, and which amounted to 3.032.816 tons. The extinguishing of the blast furnace of ex Lucchini plant in April 2014 may have contribute to cause this declining dynamic.

The *PRP 2008* also aims at strengthening local competitiveness, encouraging therefore the steelwork's recovery and the safeguard of the employment rate, as well as overcoming environmental criticalities and promoting sustainable development, so as to tackle the complex crisis and transition which are affecting the territory.

In addition, the *PRP* may count on the resources allocated by the *APQ* for what concern the strengthening of the local infrastructure and the connection to the

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[117] The dry bulk cargo, which corresponded to about 6.000.000 tons in 2005 and beyond the 7.000.000 in 2007, went down to around 3.400.000 tons in 2009 and up again to 4.286.000 in 2012 (Data elaborated by Assoporti and Autorità Portuale di Piombino).

national system, in order to overcome the cutting out of Piombino and Val di Cornia by the national mobility system as well as moving forward from its peripheral condition, as stressed by earlier local planning plans.

Actually, the transformation of the *Variante Aurelia* between Livorno and Grosseto and its inclusion in the national highway system, together with the improvement of the railway, the extension of the SS. 398 and the functional reorganization of its accesses to the port and the urban areas, are considered key preconditions to the success and efficiency of the whole set of planning measures and projects designed and planned in Val di Cornia over the last two decades.

In addition, the realization of the *Due Mari* corridor, which should connect the Adriatic and the Tyrrhenian seacoasts, and the development of the *EU Trans-European Networks – Transport (TEN-T)* should strengthen the strategic position of Piombino and of the whole Tuscan port system, in the core of the Mediterranean sea, as an hub and a gate to Central Italy and Central-South Europe[118].

The APQ guidelines have been designed and set up also in the framework of the debate about the removal and demolition of *Costa Concordia* and about Piombino as the possible recovery port, until the decision taken in June 2014 by the national government in favour of the port of Genoa. For several months in 2012-2013, this chance has been largely debated as a possible economic opportunity and spark for the generation of a new shipbuilding *filiera*. At the same time, the discussion has also and decisively uncovered and highlighted the infrastructural limitations, deficiencies, and overspecialization of the port. Despite the failure of the Concordia proposal, consistent with the European and the *APQ 2013* requirements, the regional and the local administration together with the Piombino Port Authority have kept negotiating at national level for

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[118] The '*EU Trans- European Networks – Transport (TEN-T)*' are "a new transport infrastructure policy that connects the continent between East and West, North and South. This policy aims at closing the gaps between Member States' transport networks, removing bottlenecks that still hamper the smooth functioning of the internal market and overcoming technical barriers such as incompatible standards for railway traffic. It promotes and strengthens seamless transport chains for passenger and freight, while keeping up with future technological trends" (http://ec.europa.eu/transport/themes/infrastructure/index_en.htm).

additional resources aiming at promoting the creation of a shipbuilding hub, specialized in ship demolition and repair, steel recycle and reuse: to this purpose, in October 2014, the national-state allocated about 20 millions of Euro in order to support the creation of the apt infrastructural condition, which would allow Piombino seaport to become a possible hub for the demolition of several warships in 2015, as provided by the national government plan (Il Tirreno, 2014l,m).

The recent sale of the ex *Lucchini/Severstal* plant to *Cevital* could represent a new challenge as well as opportunity for the seaport of Piombino: the introduction of the electric furnaces in steel production system, which could open to the development of a steel recycle and reuse *filiera*; the improvement of the agri-business sector; and the intention expressed by the Algerian group to support new trade routes between Tuscany and North Africa and to strengthen the logistics pole.

The seaport of Piombino in the regional and European scenarios

In accordance with the *EU TEN-T* goals, Tuscany has promoted in 2014 a new *Piano Regionale Integrato Infrastrutture e Mobilità (PRIIM)*: this plan represents a comprehensive tool to define the strategy and priority of the whole regional mobility and transport system, including railways, ports, highways, airports, inter-ports, public transports at local and regional level, cycling mobility.

The new regional *PRIIM* aims at creating an integrated regional network of services and infrastructure, in order to promote the sustainable mobility of people and goods, support regional competitiveness through the creation of a logistic platform as well as deal with territorial uneven development. It is structured in specialized but complementary infrastructural nodes and networks, through which promote new territorial development projects.

As reported by the *PRIIM 2014* (Regione Toscana, 2014), the regional maritime transport system in 2011 amounted to about the 25,9% of the total regional

traffic, a data consistent with the global and European strategic intention to sustain the promotion of shipping traffic.

In this perspective, Tuscan port system plays a strategic role. It is composed mainly by: Livorno, the sixth port in the Italian rank 2013, specialized in container shipping, liquid bulk and especially RO-RO trade[119], and the only one at regional level with the apt potential (depending on the implementation of its new PRP) to enter today in the *UE Motorway of the Sea* and *Short Sea Shipping* routes[120]; Piombino, specialized in passenger and dry bulk[121]; and *Marina di Carrara*, specialized in marble transport (Regione Toscana, 2014).

In particular, the regional port system in 2011 has registered a freight transit of about 40 millions of tons (the 76% in Livorno, the 15% in Piombino and the 8% in Marina di Carrara), which correspond to the 8% of the national amount (Regione Toscana, 2014)[122].

Indeed, as an effect of the globalization and the restructuring of global supply chains, over the last decade, maritime transport and shipping sector development, especially in containers' traffic, have opened a new phase for port system evolution and integration: the *port regionalization*, "characterized by a strong functional interdependency, and even joint development of a specific load centre and (selected) multimodal logistics platforms in its hinterland, ultimately leading to the formation of a regional load-centre network" (Jacobs and Notteboom, 2011; also Nooteboom and Rodrigue, 2005).

At present, a port acts as "transhipment hubs in extensive maritime hub-an-spoke and collection and distribution networks": in this perspective, a relevant new role could be played also by inland freight distribution and infrastructure.

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[119] The total amount of freight transited in Livorno in 2013 correspond to 27.952,887 tons, whereof about 8.400.000 tons liquid bulk, 750.000 tons of dry bulks, 6.600.000 tons in containers and 10.000.000 tons in RO-RO trade, while the passenger traffic amounted to almost 2.550.000 people (Assoporti).

[120] The '*Short Sea Shipping*' is a form of transport, the costal navigation, supported by specific EU policies: it is "highly efficient in terms of environmental performance and energy efficiency. It has the potential to solve road congestion problems affecting many parts of the European continent" (http://ec.europa.eu/transport/modes/maritime/short_sea_shipping/index_en.htm).

[121] Piombino absorbed in 2011 about the 40% of the regional dry bulk traffic and the 30% of the RO-RO (Regione Toscana, 2014).

[122] This trend has not registered significant changes compered to the data of 2005.

What emerge by this evaluation is the need for a load and logistics networked and integrated system, composed by inland and offshore nodes as well as transport corridors, whose flexibility depends on the kind of services provided (Nooteboom and Rodrigue, 2005). This approach opens to a new role for agents and institutions in port governance mechanisms (as port authorities and enterprises, whose interests extend on several locations). They acquire new influence in shaping seaport trajectories, especially due to changes in the integration of vertical and horizontal organizational settings.

Following Jacobs and Nooteboom (2011) in fact, the evolution, change and locational competitiveness of consolidated and mature seaports depend to a large extent by established spatial structures and power relations, technological innovation and institutional frameworks. Moreover, their spatial evolution is strictly related to interrelation and network, which extend way beyond the seaport boundaries and the local scale: the evolution of a seaport requires today high levels of interconnection and interrelation.

In this sense, logistic networks have been acquiring strategic relevance in defining the global supply chains as well as competitive port localization: this scenario has been fuelling a new form of 'co-opetition' between several seaports and inland nodes. A 'multiport gateway region' system may emerge in this dynamic scenario, opening new opportunities for (secondary) ports, located in proximity of main ports, and depending on local authorities and agents' strategic actions at regional level (Jacobs and Nooteboom, 2011).

In this perspective and consistent with the *PRP 2008*, the *PRIIM 2014* and its definition of the *Rete dei Porti Toscani*, the infrastructural development of Piombino seaport as well as a territorial systemic approach to its development could upgrade its positioning in the *TEN-T* system, the EU *Motorways of the Sea* and *Short Sea Shipping* routes, and strenghten its role as a offshore node and hub of the integrated Tuscan system. At present, Piombino seaport is excluded by the *Core network* of the *TEN-T* system (the set of the core corridors, which includes Livorno), but is inserted in the *Comprehensive network* (the set of the 'peripheral' corridors), defined by the European Commission. Tuscany is

defined as a central node in the north-south corridor and a strategic node in east-west trajectory, which should define the 'Mediterranean Corridor' and which should open the West Europe and Central Italy to the Balkan area and the East Europe.

Moreover, in 2010 the Port Authorities of Livorno, Piombino and Carrara have opened a process of cooperation, which has finally led to the creation of the *Tuscan Port Authorities* association: a first step toward the promotion of one integrated port system, which until today has not revealed to be much operationally effective (Autorità Portuale, 2013).

2.4.3 Beyond old 'steel' conception?

Piombino is just one in-transition territory within a global dynamic scenario as well as one feature of a wider debate, which stretch way beyond local boundaries, aimed at questioning old-fashioned (steel) industry models and mainstream narratives as well as opening to an alternative territorial trajectory: indeed, several key steel production sites and territories are dealing with the effects of the crises and the transition processes, such as Terni (Umbria) and Taranto (Puglia), just to name the most discussed by media, but we could also refer to Trieste (Friuli Venezia Giulia), Sulcis (Sardegna), Genoa (Liguria) and Naples (Campania).

Several issues are at stake in public debate, which concern the process of industrial decline, environmental criticalities, jobs' losses, industry re-organization and internationalization, and which are deeply characterizing these "*città della ruggine*" (Il Corriere, 2014). All these cities express a mix of both backward-looking bias and nostalgia (often pictured as the State-run industry), as well as hope and worry about an uncertain future (often pictured as multinational business groups) (La Repubblica, 2014a; Linkiesta, 2014; pagina99a,b).

However, the transitional scenario has allowed to unveil several 'secondary' and 'spontaneous' initiatives and debates, beside media narrations and 'institutional' planning measures, opening new spaces for alternative territorial trajectories and supporting a 'diversification' strategy as well as 'differing ways of sensing and approaching' steel expertise.

Notwithstanding their relevant and success development, these latent paths are too often unnoticed by the local administration as well as cut off from the local public debate.

Some of these peculiar experiences and alternative stories have been described by the research work "*Dinamiche identitarie, trasformazioni economiche, prospettive strategiche: il caso di Piombino e Val di Cornia*" carried out by Scuola Superiore Sant'Anna in 2013 and later by the local newspaper *Il Tirreno* in the report '*Beyond steel, the other economy*' published in 2014, as well as by the debate about the appraisal of industrial archaeology and tourism promoted on *Stile Libero News*, an online newspaper of Val di Cornia[123].

As analysed in the previous paragraphs, after the '90s crisis, the interrelations territory/steelworks and Piombino/Val di Cornia have been deeply restructured. At the same time, the increasing local vulnerability have mostly strengthened a steelwork-bound vision the future, which re-affirmed the key role for the local development of the plant and the blast furnace, instead of generating a new and fresh push towards alternative scenarios: this approach has encouraged backward 'resistance' over 'proactivity' toward the future, supporting the idea that a future without the steelworks would have be unconceivable.

Moreover, the cyclic steel sector crises and the uncertain future of the steel plant, together with a general steelwork-bound approach to local policy-making, have held back local planning capabilities as well as entrepreneurship: the persistent 'emergency' and steel-bound mindsets have favoured short-term and

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[123] In the meantime, *Il Tirreno* is promoting a new enquiry titled "*Tourism: the big occasion*".

sector-driven measures, over a long-term and integrated strategic vision (Bracci, 2012; pagina99, 2014a,b; Stile Libero, 2014b).

Indeed, the analysis *CATI – Computer-Aided Telephone Interviews* carried out by *Scuola Superiore Sant' Anna* in 2013[124], during the Lucchini/Severstal crisis, revealed that according to the 63,2% of the interviewees 'nothing was happening' in Val di Cornia, while the remaining 37% identified within the territory positive signals of change towards new development patterns, especially connected to the tourism sector (14,2%), the seaport enlargement (12,2%), the agri-tourism sector (6,2%) and the thermal tourism sector (4,8%)[125].

Nonetheless, the rise within the public debate of territorial *ferment* as well as *weak signals* of change suggests that, despite the most common perceptions, something 'different' is also happening within the territory of Val di Cornia: alternative declinations of 'steel' know-how have materialized throughout time in success entrepreneurial experiences and additional approaches to 'secondary' sectors (as proved by the idea of Piombino as a the 'Italian Ruhr', which have been able to generate unnoticed and outstanding development paths and alternative territorial narratives (Il Tirreno, 2014o; pagina99, 2014b; Scuola Sant'Anna, 2013; Stile Libero, 2014).

The assessment and appraisal of these narratives might allow to move forward from the mainstream and dichotomous approach 'steel'/'non steel' in favour of the valuing of a more dynamic, open and hybrid territorial perspective and reading.

This perspective sheds light on alternative and unnoticed sectors and dynamics, which are too often overlooked or taken for granted due to the prevalence of the steel plant in the local economic scenario. Moreover this approach allows to go past stereotypical perceptions, in favour, for example, of the unnoticed local

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[124] The study of the *Scuola Superiore Sant' Anna* (2013) has examined the perceptions at community level about the vocation and nature of the territory through several *CATI – Computer-Aided Telephone Interviews,* conducted in 2013 on a sample of one thousand inhabitants of the area (Sant'Anna, 2013).

[125] With values under the 3%: the promotion of new and existing SME, the awareness derived by the steel crisis, the biodynamic agriculture, the sea cruise sector.

ability to reinvent and apply the 'steel' know-how and expertise out of the mere steelwork, as well as attested by the gender-sensitive reading of Piombino carried out by the research of *Scuola Superiore Sant'Anna* (2013), which unveils new spaces of female entrepreneurship besides moving forward from the mainstream male-centred imagery inherent to the 'steel-bound' territorial system, also described by Silvia Avallone (2010, 2014)[126].

At present, the urge to move toward a fresh and innovative territorial perspective acquires today a stronger relevance due to the real materialization in April 2014 of one of the most dire and alarming scenario, until then pictured as unconceivable, that is: the extinguishing of the blast furnace Afo4.

'Tourism-bound' versus 'steel-bound' imageries?

According to the *CATI – Computer-Aided Telephone Interviews* data described in the research of *Scuola Superiore Sant' Anna* (2013), the common perception of the steelworks as the main engine for the future development of Piombino and Val di Cornia seemed to go weakening among community (28,1% in average and 34,7% in Piombino), in favour of the quality tourism sector (49,8%) and the agriculture one (21,6%), while the 90% of the interviewees agreed to recognized the relevant role of the seaport for the local system.

In addition, the 63% of the sample considered the tourism sector as a promising field that should be improved in terms of training and education services. To follow, the other fields perceived as potentially strategic to alternative development patterns were the craftsmanship (23,8%), the steel industry (20,2%), and finally the viticulture, commerce, bio-agriculture and services sectors[127]. The sea (59,9%), the archaeological heritage (13,2%) and the *Parchi*

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[126] Quoting Avallone (2014): *"«la Fabbrica». Una lei, una madre nel bene e nel male, che raccoglie tra le sue braccia imponenti cielo, terra, mare, 2.500 persone più l'indotto, e tutti i figli e le mogli che aspettano che papà torni a casa"*.

[127] By the analysis of the data can be affirmed that, in general, support to steel and agriculture has been expressed mainly by elder people and inversely proportional to educational level, while tourism and commerce were more appreciated by young people with higher level of education and freelance professionals.

Spa (10,7%, especially between youngers) were envisioned by the interviewees as the main features of the Val di Cornia' territorial attractiveness, while the industry and the seaport were selected by the 9,5 % (especially between the elders) and the 4,7% of the sample. The majority of the interviewees (29,8%) agreed on choosing '*Val di Cornia*' as the main territorial brand, followed by '*Toscana*' (22,9%), '*Costa degli Etruschi*' (11,7%) and '*Alta Maremma*' (6,7%), while '*Piombino*' has been suggested by the 13,6%.

The tourism sector so emerges at local level as the main 'alternative' engine of change, notwithstanding its seasonal character and its limit to fully respond to the local employment needs. However, the promotion of oversimplified and stereotypical ideas of tourism, especially if defined as mere seaside and agri-tourism, could represent a severe threat to the achievement of a sustainable and territorial appraisal. In this sense, the radical dismissal of steel-related resources and expertise as well as neglecting and overlooking the territorial complexity, in favour of more mainstream and sector-driven forms of territorial development, could lead to miss unique and key opportunities.

These mainstream readings of the territory clash with the territorial assessment (even too extreme in some aspects) fostered by several local actors and supported mainly by the '80s ex-mayor Paolo Benesperi: they propose an alternative narrative based on the Ruhr development model, aimed at protecting and, especially, appraising the local steel-related vocation and history (from the Etruscan until today) through the requalification of the industrial architecture (and archaeology).

Indeed, until toady and with the exception of the *Città Futura* project, no one of the measures provided by the *APQ 2013,* or by any other planning tool have expressed any concern and recommendation about the protection and appraisal of the steel industrial architecture and heritage as well as to its historical and cultural value. Consequently, they promote an alternative plan in order to deal with and manage the dismissed industrial areas and factories, based on the socio-economic, environmental, historical-cultural and touristic appraisal of the local industrial heritage, history and expertise. This approach should allow to encourage a broader and innovative appraisal of the past and ongoing territorial

dynamic and resources: it may be seen as an opportunity to create a shared strategic vision, through which generate a coherent approach to the territorial system as well as the tourism sector, aimed at valuing the industrial, the urban, the rural areas as well as the sea, besides opening to the enhance, strengthen and rethinking of the role of the *Parchi Val di Cornia* (pagina99,b; Stile Libero, 2014 a,b,c).

Piombino between 'leading' and 'follower' firms

As analysed by the research of the *Scuola Superiore Sant'Anna* (2013) and the *Il Tirreno* report (2014o), over the last decades '*another Piombino*', made of small craftsmanship and entrepreneurs and capable to tackle the crisis, has emerged. These positive and success stories have been developed by several 'internal' actors, strongly rooted in the territory and *depositary* of a context-specific expertise, as well as by 'outsiders', who have *chosen* and *recognized* Val di Cornia as their optimal location, developing throughout time a deep sense of belonging.

As revealed by the research of the *Scuola Superiore Sant'Anna* (2013), despite their marginal role within public debate, some of these exemplary firms of the satellite activities are characterized by a high level of innovation, besides having a significant impact in terms on employment[128]. Indeed, two distinct and clashing trends may be depicted in terms of innovative capacity and economic trends: whilst some SME have proved to have the capability to differentiate and develop their own independent path, others have demonstrate to fell short in rethinking their business strategy, being bounded to the plant activity, and in the light of present conditions, are struggling with the credit insolvency of the steelworks and their lack of competitiveness.

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[128] Just five SME of the manufacture sector took part to the 'industry focus group' organized by the research group of *Scuola Superiore Sant'Anna*. If the general lack of participation has been registered as a sing of disillusion and lack of interest, the active participation of the (small) group and its employment representativeness constituted data of relevant interest: these five SME alone reached 500 employees, correspondent to the 25% of the Lucchini labour force (Sant'Anna, 2013).

In general, a shared feeling of wariness and disillusion toward political institutions seems to spread among these innovative pioneers, which might be caused, at least in part, by the propensity of the local administration to (too often) concentrate resources and attention on the steelworks' needs. On one hand, this narrow territorial approach have neglected for too long the design and implementation of long-term development perspective and strategies, in favour of short-term and emergency-driven measures. On the other, it has also been feeding the growing call for higher inclusion in policy-making and development processes as well as for further coordination between the local economic actors, in order to shed light on the existence of *another* way of sensing and reading the territory.

The 'winning strategies' implemented by several innovative firms focus mainly on steel-related sectors, taking advantage from steel-related and distinctive skills and know-how, acquired by means of previous collaborations with the steelworks. These expertise have allowed several enterprises to develop new industrial diversification strategies thanks to the ability to integrate original steel-related knowledge to different but related sectors, as well as to advance in innovation and research, besides encouraging industrial openness and interconnections, even at international level.

This dynamism has permitted to re-think traditional steel-bound expertise and know-how in innovative ways: these success experiences, in fact, reject an idea of 'diversification' as the movement from one sector to another, feeding instead the development of new and innovative expertise without dismiss or lose the know-how acquired by past experiences (Il Tirreno, 2014o) [129].

Whilst the steelwork-bound firms consider transition as a threat due to their rigid and closed character, these innovative and dynamic firms seems to interpret this phase as an opportunity to change and improvement.

Indeed, on one hand, several steel-bound and satellite activities entrepreneurs have expressed a feeling of scepticism and disappointment toward the measures implemented by the local administrations and the steelworks. They

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[129] Some of these steel-related firms are SiderPiombino, DueEmme, Elettromar Spa.

ask, therefore, for more participation and attention, for further support in training, education and innovation, for the creation of new local opportunities as well as for further openness to new markets: they are advocating for a higher coordination with the local '*leading firms*', which could constitute a key resource and gateway to spread and spill-over new expertise and innovation, as well as creating new opportunity to anchor alternative development paths. It might allow to turn steelwork-bound firms into '*follower firms*'.

On the other hand, the *leading innovative firms* partially perceive the territorial crisis and are actually no more forcedly bounded to the steelworks and the host territory. They rather seem to look for 'additional reasons' to *remain* in Val di Cornia as well as advocating for new synergic collaborations, infrastructural and services improvements, focusing particularly on the seaport potentialities. According to these entrepreneurs, in fact, territory and firms are deeply intertwined by rooted forms of reciprocal responsibility and commitment, as well as by the unique local value, which they express in terms of know-how and human resources.

Aside the exemplary stories in steel-related sectors, significant initiatives have emerged also in *other* fields, encouraging new innovative overlap, interrelation and integration between differing sectors and knowledge bases. They open to a more complex and articulated local imagery, which encompass tourism, agriculture, viticulture, archaeology, manufacture as well as broader territorial promotion.

The success formula, which has led all these success stories, seems to be the same: context-specific know-how combined with high degrees of openness and internationalization as well as interconnection with other activities, continuous investments in research and innovation, in addition to a high sense of responsibility toward the host territory and a strong sensitivity toward education and (youth) employment (Sant'Anna, 2013; Il Tirreno, 2014o).

According to the opinion of several *leading* entrepreneurs, in order to achieve and maintain success and development, new clear territorial planning measures and plan are needed, so to foster an innovation and inclusive territorial strategic

vision, which should *guide* and *address* firms toward new and alternative *future paths*, rather than limiting and hampering local SME initiatives.

In order to deal with the threat of the steelwork's closure and the pressure of the economic crisis, the neo-elected mayor of Piombino, Massimo Giuliani has identified *"first of all, work"* as the main priority of his first mandate 2014-2019 (Comune di Piombino, 2014). In the guidelines of his political programme, this objective has been disarticulated and developed in terms of 'new and qualified job', 'dignity', 'innovative sectors', 'environmental sustainability', 'participation', 'local resources appraisal'. The plant re-innovation, the seaport and infrastructural development, the support to SME, agro-business and tourism sectors have been described as 'opportunities' to turn the crisis into a positive trigger for local change and development. All these measures are supposed to encourage a new conception of 'territory' as a 'place where express the identity of the whole community', moving forward from the idea of 'territory' as a mere 'asset'.

At present, the success and exemplary experiences described ought acquire a new prominent role in the development and creation of innovative and alternative trajectories, beside responding to the local need for new development spaces (beyond the steel plant) as well as integrated and inclusive planning approach. The resources allocated by the APQ 2013 and the business plan presented by *Cevital* seems, at least in part (and potentially), to already sustain some of these objectives.

From the '80s on, a string of deep crises have hindered the leading role of Piombino and the steelworks, generating *centrifugal* and *alternative* pushes and pressures within Val di Cornia and its economic landscape. Nonetheless, over the last three decades, the area has revealed to fall short in reviewing and re-interpreting its trajectories in alternative ways.

Recently, the vulnerability of the territory has been further highlighted by the extinguishing of the last blast furnace *Afo4* in April 2014, by the long and

troubled negotiation and sale process of the *Lucchini/Severstal* plant between 2012 and 2014, and by the uncertain future of the *ArcelorMittal* plant (ilSole24Ore, 2014a).

The urgent need for renew openness and dynamism in territorial development strategies is reflected by the almost permanent state of crises of the territory, as well as by the advocacy, within a transition scenario, for a new, open, plural and innovative account of local territorial competitiveness, knowledge/expertise and resources. It would allow to encourage a renewed approach to space and territory based on the valorization of multiple and dynamic identities. The enduring enclosed and too narrowly steel-focused approach to the territorial dynamics, as well as the crystallization of one steel-bound predominant narration over the others have do restrained over the last decades the local capability to move towards new and alternative trajectories. The persistence of 'resistance' dynamics risks to turn the transition into a threat, rather than discloses new opportunities.

Indeed, at present, the '*not yet*' scenario of Piombino represents both a challenge and an opportunity to define new territorial policies and pattern, and to develop a new conception of local resources and assets. Despite the apparently static condition and the dramatic crisis, in fact, Piombino and Val di Cornia reveal to be the depositaries of new and fresh (but unexploited and unnoticed) pushes and pressures, besides offering a rich set of unique know-how and skills, hard infrastructure and services. The transition processes still require institutions and communities to make an additional effort in order to move forward from old-fashioned mindsets and territorial readings. Moreover, as result, transition could provide with and uncover a new territorial setting and opportunity to generate, discover and exploit new territorial trajectories: the exploration of Val di Cornia as a 'in-transition' territory has proved to unveil relevant elements to better explore the new emerging territorial system, besides shedding new light on the political role of territorial identity for strategic planning process.

CHAPTER 3

'Identity matters': an alternative approach to Piombino and Val di Cornia in transition

Following to 2008 global crisis shock, the awareness that 'something' was changing in the socio-economic paradigm has been heavily encouraging 'emergency' mindset policies and short-term measures.

From the end of the last century on, the re-organization of global production has stressed the obsolescence of several economic patterns and shattered territorial imagery and identity. This phenomenon has allowed to develop new ways of reading global and local dynamics: the structural transition that has been taking place since the beginning of the new millennium is highlighting both innovative change processes as well as dramatic struggles within territories.

It unveiled the need to observe and explore to a deeper extent 'what is actually going on' within regions and sub-regional localities, in order to understand the global economic re-structuring: something more is at stake (Rullani, 2006, 2014b).

On both a theoretical and an empirical basis, there have been remarkable consequences: field observation has become a core stage to obtaining a more reliable territorial analysis. Territories themselves are providing surprising contributions and fuelling a richer theoretical debate. The differing natures of the regions' response to the crisis allow to outline a more realistic landscape of the new planning approaches implemented at regional level to face challenging transition times such as the present ones are.

In the present study, a claim for the need and usefulness of a joint, interdisciplinary work is suggested among regional science and cultural geography in order to deeper explore and unfold territorial 'reactions' and transition trajectories: the aim is being able to offer an additional analysis of the past, current and possible future evolution of Piombino and Val di Cornia under

the lens of dynamic and relational conceptions of space, place and territorial identity, as outlined in the opening chapter.

On one hand, this approach is based on the grounds of the relational concept of 'space' and 'place', which has been pushed forward since the '70s within the cultural geography debate, in which Lefebvre (1973) opposed the abstract and absolute spatial conception, inherent to modernity, with the idea of '*production of space'* .

Under the pressure of transitions and globalization, the evaluation of such dynamic approach has kept growing and has been widely applied between the '70s and the 2000s, stressing the interrelation between social and spatial spheres. The rejection of a hegemonic idea of 'globalization' -as 'one dominant narration' based on flexibility, mobility and space-time compression- opened the way to more complex evaluations of space-time territorial trajectories: such dynamic interpretation of 'globalization' was able to unfold the (conflicting) co-existence of multiple trajectories within local *places*, as emphasised by Massey (2005).

On the other hand, the account of *history* and *geography* from within an evolutionary perspective, championed by the Evolutionary Economic Geography framework, offers several new theoretical tools to the analysis of territorial complexity: path-(inter)dependence, lock-in, related variety and resilience represent new instruments to explore the emergence and production of new territorial trajectories.

These contributions are fundamental to encourage a deeper and relational understanding of the evolution of territorial trajectories during a transition phase: they constitute an integrated critical mindset to territorial assessment, enhancing the social, environmental and cultural aspects, and emphasizing the role of context-specificity and agents in economic processes.

Such point of views have allowed to imagine new ways to define the territory as well as providing alternative approaches to local and regional development and planning, besides having revealed the political and strategic nature of a territorial dynamic identity. The distinctive dynamism and the uniqueness of

each and the context-specificity of territorial evolution (both in terms of history and geography) have led researchers to wholly dismiss any default acceptance of pre-set recipes and the use of single, all-comprehensive labelling to define enclosed spatial identity.

Therefore, this method shift supports open and relational definitions of *place* and *identity* as "mutable on-going productions" (Massey, 2004, 2005): as far as territorial readings are concerned, a relational account of space makes it indeed finally possible to leave behind the duality of 'binary' and 'static' readings. It allows to identify *alternative* forms of space-time conceptions, thus overcoming dichotomous and hegemonic territorial interpretations, as suggested by Massey (1992).

In fact, several dualisms did emerge in the literature review presented in the first chapter: while mainstream territorial readings are connected to static and stereotyped accounts of place and territory peculiar of 'old' patterns and conceptions[130], transition might turn out to be a trigger to overcome these dualities and to bring to surface alternative and dynamic patterns.

More precisely, Val di Cornia's scenario shows to be indeed ruled by a predominant 'steel-bound' narration: a static scenario revolving on *enclosedness* and 'resistance', whereas the centrality of the steel plant and the priorities it implies are opposed to a spotted map with isolated attempts towards diversification.

On the other side, a deeper reading of the area reveals a higher territorial complexity and dynamism across time and space, shaped by 'other' narratives beyond the dual 'steel/non steel' descriptions (Figure 3.1).

The transitional process of Piombino and Val di Cornia is thus trapped between innovative transformations and attempts to maintain *past winning patterns*: despite evident lock-ins rooted in such stern 'steel' imagery, the outcome of the

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[130] Some of key dichotomies are: proximity/distance, embeddedness/mobility, tacit/codify knowledge, exogenous/endogenous dynamics, global/local

case study analysis defines Val di Cornia as a *trans-territorial configuration*, in which *alternative and dynamic spaces as well as an open and progressive conceptions of identity can be identified*.

Therefore Piombino and Val di Cornia represent a key field to:

- *observe* territory evolution under stress from transition toward trans-territorial, multi-level and multi-scaled configurations;

- *analyze* the relation between territorial evolution and its own identity, focusing on the emergence of differing narrations and approaches to transition;

- thirdly, *explore* how this shift in the reading of identity may contribute to an innovative local and regional development and planning approach.

According to this new perspective, identity turns out to be a (Figure 3.1):

- *dynamic and polycentric* production of *trans-territorial* configurations;

- *selective and power* process between *co-existent multiplicity*;

- *strategic element* for a *renewed* approach to local and regional development and planning.
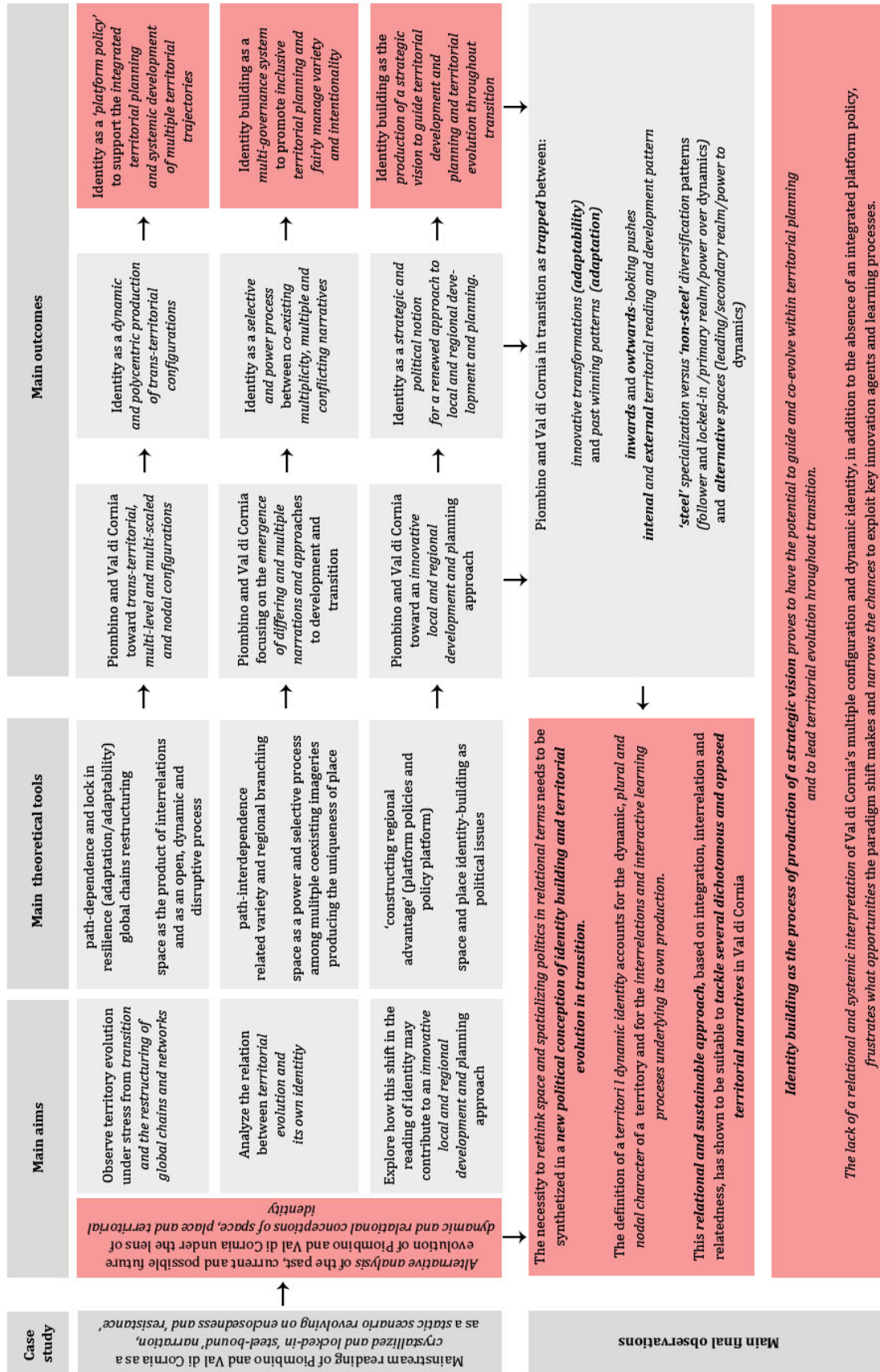
Case study

Mainstream reading of Piombino and Val di Cornia as a crystallized and locked-in, 'steel-bound' narration, as a static scenario revolving on endosedness and 'resistance'

Alternative analysis of the past, current and possible future evolution of Piombino and Val di Cornia under the lens of dynamic and relational conceptions of space, place and territorial identity

Main aims

- Observe territory evolution under stress from transition and the restructuring of global chains and networks
- Analyze the relation between territorial evolution and its own identity
- Explore how this shift in the reading of identity may contribute to an innovative local and regional development and planning approach

Main theoretical tools

- path-dependence and lock in resilience (adaptation/adaptability) global chains restructuring / space as the product of interrelations and as an open, dynamic and disruptive process
- path-interdependence related variety and regional branching / space as a power and selective process among multiple coexisting imageries producing the uniqueness of place
- 'constructing regional advantage' (platform policies and policy platform) / space and place identity-building as political issues

*The necessity to rethink space and spatializing politics in relational terms needs to be synthetized in a **new political conception of identity building and territorial evolution in transition**.*

*The definition of a territori l dynamic identity accounts for the **dynamic, plural and nodal character** of a territory and for the interrelations and interactive learning proceses underlying its own production.*

*This **relational and sustainable approach**, based on integration, interrelation and relatedness, has shown to be suitable to **tackle several dichotomous and opposed territorial narratives** in Val di Cornia*

Main outcomes

- Piombino and Val di Cornia toward *trans-territorial, multi-level and multi-scaled and nodal configurations*
- Piombino and Val di Cornia focusing on the emergence of differing and multiple narrations and approaches to development and transition
- Piombino and Val di Cornia toward an *innovative local and regional development and planning approach*

- Identity as a dynamic and polycentric production of trans-territorial configurations
- Identity as a selective and power process between co-existing multiplicity, multiple and conflicting narratives
- Identity as a strategic and political notion for a renewed approach to local and regional development and planning.

- Identity as a 'platform policy' to support the integrated territorial planning and systemic development of multiple territorial trajectories
- Identity building as a multi-governance system to promote inclusive territorial planning and fairly manage variety and intentionality
- Identity building as the production of a strategic vision to guide territorial development and planning and territorial evolution throughout transition

Piombino and Val di Cornia in transition as *trapped* between:

*innovative transformations (**adaptability**) and past winning patterns (**adaptation**)*

***inwards** and **owtwards**-looking pushes*
***intenal** and **external** territorial reading and development pattern*

*'**steel**' specialization versus '**non-steel**' diversification patterns (follower and locked-in / primary realm/power over dynamics) and **alternative** spaces (leading/secondary realm/power to dynamics)*

Main final observations

*Identity building as the process of **production of a strategic vision** proves to have the potential to guide and co-evolve within territorial planning and to lead territorial evolution throughout transition.*

The lack of a relational and systemic interpretation of Val di Cornia's multiple configuration and dynamic identity, in addition to the absence of an integrated platform policy, frustrates what opportunities the paradigm shift makes and narrows the chances to exploit key innovation agents and learning processes.

Figure 3.4: Alternative reading of Piombino and Val di Cornia. Conceptual framework

3.1 Toward *trans-territorial configurations* in Piombino and Val di Cornia: identity as a *dynamic* and *polycentric* production

As remarkable a year in the memories of its denizens as much as a seamless milestone along the ageless Etruscan iron lore, 1864 may be considered the turning point in the development of Piombino and Val di Cornia: the establishment of the first steel plant was a key stage in the evolution of the area, besides representing the foundation of its future dynamics. Steel industry has indeed significantly 'crafted' and 'shaped' throughout time the layout of the valley region in several ways: economic, social, cultural and environmental.

Nonetheless, 'steel-bound' characterization risks to be oversimplified, if interpreted as the mere enclosed and localized outcome of an extremely specialized territory: once applying an enhanced perspective focusing with a larger scope and ranging well beyond the factory's perimeter, such static depiction comes to be defied.

A wider approach to Val di Cornia analysis, exploration and observation reveals its complexity and dynamism while asserting at the same time territorial identity over the *crystallized* and established *picture* of steelworks based on a rather tunnelled and biased imagery. Hudson's description of North East England happens to fit Val di Cornia to the extent in which both can be described as "industrial region(s) materially and discursively constructed in a space that was formerly largely occupied by a pre-capitalist and non industrial economy and society" (Hudson, 2005). Moreover, from the nineteenth century on, Val di Cornia's production and territorial system -focused on heavy industry- has grown into a "workshop of the world" under a capitalist and globalizing economy, to later see its primate decline and start sliding towards at the edges of global economy at the end of the last century, due to the ongoing decline processes, in turn deriving from the restructuring of global economy.

Thanks to the 'theoretical lens' tool introduced in the first chapter, it is therefore possible to analyze how in Val di Cornia dynamic and interdependent trans-territorial configurations have always been there, progressively shaping its local identity around and over 'steel'.

The response of the territory to persisting strings of sector crises and restructurings have well proven the evidently intertwined and interdependent nature of the area: over the last decades, these transformations and their effects have expanded well beyond the plant, to mutate and generate newer and alternative trajectories.

This phenomenon has become definitely more evident by the end of the last century and it has been further emphasized in the new millennium, under the pressure of transition.

3.1.1 Piombino and Val di Cornia beyond the 'steel-bound' path-dependence

In the early 2000's the structural transformations of the socio-economic paradigm caused questions to be arisen concerning obsolete industry models and to their relations with the territory.

The link between industry and territory has profoundly characterized in countless ways last century's production patterns, turning from the territory being conceived as a 'scenario' and a 'passive' localization for vertical integrated industry during the Fordism era, to being held as an active entity and an integrated resource provider within post-fordist horizontal production systems.

The current transition is unleashing new potential, often by generating new interrelations and interconnections mutually linking territories, industry and the global production system, opening up old-fashioned production patterns to newer space-time characterizations.

At present, pressing and radical questions demand answers from localities and regions on matters concerning new territorial mindsets, visions and identities. Such issues have grown to gain strategic and political relevance in local and

regional development: the shift from enclosed 'static' patterns to 'open' and 'relational' ones is just one of the main ongoing transformations and probably one of the most paradigmatic.

Some regions in transition have indeed been able to *generate alternative and proactive* trajectories open to future initiative. The capability to 'surf' over times of change, as worded by Rullani (2013), has provided unexploited, new instruments to deal with global and territorial transformations, eventually coming to be successfully acknowledged as upgraded, modern production systems at global level and re-positioning themselves as innovative regions.

However, several territories have maintained a *resistance* towards change which is firmly rooted in a somewhat proudly backwards temper heavily drawing on past local history and due to such background, now likely to end up experiencing global dynamism more as a forced struggle than as a potentially rewarding challenge.

In concrete terms, such underlying approach shows in rigid and locked-in settings, turning localities into "insular, inward-looking systems, as many old industrial areas, both resource-based monostructural areas, dominated by, for instance, steel, coal mining and shipbuilding, and areas which specialise in consumer goods" (Hassink, 2005).

Not every context has been able to promptly review established policies or to openly question its own territorial identity, as it requires putting granted points into discussion and developing new dynamic patterns. Consequently, the outcomes of industry and economic restructuring at territory level may strongly vary in their individual manifestation as it rewrites global patterns in labour, market and production systems world-wide.

Piombino and Val di Cornia: a 'steel' identity lock-in?

Val di Cornia sticks out as a *resisting* rather than a *surfing* territory crafted as is it by the dominance of the 'Piombino/steel pair: the territory seems to portray in a number of ways the old-fashioned and monostructural industrial scenario described by Hassink (2005, 2010a):

- the presence of steelworks has enforced through time the centrality of Piombino as the main socio-economic catalyst of the valley, given that for decades it had driven the labour market and the demographic and urban evolution of the area.

- steelworks have conditioned the territorial development pattern: for better or worse, it has worked as a 'selective attractor' to several internal and external stakeholders; it has shaped local infrastructures, as for the seaport development, as well as having crafted the economic landscape implementing out-sourcing policies.

- 'steel' has deeply influenced local entrepreneurship, know-how and skills, defining for decades core economic, social, environmental and cultural aspects, the social structure and the perception of the territory and its people's imagery.

These barriers to territorial transformations are the result of what Grabher (1993) defined "the trap of rigid specialization": the persistence of this condition challenges business enterprises, a territory's adaptive skills and its innovation potential when confronted with change and shock. The trap of over-specialization leads territories to contingent *regional locked-in configurations*, manifesting in *functional*, *cognitive* and *political* lock-ins.

Over the last decades, such 'steel' vocation in Val di Cornia has indeed proved to be highly crystallized and rigid when faced with multiple shocks and changes.

Such static condition may be described, according to Grabher's (1993) definition, in terms of lock-in due to:

- rigid hierarchical industrial structure and chains, highly concentrated around steelworks, i.e. *functional* lock-in;

- a pervasive 'steel' culture, which is manifest in several fields and in the community, shaping the social structure and imagery, i.e. *cognitive* lock-in;

- overlapping of industry and politics, both of which have often adjusted their goals and focus according to the steel factory's needs, to the detriment of other objectives, deemed as 'secondary', as claimed by Bracci (2012), i.e. *political* lock-in[131].

Applying Hassink's words to Val di Cornia, the political lock-in is made up of "thick institutional tissues aimed at preserving existing traditional industrial structures" (2005), has held back the "development of indigenous potential and creativity", crafting both organizations (as local administrations) and pattern behaviours (as rules, social norms and laws).

Through time, the "rigid specialization" of Piombino has consolidated the fixed and hegemonic steelworks imagery: it has supported a locked-in reading of Val di Cornia and has determined the persistence of one a-spatial narration, inherent to the steel plant pattern.

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[131] 'Secondary' is used here critically in contraposition to 'primary' spaces as proper of the prevalence of one space-time conception or "grand narration" over others.

The prevalence of the temporal conception in Fordism and Post-Fordism has fuelled a static and inward definition of territory. Borrowing Hudson's idea, the predominance of the temporal dimension over the spatial materialized in partial and dichotomous 'old/new industry' readings of the area.

Indeed, this dual evaluation of local production systems under one predominant pattern has tended for decades to have territories classified in terms of 'losing and winning', 'old and new'. The comparison of 'successful' recipes and 'obsolescent' practices overlooked for too long the emergence of 'secondary' and 'alternative' spaces within a territory. Unnoticed dynamisms were ignored and excluded by this twofold reading.

As originally pointed out by Lefebvre in the '70s and later on by Harvey (1990) and Massey (1992), an open and dynamic assessment of space might reveal a definitely more blurred and complex landscape: history and time are interrelated and inseparable elements in the production of space. Each production mode therefore shall be the outcome of peculiar space-time compounds and interrelations: in fact, the socio-economic paradigm transition and the structural pattern transformation may be looked at as significant shifts in space-time appreciations.

This perspective allows to reach way beyond any construct of fixed and crystallized territory or of dual appreciation: as suggested by the EEG framework and by Martin and Sunley (2010), territories are the product of continuous *path-dependent* processes, in turn shaped by several temporal and spatial contingencies.

According to Massey (2005), the words 'trajectory' and 'story' emphasise the idea of progressive change within a phenomenon: these terms are going to be necessarily both temporal and spatial (for example, in their relation with other trajectories) as they are bound to refer to "the history, change, and movement of things themselves".

Thus, Val di Cornia's multiple lock-ins ought not to be considered as still frames in a fixed and static territory depiction, but rather as negative forms of *path dependent* evolution. They are the outcome of a variety of early events and contingencies, mainly shaped by steelworks dynamics and needs, rather than being pre-set and unavoidable territory trajectories.

In Massey's words (1973), Val di Cornia and its local production system are "the result of a complex historical process", during which path-dependent mechanisms have mutually enforced territory/plant interrelation across time and space.

An evolutionary appreciation of this contingent process reveals the complex development of such paths. It sheds light on latent and branching processes, highlighting both their positive (path-reinforcement) and negative (path-rigidity) sides.

As claimed by Martin and Sunley (2006, 2010), from a progressive and dynamic perspective, 'path-dependence' and 'lock-in' become promising concepts to investigate the evolution of territorial trajectories and move forward from equilibrium-based and static approaches in the analysis of territorial trajectories (also Hassink, 2005).

These definitions invite to appreciate the development of Val di Cornia and its 'steel' path-dependence as a *discursive and progressive process*, shaped by sequential shifts both in space-time and in production patterns, rather than being conceived as a static, immobile and locked-in configuration. By using such definitions, a different reading of the region's evolution is allowed to unfold.

Until the '70s, the dominance of the Italian public steel industry *Ilva* used to promote a negative 'steel lock-in' and self-reinforcing path-dependence, jeopardizing the *resilience* of the area. The same pervasiveness has fuelled territorial rigidity besides spurring the centripetal forces around Piombino and, last but not least, to outline caged socio-economic configurations (for example, in labour market, in urban and territorial planning, in social and cultural expectations).

On the other hand, the steel privatization and the industry crises of the '80s and the '90s created within the socio-economic landscape the conditions for formal and informal 'un-locking' trajectories to emerge. Since then, the will to overcome negative lock-ins started to gradually manifest among institutions and community, determining the appearance of other trajectories: this awareness has generated positive path-dependent circuits, firstly thanks to the institutional and political attempts toward 'diversification' of the '80s and the '90s, and later by the spontaneous 'alternative' narrations, described in the second chapter.

Thus, several cases in Val di Cornia have been able to adapt through time to the challenges imposed by transitions, unlocking negative path-dependence and actually branching out their own innovative paths.

Therefore, the Val di Cornia 'steel' lock-in, cannot be defined as a negative and static condition, but rather as a changing and adaptive process of negative and self-reinforcing path-dependence, across space and time; as a territorial response to external and internal contingencies where territorial trajectories have been predominantly shaped around the steelworks.

At the same time, some 'steel' path-dependent processes have been able to branch out and 'unlock' alternative development route and new positive self-reinforcing patterns.

Piombino and Val di Cornia between adaptation and adaptability

A reading as such of Val di Cornia's 'steel' path-dependent and locked-in nature can finally be revealed in its ambivalence and complexity: territorial response and adaptive skills during transformations ought not to be labelled and analyzed solely under the lens of a-spatial dominant patterns.

On the contrary, a dynamic and relational appreciation of territory and space-time production uncovers differentiated and multiple reactions while facing change, not just among, but also within territories.

Indeed, territorial *resilience* could be defined as the territorial aptness to respond to change and shock, as well as being the capability to resolve *adaptation/adaptability* tensions and unbalances (Boschma 2014; Pike et al., 2010; Simmie and Martin, 2010). Resilience is therefore not a pre-set condition of the territory, but a path-dependent and dynamic building process.

Coherently with the multiple and complex nature of path-dependence and lock-in, resilience may manifest differently within territories and with each other, generating both rigid/negative and alternative/positive spaces and trajectories: it allows to distinguish *leading*/resilient and *follower* and *locked-in* agents, in accordance to the degree by which they are able to promote and improve adaptive skills in Val di Cornia.

According to its evolutionary definition, resilience of Val di Cornia has been more and more affected by decades of cyclic external shocks, structural changes (industrial, technological and institutional) and recovery in the steel industry and its whole system.

On one hand, such series of crises in Val di Cornia worked as local self-reinforcing processes of '*steel' resistance*, consolidating *adaptation*. On the other hand, they did play a role as *reactive* processes, capable of branching out new paths and renewing old ones, eventually generating new *adaptability*.

Resilience, in fact, depends on the mutual interrelations between territorial recovery skills and the impact of transformation processes, as well as on the balance between adaptation and adaptability tensions.

However, path-dependence, lock-in and resilience do not to derive exclusively from shocks or exogenous causes. They reveal to be also *endogenous* and *intentional*, and so dependent on the role of agents, actions and routines (Boschma, 2014).

Agents and the economic scenario, history and spatiality, all mutually shape and influence each other. These perspectives reject a territorial trajectory analysis

through the lens of 'universal principles', as pointed out by the EEG framework, while also denying the existence of one a-spatial dominant temporality, as claimed by several scholars in the cultural geography debate.

Until recent times, the dominance of the steel narrative in the functional, political and cognitive realms has negatively impacted *regional resilience* and has restrained the relevance of positive *leading* path-breaking experiences.

Moreover, it has constrained their space to a 'secondary' scenario and increased the vulnerability of the area. However, some of these successful trajectories could be considered emblematic examples of optimal balance between *adaptation* and *adaptability*, that is *resilience*: especially after the 90's crisis and the plant privatization, several lock-ins were lifted, allowing for adaptive changes to take place in the economic landscape and social structures and, in public and private expectations and aspirations.

The latest 2012-2014 crisis, has further and indefinitely broken [132]; the recent turn-over in the local administrations, the new political and economic agreements at regional, national and supranational levels might loosen 'the strong ties' described by Grabher (1993), fostering changes in local constituencies and political agendas; both public debate and the opening up of the local economy to other innovative territorial vocations could be able to support new spaces of development and to shape a new vision and greater expectations, as it would positively influence business routine, behavioural patterns and social norms.

These transformations should be all interpreted as *adaptive* spaces and signals of *unlocking* and *dynamism* in the evolution of local paths, fit to promote regional resilience, aside from 'steel' adaptation.

Notwithstanding, resilience-building and adaptation/adaptability tensions in Piombino have been often simplified in dualistic terms: the contrast between '*steel specialization*' and '*diversification*' has weakened their complexity and

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[132] The implementation of the electric furnace in the steel industry requires significant changes in the production system and in the types and quality of the products, besides influencing the port traffic, the management of the satellite activities, and the upstream and downstream chain tasks and management.

effectiveness. It has overshadowed and still is to a relevant new adaptive geography, itself supported by new *leading* change trajectories, capable to nurture the shift from mono to *polycentric* socio-economic configurations within Val di Cornia and to promote regional resilience.

Consequently, further questions arise in the analysis of Val di Cornia's adaptive resources, the answers to which stretch beyond the established *successful/new/open* versus *obsolete/old/locked-in* dual distinction: how the area has been dealing with the global chain restructuring and which territorial configuration are actually *emerging* due to this transition.

3.1.2 Piombino and Val di Cornia in the global chains restructuring

The development of Val di Cornia is a paradigmatic example of the evolution of production patterns over the twentieth century. More specifically, it represents a prime case to observe the co-evolution of local and global production systems. Coherently with the scenario described in the first chapter, it reveals the progressive interrelation between industry and territory across space and time , a connection system that has markedly characterized the evolution of the Italian Industrial Districts.

Regardless iron being deeply rooted in the history of the territory, the origin of the 'steel' tradition itself has always been intertwined to wider production systems and exposed to both internal and external dynamics: despite the plant's hegemony, this interrelation has never been strictly exclusive or static, but it has pretty much always been influenced both by the 'outside' and the 'inside,' creating opportunities for different forms of development.

Since the establishment of the steel industry in the nineteenth century, in fact, the territory has been modified according to some degree of openness and dynamism, leaving behind stereotypes and closed territorial imagery.

The economic landscape has been shaped by both local reinforcing processes and wider production dependences: the entering the national and European steel market; the far-reaching attractiveness of steelworks in the labour market far beyond local boundaries; the pressure of competition at European and global level; the raw material supply chain and the seaport development; the presence of external and foreign investors are just a few examples of wider dynamisms and interrelations.

In addition, the plant worked as a State-run business for little less than the whole past century, coming to gain an evident prominence over the territory. The extent of external influences and of internationalized dynamics became fully manifest starting from the '90s, with the acquisition by Lucchini and Severstal sector group.

Through time, the combination of internal and external processes in Val di Cornia has fuelled, both positively and negatively, a spiral of *path-dependence* growth: inter- and intra-regional inputs and outputs were '*territorialized*' by localized and contingent circuits of both lock-in and unlocking processes. This 'localized' interdependence has led along a rollercoaster of growth and subsequent decline throughout the century, revealing what Hudson (2005) defines '*path-contingency*'.

Whilst some of these lock-in and unlock contingent and dependent processes have been clearly visible, especially when connected to 'traumatic' events (such as the termination of the steelworks system as a State-owned business; the subsequent takeover by new private and international investors; international and sector crises and the development of multi-level agreements and changes in local administrations), other processes, connected to 'secondary' local contexts and players, have kept existing if unnoticed.

The changing relation between industry and territory

Over the last century, the *Ilva* plant has seen the pervasive manifestation of the presence of the national state administration in the area, which fostered a sense of internal territory coherence well beyond the plant's perimeter and its steelworks proficiency. As part of a wider public socio-economic recovery and growth plan, Piombino used to be a strategic hub of the steel national industry. Since the '60s, the public and vertically integrated Fordist plant asserted itself, as a State-run business, at local economic level and as a social system, shaping local contingencies around its own needs by exploiting path-dependent and self-reinforcing mechanisms in order to carry out the national planning, which had envisaged to turn Piombino into the '*città fabbrica*' - the *factory-town* (Bianconi, 1970; Bracci, 2012, Lami, 2000), supporting multiple lock-in processes.

The crisis of the '80s and the '90s and the privatization of *Ilva* suddenly open the rigid walls of the local business world, altering the interrelation between industry and territory: between the '70s and '90s, the disruption of the plant's vertical integrated management gave in to a post-fordist new horizontal production system.

On one hand, out-sourcing processes and high unemployment rates '*released*' internal competences to become available for external opportunities, generating new satellite activities and reshaping the labour market; on the other hand, the steel '*overspecialization*' started to be questioned in favour of different local territorial resources, as demonstrated by the renewed and wider local planning approach, which led to the creation of *Parchi Val di Cornia* in the '90s.

Val di Cornia turned out to be indeed a source of opportunities at local level and to be able to cement socio-economic development: a '*territorio fabbrica*' perceived as a self-sufficient and inward entity.

The privatization of the steelworks and the taking over of outsider investor group *Lucchini* in the '90s put in jeopardy the symbiosis and coherence between the social, the political, the cultural and the industrial spheres, which had so far worked as the hardwiring of the public era. The shift from public to private-

owned business rulership represented a turning point for territorial openness, putting to the test the actual present competitiveness of the local production system as a modern actor in the free market: plant production system together with SME portfolio quickly became critical features to local development and global positioning.

Indeed, at the beginning of the new millennium, open markets and ICT improvements began to challenge classical development patterns and balance, mapping out new geography in the global production system.

Local fragility further came to be manifest during the 2000s, as it struggled to adjust to new international labour market and global production restructuring by becoming able to create new strategic forms of competition based on innovation, openness, knowledge and mobility.

Global restructurings are challenging the classic idea of competitiveness, engendering new forms of territorial *cooperation* based on *complementarity* (Boschma, 2004; Bristow, 2011; Cochrane, 2011; Pike et al., 2007, 2011; Porter et al.; 2011): the rising global interdependence and interconnection and the changing geography of production and value was asking for a shift from a competitive model, characteristic of a free market economy, towards a *multi-governance* model, based both on complementarity and cooperation within/among different territories, expertise and resources.

These requirements are clearly summarized by the notion of "*shared value*" creation, developed by Porter and Kramer (2011) as "a new way to achieve economic success"[133].

This conceptual shift has given birth to new criteria in defining 'successful' and 'vulnerable' territories and it has henceforth been able to identify new interrelations between the territorial and the industrial spheres.

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[133] This notion is seen as a mean to reconnect economic and social progress, companies and communities through strategic thinking, focusing on the enlargement of the total pool of economic and social value.

This structural transformation did reveal the failure of the 'territorial reproduction' formula and the obsolescence of the mechanical application of 'winning recipes' based on paradigms such as *First*, *Second* and *Third* world.

Such pattern mutation also confirmed the limitedness of standard regional distinctions like *developed/underdeveloped* or *advanced/backward* framed around the dominance of a single a-spatial conception of globalization, as stressed by Massey (2005) and Agnew (2013): the transition questioned the 'one hegemonic temporality', based on space-time compression, flexibility, speed and mobility, in favour of a wider and dynamic account of globalization as the co-existence of multiplicity (Massey, 2005).

The new approach started redrawing the relation between industry and territory. The re-assemblage of social space-time within transition around higher mobility of knowledge and people and cooperation/complementarity criteria has been translated in a re-conceptualization of 'proximity' (Bathelt, 2011; Boschma, 2005), 'knowledge bases' and skills (Asheim et al., 2011; Rullani, 2014a,b).

This change has drawn the attention towards local context-specific resources, players and business' capabilities and actions: *place* as the productions of social space-time processes ceased to be a self-confined entity to become part of a wider open global system.

Value-added activities and innovations, expertise and know-how together with relations and networking skills have come to be pivotal elements to a new territorial competitiveness, defined as it is by the specificity of these mutual and dynamic processes and interrelation networks, all of which may be defined as *territorial uniqueness.* Within such unforeseen scenario, and being characterized by high local specialization and low skilled labour force, scarce innovation and relative enclosedness, Piombino and Val di Cornia were soon bound to show their vulnerability within the new scenario.

The internationalization process in Val di Cornia

Global re-structuring and open markets have strongly and visibly affected the steelworks sector, reshaping the geography of the steel production system.

The presence of new competitors has in fact caused a significant redrawing work in the sector's *global production network* (GPN) (Henderson et al., 2002; Coe and Hess, 2011) and *global value chain* (GVC) (Humphrey and Schmitz, 2002; Gereffi et al., 2005).

Over the last decades we have been witnessing an uncanny rise of a number of 'backward' and 'emerging' regions to the detriment of 'developed' and 'advanced' ones: the growth rate of the former countries has been swiftly increasing since the new millennium, topping way over 50% of global steel production.

Their positive trend had its roots not simply on their competitiveness in terms of cheaper workforce, lower production costs and looser environmental regulations, but also in their having upgraded to *global innovation networks* (GIN) (Cooke, 2013), thanks to harder and better placed efforts to improve expertise and technological standards, dense know-how exchange and heavier investment policies in R&D and innovation.

The fast advance and upgrading of these countries, especially India and China, still represents a major threat for European steel sector and for its position in global production network: as proved by the enforcement of the *EU Steel Action Plan*, European steel markets have been crushed under steel global-level overproduction caused by China's hurtfully increasing production.

To new, emerging players, the crisis of European steel industry represents a chance to expand, to internationalize and to achieve a relevant position in the worldwide business network.

Foreseeably, Italy has shown not to be able to achieve comparable levels of competitiveness if compared to new market players, due to severe energy supply issues and to the lack of radical improvement and investment policies in

the national production framework, markedly in what concerns innovative technology and environmental sustainability.

An analysis of Val di Cornia's dynamics at micro level reveals the macro changes in production and value geography.

For the last ten years, Piombino, as many other Italian industrial sites, has attracted several foreign companies, like the Russian group Severstal in the 2000s and the public show of interest by Tunisian, Indian and Algerian companies in the last sale deals.

Despite its presence in the new global production system, Piombino has so far not been able to further scale up its positioning and competitiveness, but it has instead made its structural vulnerability and inadequacy more recognizable.

Notwithstanding its high standards in special steel and long products, Piombino's steel industry has not been able to successfully implement the sought-for management innovations and added-value features which would be essential for it to turn into a core node at GIN, GPN and GVC level.

Its scarce competitiveness and fragility have been dramatically clear since the beginning of the millennium, having caused unending emergency contingencies: from *Lucchini*'s sale in 2005 and the insolvency of Severstal in 2011/2012 to the negative experience of the *Smc* (fraud) plan and, finally, the entrance of Cevital in 2014.

Instead of supporting territorial upgrading and networking, internationalization ended up with reinforcing the locked-in attitude, based on local defensiveness and distrust towards 'openness' and 'outsiders': such a long string of negative experiences generated a feeling of disappointment and wariness, of resistance and scepticism affecting community, financial stakeholders and local administrators, and accrued during the last troubled negotiation and sale process and the negative *Smc* attempt to take over the plant.

Thus, anchored to its past success and roots, Val di Cornia's economic landscape has not significantly evolved in terms of innovation and cognitive improvements. The local system did not opened and adapt to new forms of

competitiveness/cooperation in global networking and interconnections: it has not been able to develop a strong *cognitive internationalization* (Bellini and Bramante, 2008; Rullani, 2006) and so to *anchor* new knowledge through global *pipelines* in order to fuel innovative spillover and interactive learning processes (Bathelet et al., 2004; Crevoisier et al., 2009):

More in detail, under the Lucchini/Severstal management, which started in the early 2000s, the steelwork did evolve, albeit according to mainstream types of internationalization, that is *allocative* and *hierarchical model*. Paradigms as such fell shy of ensuring a safe spot for the territory's features amidst the global production network and value chain, and were unable to create the grounds for competitive added-value systems as it failed to turn the local system into a key node as an active part of the global innovation network.

As "open" as they might have been, such policies only did focus on investment and corporate managementship, wholly neglecting innovation, expertise and exchange as crucial factors to industrial and territorial development alike.

The last ten years have witnessed how often local industrial and development policies have been little incline to give up a no longer fit understanding of competition and tried instead to salvage a traditional mindset whose maneuver space is limited to cost and production rates, whereas innovation and knowledge as business-sensitive factors based on added value and sustainability were neglected and seen as rather alien paradigms and basically unsafe bets. More specifically, territorial development has not accounted for new forms of cooperation and competitiveness and it has kept relying on traditional localized agglomeration criteria. The steelworks and its satellites activities have evolved mainly without promoting any other kind of shared space for cooperation else from the plant and its surrounding Val di Cornia area, enforcing this way a yet tighter regional lock-ins.

Geographical and cognitive proximity have represented the core of inward local development policies in Val di Cornia, ignoring innovative and alternative forms

of interactions, as suggested by Boschma's fivefold distinction of proximity (2005).

Localized learning used to rely on 'steel' *synthetic knowledge bases*, without establishing links with interactive cognitive processes and thus wanting for diversification or 'contamination' with *analytical* or *symbolic* bases, as suggested by Asheim et al. (2011) and their threefold definition of knowledge bases.

This pattern diminished the cognitive distance between local SME networks, up to the point of having exceedingly favoured 'strong' over 'weak' ties or, otherwise said, adaptation over adaptability, hindering regional resilience: this evolution confirms the *proximity paradox* described by Boschma and Frenken (2010).

These faults and a locked-in territorial imagery have been empowering each other up to driving institutional policy-making at local, national and European levels, producing regulations marked by short-sighted industrial management and obsolescent production systems.

These dynamics have been empowered by an overall consistent lack of long-term strategic planning and lasting innovative vision at several levels, as it will be shown in greater detail.

The recent acquisition by the Algerian *Cevital* group is expected and supposed to modify these patterns, thanks to long-awaited changes in the production systems, a generally more open managementship and a more positive and integrated interaction with the territory. Indeed the *Cevital* business plan aims at promoting a broader and differentiated approach to Val di Cornia's territorial development, going beyond the mere steel production to embrace the agro-business and logistics sectors.

And still, since the '90s the steel plant has also exercised a silent role as the "gateway" to and from the territory. Its internationalization has managed to provide some beneficial degree of authentic openness for the territorial system and its satellite activities.

In these cases, several enterprises of the satellite activities were able to spontaneously branch out innovative interrelations derived from as well as external to the steel network: regardless of how bound these business used to be to the steel sector system, they were and have been quickly able to promote alternative forms of collaboration/complementarity over local borders, based on distinct types of *proximity* (Boschma, 2005) and successful combinations of *differentiated knowledge bases* (Asheim et al., 2011).

By these collaborative platforms, there did emerge these 'weak signals' of change, the local 'ferment' and 'success stories' aforementioned and yet more than often ignored by the public opinion.

Actually, the 'territorial ferment' is the local manifestation of new forms of *cognitive internationalization* within Val di Cornia. These new innovative spaces surfaced in virtue of the optimal balance between *embeddedness* and *mobility*: they are the result of localized learning processes (often steel-related) and mutual knowledge contamination through multi-scale and inter-firms' collaborations.

A similar, but unexpressed 'territorial gate' might potentially be the seaport business, whilst so far the focus has almost solely been limited to meeting the plant's demands and needs. Its regionalization and the development of the European corridors (TEN-T) would impressively unleash its potential and strengthen its main network hub nature.

Aside from steel locked-in narratives, other territorial multi-dimensional configurations are coming up and out of transition in Val di Cornia, by having bet on context-specificity (*embeddedness*) and open interconnections (*multi-scalarity*), as worded by Coenen and Truffer (2012; Truffer and Coenen, 2012; Coenen et al., 2012a).

In conclusion, multiple spaces of global insertion and interconnection co-exist within Val di Cornia, characterized by different degrees of closure and openness, adaptation and adaptability, statics and dynamism, vulnerability and responsibility. In particular two diverging realms emerge around the steelwork:

followers and *locked-in* realms, whose production is highly dependent on the plant, and *leading* realms, open and dynamic.

In the last decade this dynamism has been fuelling the shift from a Piombino-centric configuration based on the steel plant, toward a *polycentric* and *centrifugal* re-organization of Val di Cornia based on a wider conception of local resources and vocations: this evolution has generated new resilient spaces, looking for a new balance between regional adaptation and adaptability, and has opened alternative spaces of cognitive internationalization.

3.1.3 Piombino and Val di Cornia caught between local and global

Global re-structuring and the appearance of new forms of internationalization have uncovered a higher territorial *complexity* than expected and a revised account of the *emergence* of territorial trajectories.

According to EEG framework, the local system's configuration appears to add up to much more than the mere sum of its own components, but as the outcome of interactive learning processes at both lower and higher levels: micro and macro levels affect each other, making it hard to neatly distinguish between *endogenous* and *exogenous* causality (Martin and Sunley, 2006, 2010; Martin, 2010).

Rising territorial complexity escapes a customary scalar evaluation of trajectories as it is inherently unfit to grasp the new blurred distinctions of the new context, whereas what is called for is an approach focusing on relational readings, as claimed by more than a few scholars in cultural geography: space and place stand out as the outcome of multiple interactions while territories and borderlines do as the product of social processes.

This nuanced conception of territorial borders and interrelations defies traditional patterns along with their significance and effectiveness: territorial evolution simply can no longer be explained by neatly distinct external/internal and local/global causalities.

Piombino and Val di Cornia between the relational and the scalar

Looking at transition as a process of structural change in the socio-economic paradigm - a shift in space-time conception and production models- perhaps may better account for the co-existing power struggles between old/predominant and new/emerging patterns. Their very being trapped and undecided between an outdated but trusted and innovative but change-demanding path has shaped territorial configurations going through a transition phase.

Once traditional territorial configurations based on scalar organizations and binary parameters are put on a side, alternative spaces become visible within and along the transition, revealing new forms of trans-territorial interrelations and blurring classic dual distinctions.

The analysis of Val di Cornia as a paradigm example of 'territory in transition' cannot afford to overlook the coexistence of relational and scalar spaces nor of ongoing alternative configurations along with dominant ones.

Val di Cornia evolution is still strictly related to the predominance of several forms of territorial multi-scale organization and to the valley's interdependence to greater territorial systems. As stated by Allen et al. (1999), "structure still exists in the form of material closure, no matter how much they may be wished away discursively".

As observed by Amin (2002), it means being able to acknowledge the scalar character of politics: it is especially true when applied to subsidiarity principles which are a peculiar feature of Italy's regional and EU structures.

Local, regional, national and supranational levels have maintained their extensive influence on local territorial trajectories. In Val di Cornia, multi-level agreements and planning are often to be found as the original factors behind several path creation and decline patterns and lock-in and unlock processes, as proved on one hand by the promising local planning during the '80s and '90s, by

the ongoing *APQ 2013* and by EU strategies (such as the *Steel Action Plan*), while on the other by the failure of the *APQ Bagnoli* and the *Città Futura* projects.

In this sense, *territorial/scalar approach* is a necessary and useful tool to observe the evolution of early paths and the influence of historical dominant patterns.

A proper analysis of Val di Cornia therefore requires, if not demands, to acknowledge the impact of past and present territorial structures, at several levels and scales, and to account for the role of predominant production modes and their contingencies.

Since its origins, Piombino's steel industry has been part of wider systems and has consequently been highly interdependent and rooted to other production dynamics at national, European and global level.

The account of such dominant structures should not mean their unquestioned acceptance of their existence as haunting entities to the detriment of alternative and 'secondary' spaces, as it has happened for a long time. Much similarly, accepting these patterns as predominant does not imply denying the coexistence of multiple alternative space-time and territorial trajectories within Val di Cornia: it rather aims at encouraging an open discussion about a variety of co-existing options.

Indeed, a brief look at the history of Val di Cornia over the last century is a prime example of sequential evolution of production patterns, marking the progressive shifts in space-time conceptions. The transition from Fordism to Post-Fordism then to globalization and flexible capitalism has been clearly outlined by the analysis of the industrial/territorial relations as well as being outstandingly evident throughout the sequential crises and plant ownership takeovers: with the '80s, the end of the State-ownership and of the centralized fordist model was followed by private Lucchini group during the '90s, parallel to post-fordist horizontal restructuring; then came internationalization in the 2000s, this time with Russian and Algerian capital to deal with a critical market entry in global production system.

These shifts have contributed to some extent to gradually unfold the local scalar rigidity of the system production and to promote the appearance of unbound, relational and open configurations.

The emergence of these alternative spaces of openness and interconnection has blurred local/global, outside/inside distinction in territorial definition standards.

Quoting Allen et al. (1999), "thinking across binaries can aid the process of their dissolution, but their unquestioned imposition in the world at large is a testament to the solidity of power configurations and assemblages which are likely to be unmoved by theoretical nuances."

In this sense, the observation of Piombino and Val di Cornia displays the obsolescence of several exceedingly narrow and duality-based territorial readings like *tacit/*local versus *codified*/global knowledge, as proved by the co-existence and interrelations of different knowledge bases; *exogenous*/*open* versus *endogenous*/*close*, as demonstrated by the co-presence of different kinds of internationalization and complex interactions; and finally, *local* versus *global*, as confirmed by the interrelations and interdependence of wider multi-scale systems.

Consequently, a relational approach constitutes a central *strategic lens* to overcome dichotomous and dominant readings, and to recognize the emergence of alternative and multiple spaces: it allows to explore possible future configurations as wells as to question and to provide guidance for local and regional transitional development and planning, and to adjust the aim towards new visions and approaches. The relational perspective unfolds new spaces for cooperation and complementarity, and original forms of proximity and learning, tending toward what Bellini and Hilpert (2013) define '*virtualization hypothesis''*.

Piombino and Val di Cornia as nodal configurations

Transition is gradually dissolving traditional territorial patterns, 'debording' into new spatialities. In particular, global restructuring and internationalization are breeding new complex 'nodal' spaces of local/global interdependences: as described by Amin (2002), these new "spatialities of globalization" represent places and regions as 'nodes', 'overlapping' and 'relational' settings, 'combination' and 'articulations', 'assemblages' and 'de-bordering territoriality' through time and space (Amin, 2004; Allen et al., 1998; Sassen, 2008, 2013).

Faced with the pressure of global re-structuring and paradigm change, territory as a concept is emerging as the outcome of mixed internal and external causalities or otherwise said, as the mutual interrelations of local/global spaces (Massey,2004 and Amin, 2004): Massey (2004) believes that "if space is a product of practices, trajectories, interrelations, if we make space through interactions at all levels, from the (so-called) local to the (so-called) global then those spatial identities such as places, regions, nations, and the local and the global, must be forged in this relational way too, as internally complex, essentially unboundable in any absolute sense, and inevitably historically changing".

Territorial trajectories and path-dependence in Val di Cornia revealed a high degree of interdependence and interconnection stretching far beyond local boundaries. While the plant's evolution has been strongly influenced and determined by global steel market dynamics, alternative spaces blossomed elsewhere, nurtured by new forms of cognitive internationalization.

Understandably, the Val di Cornia territory has been differently forged by the nodal and 'gate' function of the steelworks industry and *leading* agents.

The relational nature of space unveils in this way the co-existence of differentiated processes of space production: local and global reciprocity and interdependence are proven to be able to impact territories in multiple ways.

A new geography of *responsibility* and *vulnerability* is being born of age within

and across territory borders: local and global influence each other and their interrelations materialize in different and sometimes asymmetric, trans-territorial systems (Amin, 2004: Massy; 2004) They territorially manifest both in terms of *propinquity*, that is internal multiplicity, and *connectivity*, that are multiple interconnections.

In Val di Cornia, the predominance of 'steel' and of frozen interdependence over open spaces deemed as secondary confirms the vulnerable and peripheral position of this territory and its tendency to 'suffer' rather than 'impact' the wider system it belongs to: an inward identity based on *propinquity* mindset has so far been prevailing.

And yet, the unnoticed co-existence in Val di Cornia of differing and at times conflicting forms of multiple interdependences is indeed helping develop connectivity and an open identity: it is unveiling a new geography, characterized by a remarkable degree of openness and cognitive internationalization. Starting from the core position achieved in innovative global networks, new local influential spaces in Val di Cornia and new 'winning' positioning are moving forward, which can be positively exploited to direct and underpin new territorial trajectories.

These complex interrelations and co-existent multiplicity are progressively re-shaping and re-structuring the territorial configuration of Val di Cornia, promoting what Parrilli et al. (2013) have defined an "overlapping footprints of similar chains and networks".

Coherently, Piombino and Val di Cornia can be defined as *nodes* in '*open networks*' and in *trans-territorial 'filiere'* characterized by certain levels of *multiple-embeddedness* (Chiarvesio et al., 2010; Corò and Micelli, 2007; Rullani, 2013, 2014b; Zucchella, 2006).

Transition is then dissolving the static, bounded and close representation of Val di Cornia. Rather, it expresses the idea of "*global sense of place"* brought forward by Massey (1991): Val di Cornia clearly shows the co-existence within its territory of manifold space-time and *senses of place*, a mix of distinct local/global interrelations.

Val di Cornia so demonstrates some degree of *openness* and *variety*, which contribute to the rise of *trans-territorial configurations*.

With the exception of some successful initiatives, the region still lacks a solid network positioning at global level, revealing critical vulnerability and difficulty in grasping a positively transitional mindset, due to multiple 'steel' lock-ins and self-reinforcing patterns.

Nonetheless, turns out 'steel' can also work as a *dynamic* device: while it does build up lock-in scenarios, steel may as well be forged into escape and redefining patterns, branching out into new unlock paths and generating exchange across territorial boundaries.

'Steel' path-dependence has not just influenced territorial evolution in terms of self-reinforcing patterns and multiple lock-ins, but it has also acted positively through time-space as an *attractor*, *gateway* and *turning point* for path-creation and renewal, and for the emergence of new '*idee motrici*' and *leading firms,* as defined by Micelli and Rullani (2011; also Rullani, 2014b).

Thus, Piombino and Val di Cornia ought not to be defined as an enclosed and static territory, but rather as a *multi-scale* and *multi-level nodal configuration*, if still seldom evident.

Local identity should not therefore be envisioned as an everlasting and fixed entity, the frozen picture of a steel-locked in, backwards territory. On the contrary, *its conception can be redesigned and enhanced into a dynamic tool to explore the polycentric and open features of Val di Cornia as a trans-territorial node, if peripheral, of a wider system*.

3.2 Towards *multiplicity* in Piombino and Val di Cornia: identity as a *selective* and *power process*

The switch from from 1.0 to 2.0 knowledge economy at the beginning of the new millennium has emphasised *learning processes* and *knowledge* as key transition features (Rutten and Boekema, 2012): localized *interactive learning,* act as the engine of unique nodal interrelations, and *knowledge exchange* help shaping trans-territorial interactions and functional links.

Knowledge and innovation *2.0*'s stretches well past the reach of mainstream R&D linear and sector analytic approach, while its range is instead broad enough to include socio-cultural factors.

Low/high technological and backward/forward distinctions lose their significance to allow for a new account of innovative regional potential.

Transition is in fact questioning geographic and static conceptions of spatial borders, in favour of wider and dynamic relational definitions of space and places: transitional socio-economic landscapes have been leading the way for new paths and configurations to develop, based on territorial context-specificity/*embeddedness* and interrelations/*multi-scalarity*.

The nature of economic landscapes is determined by new forms of interrelations and internationalization: the tacit-local/codified-global distinction (Asheim, 1999) is growingly fading as it is unfit to account for 'other' types of proximity and knowledge bases, as demonstrated by the redefinition proposed by Asheim et al. (2011) and Boschma (2005).

In this perspective, territory can be defined as a *trans-territorial node*, anchoring global knowledge flows through localized learning processes. In this relational perspective, place is conceived as the dynamic *unique product* of relations and cognitive processes, as a landmark for *overlapping* interconnections and *multiple* trajectories to meet.

3.2.1 The co-evolution of multiple narrations in Val di Cornia

These new theoretical tools are able to structure a more comprehensive evolutionary assessment of path-dependence: as suggested by EEG, history and geography are inherent and intertwined features of path-creation and destruction. An evolutionary and geographical appreciation of these processes reveals their 'place-based' and 'place-dependent' nature (Martin and Sunley, 2006; 2010).

In this view, the evolution of territorial trajectories should not be restricted to exogenous causalities and pre-set reading tools, but instead understood as the outcome of intertwined external and internal dynamics and of agents' intentional action: a mix of *embeddedness* and *mobility*, where to remodel path-dependence exploiting differentiated knowledge bases and proximities.

Path-interdependence defining territorial trajectories

From the '90s on, a renewed interest on regional-level territorial development studies has been contributing to progressively enhance the definition of path-dependence. A regional perspective requires to account for the coexistence of differing and mutually reinforcing learning processes and paths within territories (Martin and Sunley, 2006): *path-interdependence* emerged then as a key notion to analyze the evolution of multiple regional trajectories as well as the co-evolution and overlap of several path-dependent processes within territory.

In this perspective, territory is defined by the co-existence and interaction of *multiple* stories: according to Massey (2005), 'multiplicity', 'difference', 'heterogeneity' and 'plurality' are intended as "the contemporaneous existence of a plurality of trajectories; a simultaneity of stories-so-far".

Place becomes a *unique node and intersection* of multi-dimensional paths: '*the uniqueness of place*', as defined by Massey (1999, 2005), is precisely a dynamic

and multiple feature, determined by the interaction of different territorial trajectories.

EEG's account of 'path' and 'trajectory' acknowledge the co-existence of multiplicity within an economic landscape: territory results in a variety of related arenas, embracing different fields (the economic, the social, the cultural and the political) across several levels.

Thus, path-interdependence draws towards a more ample territory evaluation and it provides deeper insight of its variety and complexity. By focusing on the co-evolution and interaction of different path-dependent trajectories, it grants a scope flexible and sensitive enough to identify 'secondary' narratives and additional alternative readings besides evident narrations, it being able to spot new spaces with strategic development potential and interconnections over traditional patterns.

According to the EEG framework, path-interdependence and territorial evolution are defined as complex and multi-dimensional processes: they depend both by the degree of relatedness between different trajectories (knowledge) and by the density of their interconnection (network).

Different combinations of knowledge and networking skills determine the development of diverging path-interdependence and trajectories: they feed both lock-in and innovative paths and, consequently, may differently affect regional resilience, in terms of adaptation/adaptability tensions.

On one hand, path-interdependence in Val di Cornia has generated 'primarily' rigid configurations and regional 'steel' lock-ins: the predominance of the plant mono-structure in the socio-economic landscape has been fuelling similar and self-reinforcing mechanisms of *adaptation* among steelworks and its satellite activities.

On the other hand, though, since the '90s innovative and alternative routes have been branching and looking outside of the dominant paths, contributing to new forms of regional *adaptability*. Innovative path-creation and renewal processes have in turn generated new opportunities and un-lock processes as well as having increased the complexity and variety of local path-interdependence:

over the last three decades, alternative development models have emerged aside from 'steel', especially in the tourism, agriculture and manufacture sectors.

These paths have been brought to light both by the exogenous pressure of external shocks and by the endogenous dynamism of strategic agents: under the pressure of the crisis, both *leading* and *follower* agents have been trying to abandon 'steel' obsolescent paths to *anchor* new innovative spaces, more or less successfully.

Their unfolding took place through two main channels: one consisted in initiatives featuring strategy planning and a fair degree of shareability, the other based on pre-set implementation of diversification recipes.

A key distinction can be identified between these two dynamic sets. The former has been able to define innovative paths and narrations *by means* of the actors' *intentional* action which, when provided with a strategic knowledge-base and fed with a shared approach, resulted in success stories such as the '*Parchi Val di Cornia*' or other exemplary stories identified and collected in the 2013 *Scuola Superiore Sant'Anna* research work and by the *Il Tirreno* report (2014o). These are textbook examples of a successful shared strategy, which also sets the grounds for a common new imagery. These initiatives were already *latent* in existing paths and its know-how left *unexpressed*.

In the second case, 'diversification' narratives and trajectories were implemented *according to pre-set* recipes and agreements, without relying on a strong and shared strategic vision, as proved by the partial implementation of the *Local Development Plan* elaborated by IRPET, the *Piano Strutturale* or the failure of *Città Futura* project in the 2000s.

In fact, on one hand, 'smart' managementship has been able to lead regional path-interdependence into *positive path-renewal and branching processes*: *leading* initiatives have generated new spaces, characterized by high levels of cognitive internalization and openness, which have been able to position

themselves as core nodes in wider open networks, thanks to innovative strategy and target-oriented planning.

These firms have contributed to increase variety and path-interdependence in Val di Cornia and to redefine its territorial trajectories.

More in detail, some 'smart' actors at local level played a fundamental, but unacknowledged, role, by silently unlocking development patterns: they did generate alternative *narrative,* one born out of combining embedded know-how and open interconnections.

On the other hand, *follower* and *locked-in* initiatives have frozen regional path-interdependence into the *reproduction* and *replication* of 'winning and off the shelf' patterns: they have relied mainly on 'old' or pre-set trajectories and reinforcing mindsets, showing low initiative and high rigidity.

Related variety shaping multiplicity in Val di Cornia

Since the '90s, the different attempts toward 'diversification' in Val di Cornia have contributed to its polycentric and centrifugal re-configuration.

The emergence of the trans-territorial and nodal nature of this territory revealed the multi-dimensional nature of its causalities, based as they are on *multi-scalarity* and *embeddedness:* this evolution is contingent to the co-existence of multiple trajectories, shaped by *embedded* routines and *multi-scale* knowledge spill-overs across space.

These path-dependent learning processes contribute to determine the complexity of the regional economic portfolio: path-creation, destruction and renewal define territorial evolution through regional variety and path-interdependence. These mechanisms might be latent in existing and early trajectories and can be spotted out by exogenous and endogenous dynamics.

Under the pressure of cyclical crises and the growing demand for diversification, variety in Val di Cornia has been increasing both positively and negatively in the last decade: while *related path-(inter)dependence* has raised

by means of innovative regional *branching processes*, already latent in past and ongoing paths, it has to be pointed out also how *variety per se* has been unsuccessfully promoted through the implementation of 'diversification'.

The idea of *relatedness* expresses the necessity of a certain degree of overlapping and interrelation among territorial paths: variety alone won't be enough in order to guarantee innovation, resilience and economic development (Frenken et al. 2007). Territorial trajectories require *optimal degrees of variety* and *cognitive proximity* in order to be resilient to shocks and changes and to support path-interdependence: to be effective, adaptive capacity needs a delicate equilibrium between diversification and specialization, un-relatedness and relatedness.

The shortcoming of the institutional planning measures carried out in Val di Cornia since the '80s relies exactly on a misunderstood notion of 'variety' and 'diversification', as described by Frenken et al. (2007): according to the '*sviluppo composito*' agenda promoted by the *Local Development Plan* and adopted by the *Piano Strutturale d' Area* in the 2000s, Val di Cornia was supposed to shift from high *specialization* in steel industry (excess in cognitive proximity) to bare *high diversification* (excess in cognitive distance).

It was clear how the mindset behind the agenda was approaching 'diversification' and 'variety' as the mere addition of unrelated activities and parallel paths, without account for innovative evaluation criteria for knowledge- and learning-related potential. It was not clear how this change should be promoted, which paths should be favoured on and which the strategic vision underlying the transformation would actually look like.

A parallel oversimplification of territorial development perspectives happens to be also found in local debate, as reported by the analysis of media narrations and *CATI* interviews (Sant'Anna, 2013). Neither 'tourism' and 'agriculture' by themselves as new and promising sectors for economic 'diversification' nor the opposition to further 'steel specialization' by itself, may be expected to give rise to any kind of long-term and sustainable image of

development: this approach lacks strategic thinking and the aptness to 'mobilize' unique resources and know-how in new innovative path-branching opportunities.

Aside from these top-down attempts to diversification, other forms of path-interdependence have co-evolved since the '90s, again running on innovative coordinated planning and spontaneous 'territorial ferment': these successful path-dependent processes branched out of existing and early trajectories, uncovering some degrees of interaction and relatedness between new and past sectors and paths.

They all were generated by interactive learning and knowledge spillovers and according to the criterion of "complementary capabilities among sectors".

According to EEG definition, these processes represent paradigmatic examples of territorial evolution based on *related variety* (Boschma and Frenken, 2006; Frenken and Boschma, 2007, Martin and Sunley, 2010; Martin, 2010): rooted in 'steel' tradition, they have been able to diversify their expertise and branch out along new paths, according to the 'related variety' principle and 'contaminating' their own know-how through related path-interdependence. As stated by one 'leading' local entrepreneur (Il Tirreno, 2014o), the success of these initiatives lies in an vision of 'diversification' which denies the loss of any type of gathered knowledge.

In this perspective, 'effective and resilient' diversification is promoted through *regional branching* under the criteria of related variety*: path-interdependent processes are shaped by the recombining, valuing and renewal of existing and latent path-dependent trajectories (Frenken and Boschma, 2007; Boschma and Frenken, 2009).

Related variety may have a positive impact in two ways on regional development: it both encourages innovation as well as enhancing diversification, by so doing reducing local vulnerability and exposure to external shocks, thanks to extended local and regional adaptive skills and resilience.

According to this perspective, the 'obsolescence' of 'steel' path-dependence does not mean to completely forsake past trajectories or to reject unique and specialized know-how: resilient *related path-interdependence* requires a 'innovative' re-examination of territorial potential, in order to include a broader range of fields and sectors.

Alternative and related applications of 'steel' know-how can trigger the promotion of multiple and different territorial trajectories in Val di Cornia, beyond the boundaries of the steel production system.

For example, other forms of territorial reading have been supported, as proved by the 'Ruhr approach', which is debated in the media: alternative re-thinking of the steelworks industrial heritage might just as well be the spark to new tourism models and in turn produce territorial appraisal and trigger the renewal and integration of more consolidated patterns, as experienced for the *Parchi Val di Cornia* and agri-tourism business.

In addition, the port development may represent a chance to extend and branch out to new related and successful path-interdependent processes. Its potential as regional gateway and 'window' is almost completely unexploited, since integrated synergy at several levels (local, regional and European) and across different fields (manufacture, tourism, agriculture) is required to be brought to light.

Differentiated multiplicity in Val di Cornia

Related variety and path-interdependence are contingent but multi-dimensional processes, which have been shaping both alternative and self-reinforcing trajectories in Val di Cornia: learning processes and path-(inter)dependence combine context-specific know-how with mobile and codified knowledge, the local unique specificity of Val di Cornia with the multiplicative nature of its nodal intersections.

Disparities both inside path-interdependence and multiplicity rise in accordance to the territories and the actors' differing cognitive and networking capabilities and measures taken.

As suggested by Boschma and Frenken (2009, 2010), varying degrees of related path-interdependence are largely associated to territorial and firm's '*absorptive capacity*'. This feature is the key element to success, as it combines cognitive 'contamination' (*multi-scalarity*) and context-specific roots (*embeddedness*): path-interdependence and related variety appear to be closely connected with a territory's chances to *anchor* and *mobilize* knowledge in localized learning processes (Crevoisier et al., 2009). Followingly, regional variety and path-interdependence, as determined by local absorptive capacity, shall differ in their manifestation depending on the nature of social interactions and learning processes within individual territories: territory does indeed turn into the *multiple-embedded* synthesis and outcome of related trans-territorial interactions and dynamic flows (Zucchella, 2006).

The *leading* firms' achievements in Val di Cornia derive, in fact, not on their networking skills *per se*, but more on their having being able to locally *mobilize* and *anchor* new knowledge. This characteristic has allowed successful firms to branch out in other sectors through new forms of cognitive internationalization and innovative knowledge spillover.

 Leading SME act as gateways and nodes in Val di Cornia, fit to attract and spread new knowledge across the region and to other firms and to promote related path-interdependence and regional branching.

Still, *follower* firms display a critical lack of 'absorptive capacity. The closedness and rigidity of such business networks has restrained the local aptness to exploiting the knowledge given out by leading firms: 'steel' self-reinforcing path-dependence has certainly narrowed their cognitive distance and available variety in favour of lock-in and overspecialization.

As shown by the interviews, the lack of inter-firm exchange, local knowledge spill-over and exploitation in Val di Cornia is one of the main obstacles to the promotion of innovative interactive learning processes.

The absence of a strategic policy framework at local level, the gaps in collaboration and integration between *follower* and *leading* firms risk to weaken regional resilience: differing local absorptive capacity and variety therefore manifest as a differentiated multiplicity in Val di Cornia, characterized by uneven degrees of relatedness and un-relatedness.

This internal diversity can be seen in the co-existence of both isolated/locked-in and collaborative/open spaces.

Consequently, Piombino and Val di Cornia's identity should not any longer be described solely in accordance to 'steel-bound' predominant patterns. This narrow evaluation limits territorial complexity while ignoring as well the area's path-interdependent dynamisms.

Such static approach has shown to actually hinder a territory's potential, in fact breeding a self-reinforcing, locked-in and rigid imagery over an alternative, open and dynamic narratives.

Indeed, as by Massey (1999), the dominance of one space-time perspective and production mode over other one leads to both spatial and social lock-ins.

As testified by the evolution of Piombino and Val di Cornia, not all trajectories are going to have the same impact and intensity on territorial configuration and place definition: success stories are not ever-predominant over 'locked-in' narrations, which shows the presence of power asymmetry in the area.

Transition rises precisely out of the conflicting and asymmetric nature of these discrepancies and by the tension between different and multiple narratives, which highlights the *open* and *disruptive* aspect of space production.

Indeed, transition has raised several key questions in Val di Cornia about how to manage path-interdependence and multiplicity and how to select 'priority'

territorial trajectories, or otherwise said how to build and define the identity of Piombino and Val di Cornia.

3.2.2 Selecting narratives in Val di Cornia: an issue of power

A comprehensive look on Val di Cornia should by all means account for co-existing narratives and plural trajectories. Path-interdependence and regional branching may bring to a deeper understanding of the multiple routes traced in the economic landscape. Nevertheless, of course they are apt to provide only a specific reading of the routes' appearance and development.

According to Massey (1999, 2005), the relational nature of space and multiplicity implies power relations: path-(inter)dependence as an interactive cumulative and combinatorial process shaping territorial evolution inherently defines 'power geometries'.

Changing territorial visions and priorities drive these gradual processes: territorial trajectories are thus the outcome of progressive selections and dynamic power geometries, according to differing socio-economic paradigms and space-time conceptions. Consistent with the definition of path-(inter)dependence, selection is an open process, whereby to shape territorial trajectories and consequently to define identity.

Thus, a deeper understanding of path-interdependence implies a wider comprehension of its underlying interactions: aside from the account for differentiated and related territorial trajectories, it requires analysing the conflicting coexistence of diverse space-time conceptions and the examination of power geographies inherent to their distinctively plural and multiple natures.

Divergences, struggles and power asymmetries between different trajectories have clearly proved to be inherent and pivotal elements to territorial evolution and identity building.

Indeed Val di Cornia's development has been influenced by a predominant steel-based geography of power and by a strictly steel-bound narrative overcoming alternative and open forms of exercising power, as found in 'alternative' and successful imagery.

All throughout the plant crises of the '90s, multiplicity has been identified in varied forms within single territories and among them: some path-dependent trajectories were relying on self-reinforcing adaptation and lock-in patterns; others had been able to evolve into path-creation and renewal thanks to 'strategic' intentionality and related variety, so as to successfully lead on path-interdependence and regional branching.

These observations have made it possible to tell between *leading/follower/locked-in* realms within regional economic landscape.

However, the evolution of Val di Cornia has not privileged and fostered the most successful and dynamic paths and imageries. On the contrary, it has mainly sustained the plant's dominant influence: its development and identity have mainly relied on closed and locked-in 'steel' narratives and it has kept anchored to an old-fashioned vision of industry planning and management which belonged to obsolete patterns, rather than triggering innovative and open paths.

It so appears that territorial evolution and identity building in Val di Cornia has arisen not so much as a variety issue in itself, but more as a matter of decision-making about what territorial pattern to pick and promote among the available variety range.

'Steel' shaping dominant local identity: the exercise of 'power over'

Along the last decades, the evolution of Val di Cornia has been driven by the asymmetric clash between different paradigm and space-time conceptions.

Hegemonic narratives –as Fordism and Post-Fordism- imposed themselves over other and allegedly 'secondary' patterns, jeopardizing local variety and entrepreneurship, as argued by Bracci (2012): unevenly influential readings of

the territory have strengthened the social and economic centrality of the steel plant through *functional*, *cognitive* and *political lock-in*. A market-oriented, competition driven mindsets frozen territorial priorities and configurations in order to suit the steelworks business demands, leaving no room for odd players while ignoring the rise of open and dynamic spatialities.

Mutual and self-reinforcing 'steel' lock-in processes have privileged a hierarchical '*power over*' pattern, aimed at exercising control *over* other spaces: this attitude supported an idea of local identity as an inevitable a-spatial and hegemonic evaluation of territory built on the 'steel' imagery. An indeed superficial reading of Val di Cornia would merely depict this 'dominant' narrative as a 'static' and 'immutable' territorial image: for decades, this misconception has been trapping local imagery in a locked-in and inescapable symbiotic idea of Piombino and its steel industry.

Conversely, a deeper and comprehensive understanding of territorial narrations discloses the multiple and trans-territorial character of Val di Cornia. It unveils the co-evolution of hegemonic 'steel' narrations and silent and 'secondary' dynamisms and struggles. In this perspective, territorial identity rises as a process of conflicting and complex choices across different levels and scales and contrasting priorities.

For decades, this asymmetric process has enforced the *functional* dominance of Piombino over the rest of Val di Cornia. The prevalence of its demographic and urban growth, the attractiveness of its local labour market and its nodal infrastructure and logistics have all fuelled centripetal forces around the steel industry.

Piombino has simultaneously risen as the main *cognitive* reference in collective perception due to the pervasiveness of steelworks in the socio-cultural, environmental and economic spheres.

Its prominence has affected the internal and external shared picture of Val di Cornia: the relevant development of the steel industry and its impressive visual impact has engendered stereotypical imagery sets. Piombino and its steelworks

have become synonyms: as proved by the heated debate about the novel "*Acciaio*" by Silvia Avallone or by the media's negative and partial narrations of Val di Cornia, this stereotypical superimposition has been concealing an actually complex local reality.

Moreover, due to its socio-economic centrality, across time Piombino has been able to acquire a stronger positioning in *political* terms. This relevance has given leeway to a long-lasting influence over the local agenda in order to have its focus locked on and revolving around the plant's needs and priorities.

After the severe crisis of the '80s and the '90s and the plant privatization, the so far untouched of Piombino/steelworks diptych began showing the cracks of time: *centrifugal* dynamics had emerged in Val di Cornia after the birth of multiple and conflicting multiple trajectories.

For scores of years, divergences in territorial visions and priorities have been slowly unlocking such biased and until then utterly monopolizing imagery: an increased multiplicity is clearly present in the steadily growing call for genuine and differentiated identities in Val di Cornia, no longer limited to the Piombino/steelwork dualism, as well as inherent to the appearance of alternative spaces in defiance of the established 'steel-driven' dynamics logic and identity.

Since the end of the last century, the need to diversification has induced to devote unprecedented emphasis on context-specific features and local vocations, valuing alternative and apparently 'secondary' forms of knowledge and resources: the focus of new planning measures and inter-municipal cooperation has moved towards the variety of territorial expertise and potential.

In fact, several attempts were made at institutional level to deal with and meet such needs.

Starting with the late Seventies, coordinated planning (such as the creation of the *Circondario*) proved to be effective tools to the re-structuring of territorial power dynamics, promoting *collaborative* and *joint* experiences, in this way

redrawing Piombino's role and the steelworks industry's place within the local territorial framework. These networking and governance accounts brought a solid contribution to the consolidation of a more *horizontal* and *polycentric* configuration of the area, progressively re-scaling the Piombino-steelworks *catalyst* role.

The territorial 'ferment' and 'boiling over' described in the second chapter attest to something else besides mere 'steel' identity has being co-existing and co-evolving throughout time and space, to finally bring to light the open and disruptive character of spatial production and transition: indeed, as suggested by Soja (1999), transition has shaped a new '*spatial turn*' based on new forms of interaction and *associational* power (*power to*) to the detriment of classical *instrumental* power (*power over*), proper of previous hegemonic patterns.

Territorial 'ferment' and 'boiling over': the emergence of alternative identities and 'power to' dynamics

The '90s mainstream conception of '*power over*', proper of the hegemonic Piombino/steelwork image, has been fading due to the emergence of multiplicity and '*power to*' dynamics, aimed at promoting cooperation *with* other kinds of spaces (Allen, 1999): the steel crisis and the privatization of *Ilva,* though, weakened the dominant and self-reinforcing 'steel' approach and jeopardized their functional, political and cognitive manifestations. New unlocking processes have opened and marked new alternative spaces of contestation and cooperation.

In addition, since the new millennium, the global chains restructuring has encouraged the implementation of new territorial development mindsets fit to respond to new forms of competition based on cooperation and complementarity, further questioning old competitive patterns.

The '80s witnessed changes taking place in the socio-economic paradigm modified the spatial configuration of power in Val di Cornia and its established perceived image: the crisis of the 'steel' grand narrative (power over) had to

open up and acknowledge the co-existence of other multiple trajectories (power to).

This conceptual shift turned into a new point of view to analyze the emergence of transitional territorial trajectories: it allows to observe the evolution of Val di Cornia under the lens of changes in power geography; it offers an alternative reading of its path-interdependence, variety and identity building process; finally, it detects and stresses the emergence of 'secondary' and open trajectories of collaboration, apart from centralized, hierarchical and tunnelled 'steel' patterns of *domination,* inherent to the plant and its satellite activities.

The collapse of the *dominant* paradigm and the rise of conflicting multiple narrations have supported the consolidation of alternative spaces of *contestation* within the economic landscape.

According to this definition, Piombino and Val di Cornia's identity is to be considered neither as the inevitable predominance of 'steel' trajectories nor as the 'pure sum' of diversified paths, but rather, *place* is here understood to be a 'site of negotiation', as affirmed by Massey (2004). The place identity-building process goes way beyond local boundaries: coherent with the relational character of territory, place and space, identity is the outcome of multi-dimensional and trans-territorial intersections.

Place identity should not then be diminished into a static and pre-set image, but ought to be seen and valued as the space of conflicting and dynamic selective processes or else as the outcome of struggles and choices: at once a building process and the outcome of 'mutable ongoing production', which can be either managed and led by *power-over* or *power-to* dynamics.

According to this perspective, identity building can differently materialize across and inside territory borders, its course adjusting according to asymmetric and distinct power geographies. Under the pressure of transition, Val di Cornia is a paradigmatic terrain of 'struggle' between co-existing and conflicting narratives.

For one thing, *leading* agents have been able to promote *associational* power and along with it mediation and mobilization (power to) across scales and levels: they improved trans-territorial cooperation through cognitive internationalization, open networking and interrelations. Their multiple collective and inclusive actions pushed forward new multi-dimensional spaces of contestation and identity alternatives.

For another, *follower* agents were bound to the *instrumental* power (power over) exercised by the steelworks business according to a inward-looking thinking and vertical rigidity: a plant-based mindset has ruled over an closed territorial socio-economic configuration, resulting in a frozen imagery and an ever, locked-in and steel-bound identity.

Despite territorial plurality and the rise of alternative and successful spaces of contestation, 'steel' has kept choking other narratives for decades, shaping and trapping local identity: 'steel' lock-in and self-reinforcing dynamics have unevenly altered the course of selective processes and crafted local narratives.

According to the account of place and identity from a power perspective, 'steel' predominance is not to be intended as a static territorial image, but rather as the outcome of asymmetric and unbalanced conflicts: it is the expression of 'power over' reasoning belonging to 'steel-based' imageries, over alternative and cooperational spaces of 'power to'.

However, despite 'territorial ferment' the persistence of static readings of Piombino and Val di Cornia has kept fuelling closed and dichotomous imageries: whilst territorial evolution was trapped into the inescapable the idea of 'steel' specialization consistent with 'power over' mindsets, the growingly louder call for multiplicity ended up being dismissed ended up being dismissed as a sporadic manifestation of variety and diversification *per se*.

> In concrete terms, these dual and partial territorial readings resulted for years in short-term and sector-driven strategies and political visions: the strategic relevance of those 'weak signals' recorded over the decades kept on being easily oversimplified when not altogether neglected.

However, a more complex and relational interpretation of identity shall focus on how to manage power and interrelations readings in multiple emerging territorial trajectories and it will enable to obtain long-term and integrated territorial visions and imagery.

In conclusion, the identity of Val di Cornia is not a sheer juxtaposition of different and polycentric vocations. Nor is it a static picture locked in a 'steel-bound' image, determined by the imposition of pre-set or inevitable paths.

Identity building is much rather a selective and power process: it is a tool to mediate between multiple and conflicting narratives and an instrument to ease decision-making processes and to balance up power geography.

This way of interpreting local identity unfolds different strategic and political implications to local development and planning. It adds up to an alternative interpretation of territorial evolution in terms of power and identity.

Thus, as suggested by Massey (1999), 'spatializing' territorial policies beyond grand narratives open to heterogeneity, multiplicity and novelty: they mean changes and challenges to new development patterns. As affirmed by Amin (2004), this conceptual shift transforms the way to interpret political planning goals and the real political being of regions and localities.

3.3 Towards a *renewed approach to local and regional development and planning* in Piombino and Val di Cornia: identity as a *strategic* and *political* notion

Territorial evolution and identity are going mirror that same power geography mapping according to which they are selected and produced: *that makes space and place inherently political*. Space emerges therefore as an *open* and *disruptive* process, exposing a new "dynamic and politically progressive" conceptualization of the spatial (Massey, 1992, 1999).

The open and changing nature of transition is further demonstrating the co-existence of different and colliding dynamics within territories, which are found to be trapped between 'resistant' and 'innovative' tensions ranging between backward-looking and future projections.

Places as multiple and dynamic entities, come to be political antagonizing arenas where conflicts manifest, together with cooperation and negotiation as well as claims and struggles. According to this relational view, *territories and identities are co-produced* across several scales and *their evolution and imageries are building and selective processes*, which are largely shaped by internal and external dynamics.

Their production reveals to be multi-dimensional and trans-territorial: this global/local interdependence is drawing a new geography of *responsibility* and *vulnerability* between places (Amin, 2004; Massey, 2004).

According to Massey (2004) and Amin (2004), this multiple and dynamic character implies new ways of conceiving 'politics of place' and 'politics in place': a political account of identity should aim to appraising both complex internal multiplicity, i.e. '*politics of propinquity'*, and its multiple spatial interconnections, i.e. '*politics of connectivity'*.

In this perspective, "politics *in* place" (Amin, 2004) reject pre-set and imposed recipes; rather, they are the progressive outcome of shared and conflicting multi-scale and multi-level processes: regional development agendas and politics *of* place likewise emerge as constructed *visions* and priorities (Amin,

2004) and strategic "platform policies" (Asheim et al., 2011; Cooke, 2012).

3.3.1 Identity as a political issue in Val di Cornia

Until today, the reading of Val di Cornia was lacking a relational understanding of its narratives: the image of this territorial identity has been often perceived as pre-set, imposed and static image, hopelessly bound to steelworks, rather than being the dynamic outcome of building and selective processes as the product of conflicting multiplicity.

This interpretation has engendered dual approaches to local and regional development, based on a "steel/non-steel" logic which has narrowed and encaged its development agenda's points of contact to 'third' possibilities. It has denied attention to the rise of new 'ferment', to alternative 'steel' readings and path branching, regardless their proven capability to overcome dichotomous territorial trajectories and open up to unexplored spaces of development.

Indeed, the dominance of dual and static imageries does not fully account for the vitality of alternative spaces and narrative, as defined by the 'representational space' of Lefebvre (1973), the 'thirdspace' of Soja (1999), the 'lived space' of Amin (2004), wherein to exercise new openness, alternative thinking and contestation: it denied the relational character of territorial evolution, it overlooked the power implications of imagery-building and thus, it has shown not to be able to recognize the political relevance of a dynamic territorial identity.

In 2012, two years after the abolition of the *Circondario Val di Cornia,* the town councils of Campiglia Marittima, Piombino, San Vincenzo and Suvereto together with the Port Authority commissioned to the *Scuola Superiore Sant'Anna* (Pisa, 2013) the study "*Dinamiche identitarie, trasformazioni economiche, prospettive strategiche".* The research aimed at the analisys and investigation of local plural identity and the multiple socio-economic dynamics of the valley while going through a time of transition.

To the local administration, the study meant a new starting point from which to

explore future and alternative development strategies. This requirement has its origin in the need at local institutional level to ponder on Val di Cornia's identity and to re-discuss the local development patterns, so as to create optional sets of references for a new and shared strategic framework.

Indeed, the latest crisis between 2012 and 2014 has partly, but permanently unlocked self-reinforcing paths and questioned static and dichotomous territorial interpretations: several territorial transformations have been imposed on Val di Cornia by changes in the plant structure and organization. The manifested vulnerability of the steel imagery has further made room for new spaces of contestation in local public debate and reactivated an identity selection process: 'secondary' and alternative spaces have begun to acquire a renewed appeal and status in the eyes of local administration, of public opinion and community alike.

Such growing awareness may be considered a significant turning point in local evolution: it shows a trend-setting change in territorial reading, which now seems to be including the political and strategic significance of a territory's dynamic identity and the implications of its plural nature in terms of power distribution.

Despite opportunities as the ones mentioned, the open and disruptive nature of transition and the ongoing and changing dynamics of Val di Cornia prevent from determining or outlining a faithful short-term picture of the area.

Adaptability and adaptation tensions are going to keep shaping the evolution of the territory, and the prevalence of one over the other will determine different and conflicting scenarios.

As the awareness of such dynamics steadily grows, recent local elections and the plant's sale granted the opportunity to further promote new geography of power (thanks to new point of views and to the varying composition of constituencies), so as to favour the appearance and emergence of a new plurality of spaces and to unlock 'resistant' functional, political and cognitive dynamics, that is laying the foundations of an *adaptability* scenario.

And yet, these very changes might also be a threat to the continuity of this positive process: such delicate phase of transit from an ending state of emergency into a new phase of settling risks to consolidate an *adaptation* scenario by freezing 'alternative' pushes, generating new lock-ins and diverting the attention from innovative transformations and changes.

At present, the local agenda is still in want of integrated planning and strategic vision of the territory. For example, the programme proposed by Piombino's new mayor Massimo Giuliani definitely seems to go back to those traditional diversification and sectorial patterns already unsuccessfully implemented over the last decade: in the guidelines for the 2014-2019 administration (Comune di Piombino, 2014), the development of the territory as a 'place for the expression of community identity' is not approached by new dynamic, plural and open strategies, but it is instead once again conceived in terms of local assets exploitation.

Moreover, despite increasing attention, 'secondary' actors (such as 'steel-bound' satellite activities and other SME), along with all their strategic relevance as new forms of territorial openness and dynamism are still isolated and underrated in local planning measures: 'weak signals' remain a 'secondary scenario', complementary to 'steel', rather than being held as innovative trans-territorial 'gateways' and *leading* successful initiatives.

Instead of being perceived as 'primary' and key suggestions to a renewed local planning and development and as new territorial positive triggers for alternative trajectories to develop, these innovative experiences are still considered as sporadic spots on a still map, territorial 'exceptions': as argued by Bellini (2004), "in other words, situations of political and cognitive lock-in in "post-paradigmatic" areas (for example in several Italian industrial districts) can generate stereotypical images referring to historic production structures which are outdated and - which is worse - can hamper innovative dynamics which are taking place. The latter will not be recognised or will be dismissed as transitional, non credible and non reliable phenomena".

In this perspective, 'territory' risks to be once more misled as the pure sum of different endowments and as a close and auto-defined entity; while 'identity' risks to be intended as a static, pre-set and inspiring image.

In this sense, the definition of a territorial dynamic identity ought to be supported in order to account for the relational and nodal character of a territory and for the interrelations and interactive learning processes underlying its own production. This being the aim, the necessity to rethink space and spatializing politics in relational terms needs to be synthetized in a new political conception of identity building and territorial evolution: how to inclusively and successfully manage selection, negotiation and clashing between conflicting and multiple place imageries is one of the main challenges risen by transition analysis.

Indeed, a deeper analysis of the evolution of Val di Cornia highlights the surfacing of a dynamic, multiple and selective identity and stresses the urge to interpret its political implications in a renewed approach to local and regional development and planning. The relational shift in territorial reading outlines three main implications for territorial development and planning (Figure 3.1):

- Identity as a *platform policy* to support the *integrated* territorial planning and *systemic* development of multiple territorial trajectories (Identity as a *dynamic and polycentric* production of *trans-territorial configurations*);

- Identity building as a *multi-governance* system to promote *inclusive* territorial planning and fairly manage *variety* and *intentionality* (Identity as a *selective and power process* between co-existent *multiplicity*);

- Identity building as the production of a *strategic vision* to guide territorial development and planning and to guide territorial evolution throughout transition (Identity as a *strategic* element for a *renewed* local and regional development and planning).

Accordingly, Val di Cornia's identity turns out to be equally far from the established inward expression of the local community's identity as much as it is from a superficial public image perception or a mere branding operation alike: much on the contrary, it is the production site of a multiple and hybrid identity.

An account of the political nature of territorial identity is to go far beyond place-sensitive policies as planning tools for sector improvement and heritage protection and appraisal while it needs to shift the focus of place policies on the coordination of inclusive and selective processes of multi-governance.

Meant as a political issue, identity building requires the previous recognition and appreciation of the complex sets of learning processes and interactions, which are shaping the new trans-territorial configuration of Val di Cornia. Under this lens, territorial development is no longer a question of exercise of *power over* imageries, but rather of *power to* mediate for and empower a plural and complex identity.

3.3.2 Identity as a strategic and political tool to planning and development

The acceptance of the specific 'nodal' role of a place and the relational character of territory allows for new approaches to territorial development: as affirmed by Amin (2004) and Bellini (2004), it identifies a different way of "being political" and "making policies" in regions and localities. Territorial policies cease to be considered as tools and recipes to territorial development or as the pure outcome of a set of actions; they evolve into strategic and inclusive '*policy networks'*, which are instrumental to identifying conflicting territorial priorities and work as reliable guidelines in the selection of alternative actors and imageries to be supported.

During a transition time, identity building sticks out as a *political tool* to mediate and direct the multiple and dynamic relational nature of a territory, as a *political process* of negotiation and selection of alternative strategic visions.

Identity as a 'platform policy': territorial planning promoting an integrated and systemic reading of Val di Cornia

Since the '70s and the '80s, planning policies in Val di Cornia have been fundamental to identify and highlight the multiple and plural character of Val di Cornia aside from its prominent steel industry. And yet, their sector-oriented focus on territorial assets and heritage preservation has missed the opportunity to implement an inclusive systemic approach to territorial development.

Such reading of Val di Cornia has further supported a steel/non-steel dichotomous mentality, rather than 'integrated' and 'unique' territorial trajectories: *it has fostered a diversification-driven approach to territorial variety, as opposed to 'steel' specialization per se, and which tended to neglect the richness of its past 'steel' tradition*.

This vision, rooted in the idea of '*sviluppo composito*', has been implemented and supported by a string of planning and agendas all throughout the '90s and the '2000s, but with little success: while the sequential industry crises limited its implementation, the lack of a shared and integrated territorial reading strongly compromised its effectiveness.

This *diversification* approach has, in fact, privileged the territorial asset-portfolio over the cognitive and relation value of the *uniqueness of place*: it just kept relying on a sector-oriented mindset and according to inside/outside logic.

The sector-driven approach and the lack of an integrated territorial reading have resulted in the appearance of uneven and detached territorial trajectories and caused the appearance of multiple and uncoordinated spaces, materialized in official planning as well as in spontaneous initiatives.

This multiplicity characterized the evolution of Val di Cornia to varying degrees and branching out paths have had alternate success, especially in the tourism, manufacture and agricultural sectors: *leading* initiatives have been promoting alternative and positive path-renewal and creation processes by openness and cognitive internationalization; *follower* and *locked-in* initiatives have been

feeding self-reinforcement patterns around 'steel' and 'other' dominant mindsets.

Until today, this development strategy has excluded 'third' and alternative options to transitional territorial evolution, suitable to reconcile into consistent alternative routes the potential of what was handed over from the past together with the innovative nature of multiplicity.

Conversely, *the dualistic logic based on an internal-vs-external opposition in territorial reading and development policies has been hindering in countless ways the formulation of an integrated and strategic vision*.

First, cognitive and political lock-ins fostered the contrast between 'outsiders' (as *Lucchini* and *Severstal, Smc* and *Cevital*) and 'insiders' (community and local administration), between the industrial and the territorial spheres: the persistence of nostalgic expectations has fuelled local disappointment and the detachment between the 'outlanders' and the '*piombinesi*' locals, between the plant and the territory. It has fostered inward-looking and 'resistant' policies over 'proactive' and outward-looking strategies.

Second, the co-evolution of distinctive imageries has so far been characterized by different temporalities within the same territory: if local administration had promptly promoted 'diversified' unlocking processes since the '80s, such strategy managed to spread mostly outside of the territory or at institutional level. That image had been built on the 'attractiveness' principle and it limited projection could only touch external contexts, rather than fit to being shared and adjusted at local, internal level as well.

A perception of 'diversification' at community level began to manifest evidently in the 2000s, following to the *Lucchini* ownership crisis, the new and already frustrated expectations and the debate over the '*Acciao*' novel.

Third, the area has been suffering from the imposition of stereotypical and negative external labels, mainly connected to the steel industry: these damaging connotations have so far induced to oversimplify local complexity as well as the richness of its heritage and resources, holding back local development and the

spreading of alternative territorial visions, both within and across territory borders.

To solve the sector-driven and dichotomous approach to the evolution of Val di Cornia, *identity-building as a redesigned concept should tend to inclusive integration and synthesis of divergent imageries, in the place of distinction and differentiation.*

Thus, as argued by Bellini (2004), territorial identity should be intended as a *policy network process*, which strategically reflects and interprets the actual realization of the prevalent vision of the future.

Multi-scale and multi-level 'policy networks' become the platform for new territorial evolution and trajectories and hence for identity building processes.

A new and integrated development agenda should be willing to account for territorial openness, complexity and dynamism, for nodal and multiple territorial readings, rather than for static, pre-set and withdrawn image: as suggested by Amin (2004) and Massey (2004), politics of place should reflect territory as part of a wider and interdependent system, instead of depicting it as an self-sufficient and isolated entity.

Much in the same way, in Healey's words (2011), "there are very few places which are not threaded by all kinds of connections to other worlds, which provide resources as well as threats […]. A 'localist' agenda demands 'rights' to protection from the threats, which may emanate from other worlds. But it needs to be accompanied by responsibilities too. The planning project, in its progressive form, has a clear message about these responsibilities."

Massey (2004) and Amin (2004) therefore believe in how this approach grants an angle wide enough to make sense of territorial interdependencies and asymmetries, in virtue of place-driven policies being able to tackle, shape and influence territorial vulnerability and responsibility. Actually, as suggested by Parrilli et al. (2013), territorial 'upgrading' and development is determined by the local capacity to improve unique 'functional links' within global chains and networks. Local positioning in global systems relies so on localized *interactive*

learning processes as the engine of unique interrelations, and *knowledge exchange* to shape trans-territorial interactions and networks through specific functional links.

In this relational perspective, territorial development is guided by a new mentality made up of cooperation, complementarity and shared values, all belonging to wider system patterns: as stated by Healey (2011), an integrated and place-focused planning approach is defined as "collective endeavours to shape place qualities to promote better trajectories than might otherwise occur [...] (that) should recognise the complex interactions between economic, social, cultural and environmental relations as these play out in a particular place. It also requires consideration of the different times and scales of the various relations in play".

Criteria as such are clearly clashing with traditional competitive frameworks, which inherently imply differentiation, contrast and antagonism.

Moreover, the cooperation and complementary principle rejects the definition of development as the implementation of predictable and winning regional and local recipes. They rather open to embrace development as the valuing and promotion of the uniqueness of place, in turn itself determined by the local aptness to anchor global input and channel it into multiple and varying ways. In this way, the creation of the uniqueness of place may in this way determine regional potential.

A perspective sustained by the idea of '*constructing regional advantage*' proposed by Asheim et al. (2011): according to it, an effective regional advantage has to stem out of a strategy "based on related variety, which is defined on the basis of shared and complementary knowledge bases and competencies". Territorial development is approached in strategic terms, as '*platform policies*' ('or joined-up' policies) "focused on making connections between different but related activities". As by Cooke (2012a), "the platform model celebrates the difference and cross-fertilization of ideas and practices among firms in the same or different industries".

This approach builds up a systemic and integrated interpretation of territorial evolution and development.

The application of this concept to the Val di Cornia analysis allows for its territorial potential to fully show, far beyond being able to detect a 'steel' vocation or to carry out a sector assessment: it is possible to gather insight on the territory's cognitive and innovative uniqueness as the peculiar and multi-dimensional product and intersection of plural territorial trajectories and interconnections.

Territory emerges then not as a relevant asset and product *per se*, but as a significant production process of unique resources, goods and skills.

The uniqueness of this process derives from the specificity of its related path-interdependence, which is determined by regional evolution, history and geography.

In this view, *identity building as a dynamic and polycentric production of trans-territorial configurations can promote a new systemic and integrated reading and development of Val di Cornia: identity acts as 'platform policy' based on place uniqueness.*

Identity building as a 'multi-governance' system: territorial planning promoting inclusive path-interdependence in Val di Cornia

Considering the multiple and hybrid character of identity and the multiple nature of place, allows to define territorial potential and its uniqueness as the outcome of a fair and open selection process.

Therefore, according to Healy (2006), planning can be defined as a progressive process, rooted in the context specificity of a particular place evolution, which is produced by the history and geography of its relational dynamics. This inclusive process aims to the identification of territorial priorities, but its outcomes are not comprehensive by definition, considering its inherent political, selective and power nature.

As shown in the previous paragraph, mainstream and dual account of territorial evolution and development in Val di Cornia led to unfair sector-oriented as well as steelwork-driven politics of place, besides fuelling static and close conception of territorial identity. The predominance of lock-in and self-reinforcing 'steel' patterns in opposition to 'diversified' trajectories has inhibited the innovative path-interdependent potential of Val di Cornia and has kept for long several key actors segregated in an allegedly 'secondary' context.

On the other hand, a dynamic and relational account of this territory and identity uncovers the need for an integrated, systemic and multiple framework for territorial development and planning. Such perspective rejects established "winning horses", that is pre-set remedies as well as hegemonic 'power over' patterns, to promote in their stead selective and 'power to' *platform policies* to govern territorial trajectories: this approach privileges 'associational' over 'instrumental' logics.

A comprehensive identity-building process and the production of a shared and strategic territorial vision may both open to acknowledge the complex variety and multiplicity within territory, whereon to exercise mediation and selection between conflicting perceived imageries: the intentional and proactive character of 'constructing regional advantage' and building territorial identity stress the role of interactions and networking links.

The concept of 'constructing regional advantage', as proposed by Asheim et al. (2011), is effective in solving dichotomous and excluding readings of Val di Cornia: the criteria of differentiated knowledge-bases and related variety together with a platform approach (platform policies) are able to blur the boundaries of exogenous/endogenous causalities, steel/non-steel and specialization/diversification paradigms, in order to account for the complex and multiple interactive and innovative learning processes.

In this perspective, path-interdependence and regional branching prove to be outstanding patterns in territorial evolution, having shown their relevance in

developing regional potential according to a cooperation and complementarity mindset.

This approach allows to move forward from a sector-driven and R&D definition of Val di Cornia's regional potential to focus its energies on innovative cognitive relatedness (Boschma, 2013) or 'transversality' (Cooke, 2012b). More in detail, it stresses the relevance of local Val di Cornia 'success stories', which consist in iconic examples of regional branching and 'constructing regional advantage' schemes through the appraisal of steel-related resources: it could allow 'territorial ferment' and *leading* stakeholders in Val di Cornia to move from a 'secondary' scenario into new 'primary' geography of power.

The criteria and input brought forward by the 'constructing regional advantage' perspective (such as differentiated knowledge bases and related variety) help creating useful development guidelines to manage multiplicity and complexity into regional branching patterns. These latter constitute key principles to inclusively lead selective identity building processes beyond local boundaries: they enhance the Val di Cornia portfolio to alternative territorial ferment as well as to multi-dimensional context-specific learning processes, themselves characterized by new synthetic, analytical and symbolic bases. The inclusion of 'secondary' and alternative spaces would very reasonably seem therefore to generally increase regional learning opportunities and innovative potential.

These criteria work as the main drive towards the discovery, identification and inclusion of the whole and multi-dimensional array of territorial paths and actors by the promotion of *multi-governance* processes and public-private cooperation: governanceship does not depend on nor its action should result into pre-set, rhetoric and stereotyped criteria. As summarized by Healey (2011) "the quality of governance lies in its practices, not its formal principles".

Multi-governance processes lead to include multiple actors and conflicting images into fair identity selection and building.

According to the distinction suggested by Bellini (2004), in Val di Cornia these processes would include: the *visionaries* (defined here as the *leading* actors),

who express the necessity of "a new planned impulse for development" and unnoticedly support innovative approaches through their own initiatives and actions; the *surrenders* (here defined as the *follower* actors), are proudly and sternly rooted in a backward-looking 'steel' identity, and yet are indeed aware of their own need for renewal, eventually getting caught between disappointment and the dire want for innovation; then meet the *fearful* actors (defined here as the *locked-in* agents), which, overwhelmed by pessimism, are stuck in a past and closed 'steel' identity, and are unable to understand the current transition and to accept a growingly widespread territorial complexity and openness.

According to Boschma (2013), the concept of 'constructing regional advantage' is primarily focused "on how to enhance true economic renewal in regions, not to pick winners and back them, not to secure local vested interests, and not to make strong industries stronger. Therefore, this policy framework is to involve and accommodate economic newcomers, and to connect new and established players, and local and non-local actors, to enable economic renewal and to avoid rent-seeking behaviour and regional lock-in".

In this sense, the role of public institutions is vital: public intervention has to switch from single-handedly determining and defining territorial policies to turn into a mediator and an inclusive policy coordinator acting in the best interest of the building process.

Institutions play a key role in design and managing multi-governance processes based on inclusive discovery, interactions and selections, extended policy networks and identity building processes: as afore mentioned, identity production and selection inherently implies the deployment of some forms of priority and power. But our perspective defies priorities as predefined targets set and forced upon by local and national institutions. On the contrary, it suggests to establish priorities as indicated by an inclusive building process and shared criteria (as relatedness): it enriches the role of institutions in terms of mediation and empowerment of localized opportunities and resources.

Truth be said, this perspective is still latent in Val di Cornia: the prevailing short-term, emergency thinking is still feeding a vertical vision of territorial governance, which in a vicious circle is going to hinder the formulation of a long-term, strategic planning vision and social mindset. For example, the *APQ 2013* measures (SME support, industrial area clearing and port expansion works) might be managed so as to not represent yet one more isolated example of sectorial planning and a mere issue of resource allocation: it could instead help for new opportunities to arise and contribute to a broader and more systemic approach to territorial development. Indeed, the promotion of an integrated territorial strategic framework can further enhance and back up these investments and opportunities, in virtue of its long-term scope and of its sustainability-sensitive perspective. Additionally, it tends to generate knowledge spillover dynamics and to breed unprecedented interactive learning processes by means of regional branching or by redesigning tourism or finding path breaking ways to manage the local industrial heritage.

In addition, the welcomed entrance of *Cevital* and its diversified approach to Val di Cornia, the reshaping and restructuring of the local steel industry, together with changes in local administrations, are facts which could all contribute to create the conditions for the establishment of a novel geography of power. This shift is going to be beneficial to the establishment of alternative forms of multi-governance, it will encourage inclusive and fair selection across Val di Cornia, a needed for action in order to manage the multiple and conflicting identity building-process, an unavoidable element of transition.

Identity building as a fair selective and power process among co-existent multiplicities co-evolve with multi-governance processes, in order to promote inclusive territorial policies and fairly manage and drive regional variety and actors' intentionality.

*Identity as a 'strategic vision': a new territorial planning approach guiding
territorial evolution in Val di Cornia in transition*

The prevalence and acceptance of unquestioned 'steel-bound' points of view
and sectorial patterns in local and regional policies and planning has shaped for
decades the development of Val di Cornia, which thing in turn strengthened a
stereotypical and locked-in imagery over alternative and potentially more
successful trajectories: using Paasi's words on Finnish regional development
(2012), "planners rarely defined analytically what regional identity was and
how it could best be exploited in regional development. This diversity of
definition suggests that rather than using the idea of regional identity as a
category of analysis, planners were drawing on it as a category of practice. As
such, their discourse constituted an agenda orientated primarily towards
economic development and grounded in a political rhetoric which was both
national and international in origin".

Thus, single-handed and sector-driven solutions or pre-set recipes turn out to
fall shy of properly providing what Val di Cornia's evolution and resilience
needed to weather recurring states of crisis and paradigm shifts. Transition is
changing and challenging development patterns and it is also stressing the
'nodal' and relational nature of territory:

- it exposes its *trans-territorial and polycentric configuration*;

- it stresses the *dynamic, plural and power* character of its *identity* over
  static, pre-defined and closed images;

- it allows to analyze *identity building as a selective process* between
  conflicting multiplicities.

It demands local and regional development to account for the *political
implications* of these changes throughout the elaboration of context-specific,
integrated and strategic visions to orient and guide territorial evolution.

Indeed, the tendency toward the definition of a new socio-economic paradigm has rediscovered the need for long-term and integrated place policies and strategies. This is a core factor to the overcoming of an emergency, sectorial and short-term mindset, which has ruled and shaped local and regional development over the last decades.

As suggested by Healey (2006) and Paasi (2013), this relational appreciation of identity inevitably affects territorial development and process and action planning: planning activity is understood as "part of an effort of collective imagination about place qualities" and as a set of interdependent "relational webs" (Healey, 2006).

According to the definition proposed by Healey (2003), planning emerges as "a governance activity occurring in complex and dynamic institutional environments, shaped by wider economic, social and environmental forces that structure, but do not determine, specific interactions". Healey (2006) attributes to strategic spatial planning the capability to both generate place quality through collective imagination, as well as to manage relational complexity: she underlines the importance of selection ("spatial imaginations") and power ("governance imaginations") endeavours, especially in "transformative momentum", to solve the tension within a territory between unpredictability/dynamism and stabilization.

Similarly, according to Pike et al. (2007) "local and regional 'development' should be part of a more balanced, cohesive and sustainable approaches. A holistic approach interprets close relations and balanced integration between the economic, social, political, ecological and cultural dimensions of local and regional development, notwithstanding the potential trade-offs and conflicts involved".

The multi- and inter-disciplinary approach to regional and local development promoted by Pike et al. (2011) aims to the appreciation of "politics, power relations and practice in multi-level, multi-agent and devolving system of government and governance".

The *analysis, observation and exploration* of territories in transition become fundamental for the elaboration and promotion of an alternative and renewed development pattern.

Thus, the analysis, observation and exploration of Val di Cornia suggest alternative territorial readings of its evolution and encourage towards the enforcement of new dynamic, integrated and relational approaches. From EEG's perspective, 'history matters' in shaping trans-territorial trajectories.

The present research-work has not simply proved a highly *progressive* and *political* feature of territorial identity to exist, but it has additionally shown to be strategically relevant and to give bring to light significant issues in local and regional development and planning:

- the leading role of *knowledge and innovation* in shaping trans-territorial trajectories and interrelations by interactive learning processes;

- the wider definition of the *innovative and cognitive inherent potential* of the territory, which relies on an innovative cooperational mindset (i.e. *co-opetition*) and selection process and it is based on complex and distinctive path-interdependence processes;

- the unique role of *intentionality* and the inclusive account of actors' and stakeholders' actions, of public and private initiatives to be considered in a planning model based on strategic vision as well as integrated and systemic territorial development pattern.

Knowledge and innovation emerge as the core engines of new trans-territorial configurations in Val di Cornia: they both stress the relevance of territorial uniqueness as well as the degree of openness in regional and local evolution.

In order to nurture regional innovation and individual localized cognitive processes, a redesigned planning and development approach should feature an optimal degree of *propinquity* and *connectivity policies* (Amin, 2004; Massey,

2004) if in means to be innovative as much as effective: strategic and innovative politics of place cannot rely on openness and interconnection by itself, but needs to account for both the *embedded* and the *mobile* nature of cognitive and learning dynamics (Bathelt et al., 2004; Crevoisier et al., 2009).

As suggested by Asheim et al. (2011), to 'construct' regional advantage, "effective policy-making requires localized action embedded in, and attuned to, the specific needs and available resources of regions, as the concept of related variety emphasizes". In addition, as suggested by Boschma (2013), in an inclusive and open approach to territorial development "policy making requires localized actions attuned to the specific needs and available resources of regions". Following, the call for 'openness' and 'diversification' *per se,* supported by several local administration and *follower* actors in Val di Cornia, is rather likely to be not as effective as wished for: just looking out, scanning across borderlines for innovative solutions to be intaken and merged in, is alas no longer a viable option/an affordable strategy.

Integrated vision and *progressive* planning are mandatory in order to approach territory and regional advantage-creation as the product of trans-territorial and context-specific learning processes.

Indeed, it compellingly requires to reach deeper than the established open/close, outside/inside and core/peripheral accounts of territory, in order to embrace a nodal and trans-territorial approach to development ranging way beyond local boundaries: a reading as such may unravel Val di Cornia's complex and dynamic configuration and its multiple path-interdependent nature, shaped as it has been by the co-existence of different and conflicting multi-dimensional paths. This alternative interpretation rejects an interpretation of Val di Cornia as static, withdrawn and caught up in the clash between ruling and colliding conceptions of '*steel* specialization' and steel-excluding - *non-steel* - 'diversification', besides opening up to alternative spaces of identity contestation.

A relational approach to this territory is superior to scalar readings as it may detect and make sense of the centrality of interactions, knowledge and

innovation: it brings out new latent forms of competitiveness and openness by tracking the significance of the so-called 'secondary' innovative and interactive learning processes and knowledge exchanges.

Furthermore, the spread of these new cooperational and complementary territorial mentality sheds light on new accounts of local and regional capacity-building and uniqueness: embeddedness and mobility/multi-scalarity, proximity and knowledge bases, related variety and regional branching, all contribute to shape the new context-specificity and uniqueness of Val di Cornia.

In conclusion, further study work on the understanding of the *inside* has come to be a clearly perceived necessity in order to be able to search the *outside* for innovative interactions and networking, now working on a cooperation- and complementarity-based approach.

A deep and internal awareness of a territorial identity's evolution and of the changes is then the key to identifying local tangible and intangible resources.

It means not to support local assets *per se* in territorial development, but to improve new forms of trans-territorial *co-opetition* based on the *uniqueness of place*: to implement those 'virtualization processes' described by Bellini and Hilpert (2012) through the strengthening of localized 'gateway' opportunities.

Indeed, Val di Cornia's positioning does not intrinsically derive from its openness, interconnection or according to its business regional portfolio's variety *per se*, but rather depending on its *absorptive capacity*, that is the capability to adapt and apply new and differentiated knowledge in innovative and interactive localized learning processes. Moreover, its positioning in the global system should rely on its distinctive *functional* role as a strategic trans-territorial node. In order for it to be implemented in Val di Cornia, measures need to be taken to enhance its logistics, its context-specific knowledge (differentiated knowledge bases, as suggested by Asheim et al., 2005) and local networking skills (differentiated proximities, as suggested by Boschma, 2005).

Consequently, in order to be efficient and to generate positive interrelations, learning processes and knowledge exchanges need some extent of 'territorialization' through innovative "connective platforms" (Rullani, 2014b) in terms of services, ICT, cognitive and infrastructural enforcement and institutional settings.

This idea is openly supported by the *APQ 2013* and consistent with the measures of intervention addressing the seaport enlargement and its logistic and infrastructural development. In addition, it should be going to benefit from both *Cevital*'s diversified development approach to Val di Cornia as well as from the attempts at coordinated planning local administrations are carrying out at multiple levels.

Finally, this restructuring of the territorial framework is fostering new fair and inclusive conceptions of local and regional development, as testified, for instance, by the quick spreading of new *co-opetition* thinking: transition is emphasizing the rise of a new local and global geography of power, the unprecedented relevance of new strategic subjects and the emergence of alternative and successful 'weak signals' of territorial boiling and inner ferment.

While still following selected and collectively agreed criteria such as related variety and regional branching, the planning of a strategic vision requires, as suggested by Paasi (2002, 2012; Paasi et al., 2011), a certain degree of '*institutionalization*' at multiple levels to be established: it means to be able to shape and set its institutional, social, symbolic and territorial features through time and space by means of place-based policy-making and action planning. As suggested by Healey (2006), it is suitable to deal with '*complex governance processes*' in which to mediate and shape "both the materialities and identities of particular places".

The implementation of multi-governance processes in Val di Cornia could be able to promote '*synthesis*' and '*integration*' between co-existing and alternative path-interdependence processes (both steel and non-steel-dependent) as well as to promote innovative interactions between *leading*, *followers* and *locked-in*

actors. Despite their being neglected in main development policy-making, in fact some 'secondary' but *leading* paths in Piombino have proved to be highly resilient when faced with change and crisis: they are promising example of alternative applications and improvements of steel-related know-how and cognitive internationalization, related variety and regional branching. The account and integration of this 'success stories' within wider strategic visions may lead to make available to the whole valley new learning opportunities and in this way to make room to new forms of innovation, internationalization and resilience.

As suggested by Asheim et al. (2011), this 'linkage', that is "where policy cleverly seeks to achieve more than one outcome with a single instrument", is capable of promoting and supporting diversified branching processes by using inclusive 'joined-up thinking' developed according to relatedness criteria (related variety): it should exploit "spillovers among apparently diverse spheres, but with a single lead policy field that radiates laterally in a platform-like manner. One might think of 'joined-up' policies as 'platform policies' and 'linkage' policies as 'policy platforms'".

As suggested by Asheim et al. (2011), "'related variety' involves transitioning from the waning to the waxing opportunity by 'constructing advantage' through engaging 'differentiated knowledge bases' in the moulding of regional platform policies and even more localized policy platforms at the regional level".

According to this definition, the strategic vision of Val di Cornia should rely on and value the dynamic and hybrid identity of the valley as a '*platform policy*', based on overlaps and combinations of the multiple and context-specific vocations of the area. At the same time, it should provide '*policy platforms*' ('or linkage' policies) (Asheim et al. 2011) adequate to manage such processes at local level and to be a fertile ground for place uniqueness to unfold.

For example, a '*platform*' planning process in Piombino might want to aim at re-building and opening its locked-in identity in order to favour an alternative 'steel' path-interdependence and regional branching in order to strengthen Piombino's role as a core logistic hub at local level.

A relational and dynamic approach to territorial reading and planning uncovers the latent paths and resources deriving from the long-lasting presence of steelworks, and may organize a multiplicity into a wider and integrated platform strategy: from the port (ex.: its enlargement) to satellite activities (ex.: leading firms), from alternative application of 'steel' expertise (ex.: in shipbuilding, nautical sector and steel related variety) to industrial heritage (ex.: in tourism), from industrial area clearing to the reuse of historical industrial infrastructure (ex.: *Città Futura* and nautical districts projects).

Such localized planning process can concurrently rely on and contribute to the wider elaboration and implementation of a strategic vision for Val di Cornia: an integrated 'platform policy' (the creation process of a different identity for Val di Cornia), which ought to evolve parallel to a set of localized identity-building processes (localized platform policies) and 'policy platforms' within the area.

This relational and sustainable approach to planning, based on integration, interrelation and relatedness, has shown to be suitable to tackle several dichotomous and opposed territorial narratives in Val di Cornia, themselves resulting from the clash between differing and conflicting identities.

Besides steel/non-steel and specialization/ diversification dualities, it is apt to deal effectively with urban/rural, industry/environment, node/periphery, slow/fast territorial policy labelling of dynamics. As worded by Healey (2011), "the challenge is to integrate dimensions, not separate theme [...]. A planning orientation involves attention to our relations with all kinds of 'others' in different situations, rather than a focus on a self-contained 'bubble-life'."

However, as implied in the sector-based and 'diversification' approach envisioned in the administration guidelines issued by Piombino's new mayor, an integrated and strategic approach to territorial evolution is still waiting to fully come to surface.

This 'static' reading and 'dichotomous' development perspective may nonetheless just partially grasp the opportunities offered by transition and, on the contrary, it risks to end up breeding and feeding further multiple lock-in processes: *the lack of a relational and systemic interpretation of Val di Cornia's*

multiple configuration and dynamic identity, in addition to the absence of an integrated platform policy, frustrates what opportunities the paradigm shift makes and narrows the chances to exploit key innovation agents and learning processes.

A redesigned relational evaluation of territory and development is therefore to be sought for in order to better understand and tackle transitional dynamics in Val di Cornia: in this context, the identity-building process might very well represent the essential framework for a renewed approach to local and regional development.

The still presently unceasing sectorial and short-term planning approach to territorial evolution based on the 'steel/non-steel' dichotomy ought to be dismissed to favour in its place the elaboration and collective sharing of integrated readings of territorial dynamics across space and time. In addition, stereotypical and dominant focuses should be ignored in order to encompass a wider range of shared, integrated and plural point of views.

The persistence of cognitive and political lock-ins has been imposing self-reinforcing patterns and short-term emergency dynamics by following 'power over' patterns and a vertical, hegemonic 'steel' narrative. Despite weak signs of change, this tendency is still holding back the development of a long-term strategic vision.

However, through the implementation of inclusive multi-governance processes, institutions could play a pivotal role in the promotion, management and intermediation of conflicting, co-existing and multi-dimensional *leading*, *follower* and *locked-in* narratives. .

In this sense, institutional actors can work as intermediaries and coordinators of identity and strategic vision-building processes, once organized into broader and inclusive planning processes: public policies should create the conditions to fairly and adequately select, combine and support related path-interdependence and regional branching; they should unhinder and ease overlapping and interaction through innovative and interactive learning and knowledge

spillover; they should promote territorial uniqueness and new forms of regional potential.

Indeed, the idea of 'strategic vision' cannot be synonym with 'image crystallization'. It is not defined either as opposed to the multiple and dynamic nature of territorial identity. On the contrary, strategic vision and identity building are *dynamic and progressive tools*, which *co-evolve* in order to promote innovative and integrated planning and alternative development patterns: within a multi-governance system, identity selection is intertwined to the gradual production and elaboration of the strategic core guidelines at the base of territorial policies.

In conclusion, the way place identity is perceived, read and produced does indeed matter in terms of territorial evolution, and even more in the case of in-transition territories.

Territorial identity seen as a dynamic, selective and political process allows to gathers strategic elements for a redefined local and regional development and planning: identity building as the process of production of a strategic vision has proved to have the potential to guide and co-evolve within territorial planning and to lead territorial evolution through and out of transition.

FINAL OBSERVATIONS

Transition has brought to light the *disruptive* and *open* character of the production of space.

This process is leading to a gradual structural change in the socio-economic paradigm and it is consequently challenging local and regional territorial development patterns and dynamics.

Transformative pushes are affecting several fields, from the economic to the social, from the cultural to the environmental one.

As an effect of ICT improvements, of open markets and of new sustainability requirements, transition is redefining and reorganizing global production networks as well as global innovation and value chains, while also opening the way to new dynamic settings in the international division of labour.

Different degrees of territorial resilience, or else the adaptive capacity to recover from and adjust to transformations, are drawing a new geography made up of vulnerability and responsibility at global and local levels.

This shift is outlining new territorial configurations thanks to a redesigned definition of knowledge and of its role in innovation and learning processes (Asheim et al., 2005; Bathelt et al., 2004; Crevoisier et al., 2009) as a tool to give rise to new forms of proximity (Bellini et al., 2013; Boschma, 2005).

The emerging relevance of trans-territorial relations and interactions defines new criteria and a new understanding of local 'competitiveness' and potential, by applying concepts such as 'constructing regional advantage' (Asheim et al., 2001), or according to an alternative mindset of territorial cooperation and complementarity (Boschma, 2004; Bristow, 2011; Cochrane, 2011; Pike et al., 2007, 2011; Porter et al.; 2011).

As it happens, transition allows the potential of differing interpretations of territorial evolution and identity to unfold by adopting a relational perspective: while a relational definition of space and place is to be easily found and it is backed up by more than generous academic work, and cultural geography at

that, its application in regional studies and regional economic development has only recently begun to spread as a means of reading transition phases. It still requires further theoretical and empirical research work in order to unleash its full strategic and political potential towards a redefined approach to local and regional development and planning.

The analysis of transition process has stirred the academic community into a vivid exchange rich in cross-references and theoretical argumentations; the open-ended, escaping nature of transition is causing multiple points of views and hypotheses to come to light and unravel, though lacking the option of being able to identifying one single winning pattern.

Indeed, the open, long-lasting and changing nature of transition escapes the forcing upon off pre-defined definitions and solutions: its 'unfolding' is far from being already written.

Further *observation, analysis and on-field research work* together with further empirical data gathering at local and regional level are accordingly required in order to nurture a deeper understanding of the current transformative dynamisms and trajectories within territories.

Research Project Outline

The research project has investigated the transformative dynamics taking place in '*territories in transition*' (Rullani, 2013) according to a differing and alternative relational reading of territorial and identity evolution during transition.

Its main focus consists in the analysis of the impact transition has had on the configuration and definition of 'territory'; it parallely looks closely into how a dynamic and hybrid conception of identity affects the evolution of territorial trajectories and tries to determine the premises for a suitable and effective relational approach to local and regional development in terms of identity building.

These points are based on solid academic grounds and have been successfully tested on a case study, that is the analysis of the evolution of the Tuscan industrial town of Piombino and of its surrounding area, Val di Cornia. Research and analysis were carried out applying a relational perspective and aiming at the production of a dynamic, selective and political account of the territorial identity.

The *First Chapter* of the research project provides a definition of transition and of its underlying dynamics and causalities based on bibliografy work over a fairly comprehensive literature on regional science and regional economic development. Moreover, the opening pages offer references to several study works in cultural geography so as to structure an adequate background to the relational definition of 'space', 'place' and 'identity'.

The reference framework has mostly been the Evolutionary Economic Geography (EEG), being it a prerequisite to be able to pick out the progressive, context-specific and dynamic features of territorial trajectories.

The EEG has introduced four key concepts which are core to a deeper understanding of territorial transition processes: *path-dependence* and *interdependence* highlight the progressive and contingent nature of territorial trajectories while stressing the role of history and of the past in territorial evolution (Boschma and Frenken, 2006; Martin, 2010; Martin and Sunley, 2006, 2010); *lock-in* explains both positively and negatively the path-dependent nature of territorial trajectories (for its earlier definition referred to old industrial systems: Cooke, 1995; Grabher, 1993); *related variety* provides new criteria to explore territorial path-interdependence and defines the capability to value and differentiate local knowledge and know-how in innovative ways (as by 'constructing regional advantage') (Asheim et al., 2011; Boschma, 2005, 2009, 2013; Boschma and Frenken, 2006, 2007, 2009, 2010; Boschma and Iammarino, 2009; Frenken and Boschma, 2007; Frenken et al., 2007; Martin and Sunley, 2010; Martin, 2010); *resilience* describes the territorial adaptive skill to recover and adjust from shock and change in terms of adaptation/adaptability

tension (Boschma, 2014; Bristow, 2010; Christopherson et al., 2010; Hassink, 2010b; Hudson, 2010; Martin, 2012b; Martin and Sunley, 2013; Pike at al., 2010; Simmie and Martin, 2010).

These concepts enrich with additional progressive thinking and path-dependent perspective the analysis on territorial evolution. They represent the foundation to the development of an alternative and relational reading of in-transition territories.

Indeed, transition has caused a new open and dynamic conception of 'territory' to be born: new local/global interrelations are re-drawing multi-scale and multi-level territorial configurations. To better understand this process, research work has explored several theories in regional studies and regional economic development concerning the contemporary global geography and territorial dynamics, which are rising as a result of global chain and network restructuring. The *global production network* (GPN) (Henderson et al., 2002; Coe and Hess, 2011), *global value chain* (GVC) (Humphrey and Schmitz, 2002; Gereffi et al., 2005), *global innovation networks* (GIN) (Cooke, 2013) models describe production, innovation and value systems as fragmented and stretched globally and provide new strategic implication for territorial development (Parrilli et al., 2013).

In addition, references are made to the reviews of ''sustainable transition' approach carried out by Coenen and Truffer (2012; Truffer and Coenen, 2012; Coenen et al., 2012a), which stress the geographical (multi-scale), institutional and social (multi-level) dimensions of this process, and present *embeddedness* and *multi-scalarity* as key features of transition dynamics.

The Italian scenario was guaranteed specific focus. The study work refers to the debate on the evolution and transition of Italian Industrial Districts (IDs) to investigate a redesigned role of place in industrial policy-making and in the new industrial/territorial relation: the assessment of IDs in transition uncovers dynamic, multi-level and multi-scale territorial reconfigurations. These observations provide an alternative and relational definition of 'territory' and

'local system': Rullani (2013) refers to territory as a *node* in *'filiere trans-territoriali'*; Zucchella (2006) redefines local systems as *'multiple-embedded' articulations*; Micelli and Corò discuss the evolution of Industrial Districts as *open networks* and *virtual districts* around new and strategic driving forces - *'idee motrici'*.

Three main concepts were tested and investigated, as underpinning transition and its transformative dynamics: the evolution of the *internationalization* process (Rullani, 2006a; Onetti and Zucchella, 2012; Corò, 2013; Bellini and Hilpert, 2013), the redefinition of '*proximity*' (Bathelt, 2011; Boschma, 2005, Bellini and Hilpert, 2013) and the role of *knowledge* in shaping local/global relations (Asheim et. al, 2010, Rullani, 2006b; Cappellin, 2010).

The evolution of the idea of knowledge beyond a tacit/codified distinction and past linear R&D patterns on one hand and a new 'virtualized' conception of proximity ranging beyond the geographical one on the other, are vital to bring to light the relational character of new trans-territorial configurations: *territory can now finally be also perceived as a 'node', an 'intersection' and an 'articulation' of multi-dimensional interactions*.

As a matter of fact, (Global/local) relations and networks stand out as primary elements to define territorial systems. More in detail, new conceptions of cognitive processes, deeply bound as they are with the reorganization of value, innovation and production in global chain and network, are fundamental as a phenomenon in the investigation of a transition process and its territorial dynamisms.

This phenomenon is shaped by interactive feedbacks between *local nodes* and *global pipelines* (Bathelt et al. 2004): the former as localized *interactive learning processes,* whereby *anchor* knowledge into "unique" territorial specificities and capabilities; the latter as the process of *knowledge spillover*, whereby globally *mobilize*, move and share knowledge (Crevoisier et al., 2009).

This shift is strengthening the role of knowledge and innovation in the shaping local and global relations: as of the current scenario, the process of "*cognitive*

internationalization" has undeniably proved to be (Bellini and Bramanti, 2008; Rullani, 2006a,b) a new and successful form of trans-territorial interrelation and of territorial potential enhancement and building.

The 'nodal' and relational character of territory may provide an untold account of territorial potential, which in going to vary depending on the regional and local aptitude to develop, receive, anchor as well as spread and move knowledge and even more in their aptness in generating markedly innovative and interactive learning processes, that would be local *absorptive capacity*.

If the rise of a new relational conception of territory and territorial development is to be a main topic in regional studies, by means of this research project, a dynamic and relational definition of 'space', 'place' and 'identity' is put forward for consideration. This perspective is based on a set of notions developed by Marxist and Post-Marxist scholars in cultural geography (Harvey, 1990; Lefebvre, 1973; Massey, 1973, 1991, 1992, 1999, 2005; Massey et al., 1999, 2001) which are held as key to the reading of the current transition process. This approach allows to move forward from static and predefined definitions of territory and region (Agnew, 2013a; Allen, 2011; Allen et al., 1998, 2007; Amin, 2002, 2004; Jessop, Brenner, Jones, 2008; MacLeod and Jones, 2007; Massey, 1999, 2005; Sassen, 2008, 2013), and to instead support a redesigned and alternative approach to territorial development and planning (Healey, 2003, 2006, 2011, 2013; Paasi ,2002, 2001, 2012; Paasi et al., 2001).

As suggested by Massey (1992), relational evaluation of space production rejects 'binary', 'close' and 'static' readings of territory: it opens to alternative forms and third possibilities in space-time conceptions and overcomes dichotomous and hegemonic territorial readings.

According to several scholars in cultural geography, a relational spatial approach relies on the idea of *space and place as social products* (Lefebvre, 1973). Massey (1991) defines place not as the mere result of "some long internalized history", but as contracted by "a particular constellation of social relations, meeting and weaving together at a particular locus". Once '*region*' and

'*locality*' are seen from this relational perspective, they may be also described as *unbound and multiple articulations, shaped by particular interrelations and interactions* (Allen, Massey and Cochrane, 1998).

These definitions provide additional perspective to the analysis and interpretation of transition and territorial dynamics, especially in locked-in and vulnerable contexts. The ideas of "*global sense of place*" and "*uniqueness of place*" proposed by Massey (1991), described as distinctive overlapping interactions of multiple spatial narratives and interrelations, contribute to better explore the complex 'nodal' and 'context-specific' character of territory beyond local/global distinctions.

Surely, a relational account of space defies mainstreaming and hegemonic development patterns, which are based on a-spatial, closed, dominant narrative, lacking of geographical and historical specificity.

The long-dating prevalence of the 'temporal' over the 'spatial' has resulted in the formulation of 'one grand narrative' as manifestation of 'power over'. This trend led to misinterpret 'globalization' and 'global' as space/time compressing dimensions, as neutral and "placeless" as well as inevitable and immutable. This mindset has deeply overlooked the overlapping and recursive global/local relation. It has been holding back both a vision of 'local' as a more dynamic, complex and open system as much as it has been stifling an understanding of 'global' as a space of multiplicity. This reading has led to misleading dualisms and to a simplification of indeed complex territorial dynamics.

Conversely, a relational approach brings to surface globalization as a "co-existing of multiplicity" (Massey, 2005). A relational space-time perspective sheds light on "the rise of composite and hybrid cultures, and hyphenated and diasporic identities" (Amin, 2004). It suggests an idea of space as "a product of practices, trajectories, interrelations" and implies that "those spatial identities such as places, regions, nations, and the local and the global, must be forged in this relational way too, as internally complex, essentially unboundable in any absolute sense, and inevitably historically changing" (Massey, 2004).

The dismissal of dichotomous territorial readings shows "identity" to be interpretable as a collective construct: place identity is then to be understood as a progressive, plural and dynamic product (Massey and Jess, 2001, Amin, 2004).

Territorial identity building turns out to be indeed a gradual process of selection among multiple and conflicting narratives. Contestation and power-struggles emerge as key elements in identity building, there where selection draws new power geographies.

This relational perspective questions traditional territorial development and planning patterns.

A relational account of space and identity leads to define *territorial development and planning as strategic and integrated processes, by means of which to create place quality through collective imagination and manage territorial complexity*. It stresses the importance of selection and power, especially in changing and transitional processes. Strategic planning processes are indisputably fit to address and solve the tensions between conflicting and multiple imageries: to this aim, they require some forms of '*institutionalization*' (Paasi, 2002, 2012; Paasi et al., 2011) by '*complex governance processes*' (Healey, 2006).

The <u>Second Chapter</u> provides the *observation, analysis and exploration* 'on field' of a paradigm case of 'territory in transition': the evolution of Piombino and Val di Cornia (Tuscany, Italy) represents an exemplary opportunity to understand and analize the challenges and criticalities connected to transition.

Piombino has represented for decades one of the main Italian industrial steel production sites and, despite the cyclical industrial crises, it is still characterized by a high degree of 'steel' specialization. This chapter offers a walk-through on the evolution of the area starting with the establishment of the steel factory in Piombino in 1864 until the recent sale of the main steelworks facilities to Algerian *Cevital* group.

The configuration of the whole Val di Cornia has been deeply wrought by such 'steel' vocation: over the last century, Piombino and its steel industry have acted

as the 'catalyst' and drive of the socio-economic system, in terms of demographic and labour dynamics, as well as of planning and policy-making processes.

Through time and space, territorial dynamics have been duly crafted by the development of the steel industry system into a blue-print case.

During the '50s and '70s the *state-owned Ilva* plant, featuring a vertical fordist organization, was to pervasively model the territorial and socio-economic landscape of Piombino and Val di Cornia, generating what Bianconi (1970) and Bracci (2012) have defined the '*città fabbrica*'- the factory-town.

The prolonged crisis all through the Eighties and Nineties led to the *privatization* of the steelworks by the Italian Lucchini group.

This phase represented a turning and tipping point in the relation between the industrial and the territorial spheres: compared to the previous decade, in the mid '90s the steelworks industry recorded cuts for 6.000 jobs (Comune di Piombino, 2007).

The disintegration of post-fordist vertical structures and out-sourcing processes, made room for new horizontal and integrated forms of interrelation between the industry and the territory: the '*territorio fabbrica*'- the factory-territory.

Meanwhile, the dramatic effects of the crisis fuelled an increasing urge for 'diversification', in order to move forward from steel-related overspecialization: a new and coordinated approach to local planning began to focus on and to value other alternative resources of the territory, as proved by the creation of *Parchi Val di Cornia* in 1993.

One more crisis at the break of the new millennium further affected the area and froze the new 'diversification' approach.

In 2003, the internationalization of the steel plant and the entrance of the Russian *Severstal* group marked the end of the crisis.

If the steelworks' internationalization did fuel a sense of insecurity, fragility and diffidence tower the 'outsider', it also raised shared hopes amid the community and local institutions alike in future fresh, positive relations between territory and industry.

The financial collapse of *Lucchini/Severstal* in 2010 celebrated the outbreak of a new dramatic phase of crisis, which definitively and irremediably put an end to the old steel age: it led to the dismissal of the blast furnace and to a further handover in the plant's ownership.

This dramatic phase, as well as a shared and widespread sense of disappoint and alarm among community, has been increasingly worsening during the troubled and long-lasted negotiation and sale process of the plant. In particular, these feelings of uncertainty and wariness have been further accrued and strengthen by the fraud and negative experience of the *Smc* business plan, spreading among local administration alike.

The arrival in 2014 of the Algerian *Cevital* group has opened a new phase of hope and positive feelings about the future. It brought to an unsurprising restructuring of the steel business, for instance with the introduction of the electric furnace. In addition, *Cevital*'s business plan intends to encourage a broader approach to the territorial development of Val di Cornia by offering an multi-sectorial industrial strategy: it aims to extend its operation and proficiency range beyond steel alone and to embrace logistics, renewables and agriculture sectors.

Moreover, Piombino has been identified by the national government as a national-scale *'area di crisi industriale complessa'* - a complex industrial crisis area-: the multi-level agreement (*Accordo di Programma Quadro*), which was signed in 2013 by the local, regional and national government and the Port Authority, includes significant financial allocations (almost €200 million from the national government) and opportunities for the recovery and clearing of old industrial areas, for the port's enlargement and enforcement as well as for SME and steel industry innovation and infrastructure upgrading.

In conclusions, the mentioned sequential crises at local level made manifest and impelling the need to re-discuss local development pattern and identity. The old 'steel' model dramatically revealed its obsolescence and vulnerability. This rising awareness encouraged the promotion of a number of attempts towards 'diversification': local institutions have implemented and backed up, with mixed

success, new local planning measures, aimed at the improvement of alternative development patterns in Piombino and Val di Cornia.

As of present though, the steelworks business still is the main point of reference and its must-haves keep on heavily weighing on local development and planning, causing an enduring application of short-term and emergency-driven measures.

This said, the call for 'diversification' and plural identity supported by surrounding administrations in Val di Cornia turned out to be so far sector-based, linear and diversified development patterns, instead of convergent ones, integrated into a comprehensive strategic vision of the valley.

Despite the predominance, in territorial evolution, of a dual 'steel/non-steel' mindset, research work has investigated the emergence of 'secondary', 'spontaneous' and silent dynamisms in Val di Cornia: rooted as they may still be in 'steel' tradition, these *leading* initiatives have been able to promote *alternative and integrated development patterns*, marked by *openness, related variety, innovation and internationalization*.

Such successful 'territorial ferment', both 'institutional' and 'spontaneous', is the evidence of how alternative and open trajectories have been co-evolving parallel to the main and dominant 'steel' paradigm. These 'weak signals' testify to the presence of change and dynamism running through the valley, in defiance of the established and stereotypical image of Piombino and Val di Cornia as closed and 'steel' locked-in territories.

The *Third Chapter* offers an additional reading of the evolution of Val di Cornia, from a relational perspective and restates the emphasis on 'identity building' as the key to a deeper understanding of its complex territorial evolution.

What has become clear is that the role a stern and frozen perception of identity may play can be easily underestimated by the established understanding of the territorial dynamics of Val di Cornia: a partial and dichotomous approach has overlooked the multiple vocations of the valley, disrupting its chances to

envision and reinvent 'steel' identity and at once ignoring the availability of worthy and innovative actors and contexts.

The alternative reading of Val di Cornia dismissed the alleged closedness bias and the locked-in image of the territory, to instead put a spotlight on the co-evolution and co-existence along a transition of multiple and conflicting tensions and narrations.

Piombino and Val di Cornia works as an archetypal 'territory in transition' and a unique scenario where to: first, *observe* the evolution of the territory undergoing a major transition towards trans-territorial, multi-leveled and multi-scaled configurations; second, *analyze* the relation between the territorial evolution and its own identity, observing the emergence of different narrations and approaches to transition; third, *explore* how such shift in identity reading may contribute to a different local and regional development strategy and planning.

First, a progressive definition of *path-dependence* and *lock-in*, as provided by the EEG framework, uncovers the multi-dimensional and dynamic nature of the valley: it sheds light on the *trans-territorial configurations* of Piombino and Val di Cornia.

Indeed, an assessment of the co-evolution of industry and territory reveals long-dating as well as increasing degrees of openness and interdependence within the territory: the string of crises (the turnovers from the State-owned *Ilva* since the '50s, to the *Lucchini*' ownership in the '90s and eventually to the Russian *Severstal* and the Algerian *Cevital* in the 2000s) and shifts in socio-economic paradigms (from Fordism to Post-Fordism along the last century, to global chains restructuring over the new millennium) have gradually shown the *relational* character of this area, besides stressing its vulnerability.

The emergence of multiple and co-existing path-dependent processes and territorial trajectories may lead to acknowledge the co-evolution of different and conflicting tensions: on one hand, '*resistant*' spaces have been supporting *self-reinforcing* and *locked-in* patterns over time; on the other, '*proactive*' and

'i*nnovative*' spaces have been shaping and feeding *unlock, path-creation and renewal dynamics* by means of both the private endeavour of private stakeholders and institutional planning alike. Moreover, some of these alternative and proactive spaces has proved to be characterized by a high degree of cognitive internationalization.

Val di Cornia could therefore be pictured as trapped in-between *adaptation* and *adaptability* drives, which in turn are shaping differing spaces of *regional resilience*.

The co-presence of differing forms of internationalization and multi-scale interdependence within the territory unravels the complex and nodal nature of the territory: this dynamism enhances the territorial reading well beyond 'steel'-bounded and locked-in configurations.

The Piombino and Val di Cornia' identity emerges therefore as a *dynamic and polycentric production*, rather than a closed and static image.

Second, the dynamic and trans-territorial configuration of Val di Cornia can actually count on certain degree of territorial openness and variety. Indeed, the co-evolution of multiple and different path-dependences over time has been generating *multiplicity* within Val di Cornia.

The concepts of *path-interdependence* and *related variety*, as by the EEG framework, allow to explore to a deeper extent the nature and the rise of territorial complexity and regional variety: they describe the co-evolution and overlapping of several and distinct path-dependent processes within territory through *regional branching* dynamics.

Indeed, according to the definition of path-interdependence, 'variety' in Val di Cornia can be understood as the outcome of both successful and unsuccessful co-evolving territorial trajectories: on one hand, *positive path-renewal and branching processes* have generated alternative and innovative spaces and action planning in accordance to *related variety* criteria (nurturing *adaptability*); on the other, *self-reinforcing and lock-in processes* have been

supported by pre-set and top-down recipes based on *steel specialization and diversification per se* (nurturing *adaptation*).

Differences within path-interdependence, variety and multiplicity may depend on the distinct degree of *absorptive capacity* within and between actors and territories: this distinction allows to detect the coexistence of a variety of *leading*, *follower* and *locked-in* trajectories in Val di Cornia.

Despite their 'success', *leading* initiative, acting in accordance to innovative, related variety criteria, has been segregated throughout the history of territorial evolution into a 'secondary' scenario, in favour of the 'primary' role of other *follower* and *locked-in* paths of 'steel specialization' or of diversification patterns based on variety *per se*.

The acknowledgment of the power-drive *space and identity building* processes may hold offers a broader comprehension of the emergence of this 'differentiated' multiplicity, which is in fact strengthening 'negative' paths over 'positive' ones: this uneven dynamic seems to be consistent with the geography of power underlying its own foundation.

On one hand, 'specialization' and 'diversification' patterns may be said to rely on '*power over*' and *dominant* mindsets. On the other, alternative and innovative forms of development appear to be rooted in '*power to*' and *associational* dynamics.

The reading of the territory as dichotomous and closed has encouraged a 'power over' approach to the detriment of new 'power to' dynamisms in local and regional development time and space-wise: at first, it has favoured the prominence of lock-in and self-reinforcing schemes over proactive and innovative pushes and it has meanwhile fostered 'steel' identity over 'other' ones; next, it crystallized dual 'steel/non-steel' and 'specialization/diversification' development strategies, instead of opening to 'third possibilities' and valuing emerging 'territorial ferment' and 'weak signals'.

The Piombino and Val di Cornia's identity was proved to be the outcome of a *selective and power-driven process*, rather than being an immutable and inescapable picture.

Third, the sequence of crises, endured by Val di Cornia and Piombino over the last decades kept on feeding a more and more palpable, shared need, shared among local administration and community, for a review and a re-thinking of the local development strategy, in the hope of moving forward from 'steel-bound' patterns. Such call for change represented the first step to the surfacing of the *political nature of 'identity'*

The emergence of a dynamic and selective identity led to be open towards and look into its potential political contributions to a redesigned approach to local and regional development and planning.

A relational reading of Val di Cornia confirms the highly *progressive* and *political character of territorial identity*, besides putting a spotlight on three main strategic and relevant issues for local and regional development and planning, namely:

- the driver/leading role of *knowledge and innovation* in shaping trans-territorial trajectories and interrelations through interactive learning processes;

- the acknowledgment of the *innovative and cognitive inherent potential* of the region, consistent with new *co-opetition*-driven settings and selection criteria, assuming it is based on complex and distinctive path-interdependence processes;

- the crucial role of *intentionality*, actors and stakeholders' action as well as of public and private initiative, in the elaboration of a well-adjusted and inclusive strategic planning vision integrated and systemic territorial development pattern.

These points may lead to a *place-based and inclusive redefinition of 'territorial competitiveness' in terms of cooperation and complementarity.*

According to the '*constructing regional advantage*' framework proposed by Asheim et al. (2011), *territorial uniqueness* -meant as the particular overlapping of multiple intersections and learning processes- emerges as a building process to be mediated and facilitated, instead of be defined as an 'assets portfolio'.

This relational perspective might open the way to enhancing Val di Cornia's uniqueness, to which there is far more than the plain adding up of figures and local resources: *its territorial potential emerges as a process of discovery, (self-)appraisal and integration of 'differentiated knowledge bases' led by could be structured into an integrated, inclusive and strategic territorial vision in order to be effective and sustainable.*

Piombino and Val di Cornia' identity can be therefore said to be a *strategic and political notion.* According to this perspective, *identity-building* may be defined as:

- *a dynamic and polycentric production-process of trans-territorial configurations, which may support a re-structured systemic and integrated reading and development pattern of Val di Cornia: identity is likely to act as a 'platform policy' based on place uniqueness;*

- *a fair selective and power process between co-existent multiplicities, which co-evolves along with multi-governance process and through which to promote integrated, inclusive territorial policy-making, as well as guaranteeing an balanced management in addressing regional variety and agents' intentionality;*

- *a strategic vision, whose definition has the potential to guide territorial planning and lead territorial evolution through transition.*

Concluding Remarks

***'Identity matters': a challenge to a renewed approach to local and regional
development and planning***

A relational reading of territory may disclose the *power* and *political* nature
hidden in territorial transition and in the socio-economic paradigm-shift.

Such perspective challenges 'old-fashioned' and dominant thinking and
dynamics, besides enhancing our way to envision, experience and produce
space, place and territory: transition itself could be defined as the manifestation
of the 'obsolescence' of a paradigm.

This approach is equally open towards conflict and synergy: the focus shall still
keep on identifying a viable pattern out of the given scenario and on
highlighting the existing opportunities to re-think and nurture alternative
spaces, approaches and solutions.

As by Rullani (2013; also Thrift, 1999), it implies the dismissal of an out-dated
perspective in favour of a new set of lenses better fit to catch the present
dynamics. Succeeding in such leap of perspective may reveal to be a long as well
as tricky and troublesome process.

In order to mediate and facilitate the understanding of alternative and
conflicting conceptions as features to be valued, it is first necessary to move
from a scalar to a relational perspective, from the acknowledgment of one
dominant narrative to the inclusion of multiple narrations, from a hegemonic to
an integrated vision, besides requiring parallel improvements in local and
regional development and planning (in the 'functional', 'cognitive' and 'political'
sphere).

This research project aims at providing an original contribution to territorial
analysis by developing an integrated and relational reading of the territory, in
particular of Piombino and Val di Cornia, in terms of 'identity building'.

The Evolutionary Economic Geography framework has provided relevant
theoretical tools to the exploration of the progressive and path-

(inter)dependent nature and development of trans-territorial trajectories during a transition phase. In addition, the relational definition of space, place and identity, as offered by several scholars in cultural geography, may open territorial reading and assessment to additional as well as innovative ways of conceiving space and territory, their production, emergence and evolution.

As supported by on-field research work, transition is fuelling territorial complexity and it is opening new spaces of contestation and selection: the structural change of the socio-economic paradigm is unveiling the *open and disruptive* character of space production as well as revealing tension among diverging territorial approaches, which are in turn trapped in-between the clashing pushes of the "*fantasmi di ciò che 'non è più'*" - the ghosts of what is no longer there" and of the "*allegorie di ciò che 'non è ancora'*" - the allegory of what is still to be (Bonomi, 2013b).

Transition may rise therefore by the conflicting and dynamic coexistence of multiple trajectories, production modes and space-time configurations within territories: this process, meant as an open 'spatial turn' (Soja, 1999), inherently rejects pre-set and established remedies aimed at dealing with crises and transformations.

On the contrary, it may well highlight the relational, plural as well as progressive and political character of space production and identity building.

It is certainly going to need the contribution of academic scholars as well as local communities and institutions to be able to develop a critical approach and a discerning eye towards the multifaceted nature of territorial evolution in order to better understand transitional dynamism.

Indeed, the relational reading of Piombino and Val di Cornia as a paradigmatic 'territory in transition' reveals identity to be:

- *a dynamic and polycentric* production of *trans-territorial* configurations;

- *a selective and power-driven* process between *co-existent multiplicity*;

- *a strategic element* for *renewed* local and regional development and planning.

The consolidation of a new pattern may stem out of the gradual unravelling of this multiple imagery co-evolution: the formulation of new, shared and strategic visions should guide changing and conflicting processes and solve the increasing complexity within territories.

How to manage and transform a long-tem strategic vision into effective territorial development and planning remains an open-ended question.

As verified by investigation, evaluation and analysis work, carried out in Val di Cornia, an alternative account of identity building can be able to provide useful tools to determining the best approach in guiding and shaping this emerging spatial and relational complexity and multiplicity into new and innovative territorial trajectories.

Identity building as a dynamic, selective and political process represents a potentially strategic element for a renewed local and regional development and planning:

- identity as a *platform policy* to support *integrated* territorial planning and the *systemic* development of multiple territorial trajectories;

- identity building as a *multi-governance process* to promote *inclusive* territorial planning and fairly manage *variety* and *intentionality*;

- identity building as the production of a *strategic vision* to guide territorial development and planning and drive territorial evolution through transition.

Progressive and inclusive territorial planning and place policies should be implemented in order to promote territorial *integrative* and *synthetic* capabilities around *strategic* and *shared visions* according to '*power to*' and *empower* logics.

Identity building promotes the co-evolution of contents and processes, mediation and priority, inclusion and selection: for one thing, identity dynamism co-evolves with territorial complexity; secondly, identity building as a selective process

overlaps and co-evolves with multi-governance processes of territorial planning; last, identity building as the production of a strategic vision overlaps and co-evolves with territorial planning processes.

In this perspective, a relational and dynamic account of identity building and selection can be considered as a reliable trigger to promote changes in local and regional development and planning, and territorial power configuration.

Instead of promoting boundaries and distinctions, it generates *inclusiveness* and *interrelations* during transition by *related variety* criteria.

Instead of being turned into a lock to hold on to the past and keep out what good there might be in transition, it is time for identity to be used as an effective *resilience* tool with which to tackle vulnerability issues.. It is able to uncover and unleash, integrate and exploit *territorial potential* in order to promote innovation, interconnections and upgrading into global systems.

Instead of sticking to being a yellowing picture to anchor and grasp to amidst a transitional struggle, it can turn itself into a *dynamic and progressive, planning strategic vision* to tackle and 'surfing' (Rullani, 2013) the paradigm change and leading territorial evolution throughout transition.

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