

Right on time - Socioecological scenario planning and Swiss watchmaking

Abstract

This paper explores how socio-ecological strategy-making research applies to Swiss watchmaking. We review the literatures on fields, apply this review to socio-ecological strategy, explain how turbulence is manifested in Swiss watchmaking, and assess the viability of socio-ecological scenario planning in this field. We contribute an empirical assessment to socio-ecological strategy and relate scenario planning to field theory. We conclude by exploring research implications of this study.

Keywords

Scenario planning; socio-ecological strategy; turbulence; watchmaking

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1. Introduction

Scenario planning has proved to be valuable to engage with unpredictable uncertainty in turbulent causal textures (Emery and Trist, 1965) where for those in such conditions the common shared ground is in motion (Wack, 1984; Wright and Cairns, 2011). Ramirez and Selsky (2015) suggested that in turbulent environments it is advisable to take on a ‘socio-ecological’ strategy approach supported by scenario planning; in ways that emphasize collaboration at a field level rather than centring strategy on firm-by-firm competition. They proposed three principles inherent to turbulent environments - transition, heterogeneity and subjectivity - and assessed how scenario planning helps to instantiate each principle in socio-ecological strategy.

In this paper we empirically investigate that proposition in one field – Swiss watchmaking. Given the recent rich and to some extent contested nature of the ‘field’ construct as described and discussed in the management literature (DiMaggio and Powell, 1983; Scott 2001; Zietsma and Lawrence, 2010; Smets, Morris and Greenwood 2012), we explore how Fligstein and McAdam’s (2012) theory of fields extends this socio-ecological strategy approach to test Ramirez and Selsky’s (2014) propositions. We chose Fligstein and McAdam’s (2012) view on fields because it tackles field emergence, transformation, inter-field relations, and the roles of external events/actors in field changes such as those in turbulent causal textures.

The paper is organized as follows. We summarize socio-ecological strategy and then examine the application of competitive strategy and of socio-ecological strategy in the Swiss watchmaking field. We chose Swiss watchmaking because this field exhibits characteristics which are helpful for our analysis. These characteristics include novel regulatory changes (e.g. *Swissness* legislation), the sudden emergence of connected devices (e.g. AppleWatch in 2015), an increasingly volatile consumer behaviour (DLG, 2015), and un-planned for currency changes (particularly the change in the way the Swiss Central Bank allows the Swiss franc to be traded internationally). We find that the relations among these factors have jointly created a turbulent causal texture for many firms in Swiss and indeed international watchmaking which appears to have felt for several of them as ‘hyper-turbulent’

(McCann and Selsky, 1984) conditions that have deeply challenged their capabilities for adaptation. We discuss how scenario planning could have provided alternative framings that would have allowed firms in this field to prepare better coping strategies. We conclude by exploring research implications of this study and we also assess how scenario planning scholars can find in the creative industries fertile grounds to explore the emergent topics of temporality and materiality.

2. Literature Review

2.1. A socio-ecological approach to strategy

Ramirez and Selsky (2014) contrasted ‘conventional’ strategic approaches derived from neoclassical economics with a ‘socio-ecological’ approach to strategy focusing on the causal textures theory of organizational environments (CTT). They proposed that CTT helps strategic planners to better engage the unpredictable uncertainty that characterizes turbulent environments.

Socio-ecological strategy is grounded in an open-systems view of an organization’s strategic situation, where the core unit of analysis is the shared field of inter-organizational action (Lewin, 1952). Emery and Trist’s (1965) CTT is a part of the social ecology school that studies environmental types, helps strategists to analyse how a system such as an organization and its environment (composed of forces, factors, actors and interactions) interact. In CTT those actors with whom a focal actor interacts are located in its more immediate ‘transactional’ environment — which can involve actors in several industries. These interactions in the transactional environment are in turn situated in a broader ‘contextual environment’, made up of factors which the focal actor cannot influence. Several interacting organizations, their shared environments, and the connections that link them jointly constitute a ‘field’ (for an up to date analysis of CTT see also Ramirez et al. 2008, 2010).

Emery and Trist (1965) proposed four causal textures of the organizational environment, distinguished by the salience, complexity and uncertainty of contextual environment links for the organizations. The most complex of the four textures, and most unpredictable, was the turbulent causal texture, which was felt for those in it as a ‘turbulent environment’. In a ‘turbulent’ causal texture according to Emery and Trist, the whole common shared ground is in motion, with contextual environment elements becoming inter-connected in ways that make them become uncertain and changing. Distinctions

between the external contextual environment and what had up to then been under influence in the more immediate transactional environment begin to break down. They posited that in turbulent causal textures there is no survival for systems acting alone, and thus the collaborative strategies of socio-ecological strategy among dissimilar organizations in a turbulent field become necessary.

McCann and Selsky (1984) highlighted that in actual practice the experience of turbulence is subjective, not an objective condition as Emery and Trist had implicitly proposed. If the perception that the links managed by the organization internally and in relation to its transactional environment are under pressure, they may perceive themselves as having become insufficiently resilient due to the emerging turbulence in their broader contextual environment. And this may lead it to question whether it can on its own, work to maintain its position or viability. It follows that an environment perceived by some organizations as turbulent, may be perceived by other (better prepared, more resilient) organisations as not turbulent. It was upon their building on that McCann and Selsky (1984) insight that Ramirez and Selsky (2014) suggested that a distinctive contribution of the social ecology school is to ‘(...) examine unpredictable uncertainty as 1) a contextual-level phenomenon, produced in a field of tightly coupled interactions which can produce unexpected bifurcations (Prigogine, 1996; Bernard, 2008) and field-level unintended consequences; and 2) as a distinguishing property of a distinct ‘texture’ of the environment” that is felt to be so by an individual actor in that field.

2.2. The construct of ‘field’ and the socio-ecological approach to strategy

According to Fligstein and McAdam (2012) the ‘field’ has been one of the most studied meso-level constructs in social sciences in recent decades. Among the main approaches that stand are seminal contributions by Bourdieu (1984; 1996; 1998) and those from institutional theory (DiMaggio and Powell, 1983; Scott, 2001; Zietsma and Lawrence, 2010; Smets, Morris and Greenwood 2012).

Bourdieu (1984; 1996; 1998) tackled a central problem in social theory: the relations between agents and structures. For him, actors hold a position in a field where they hold some form of capital, and what he called a ‘habitus’ (defined as set of acquired schemata, sensibilities, dispositions and taste) that involves a frame that is used to interpret the actions of others in the field. Bourdieu’s work was mainly centred at the individual level and did not really assess interrelations among different fields.

DiMaggio and Powell (1983) defined organizational/institutional fields as including “those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (p. 148). This definition was extended and more restrictively specified by Scott to entail situations where “participants interact with one another more frequently and fatefully than with actors outside the field” (2001, p. 56). Although these contributions made the research on fields to focus more on a meso-level of analysis, Fligstein and McAdam (2012) noted that institutional theory failed to produce an understanding of field emergence or transformation, and suggested that unlike Bourdieu’s work, power was underestimated in institutional theory accounts. Fligstein and McAdam then proposed “(...) an integrated theory that explains how stability and change are achieved by social actors in circumscribed social arenas” (2012, p.3). Their theory of fields comprised seven elements:

- i. strategic action fields (meso-level social orders) as the basic structural block of modern political/organizational life in the economy and society;
- ii. each strategic action field is taken to be comprised of incumbents, challengers, and internal governance units;
- iii. the micro-foundation is the social skill in its cognitive, empathetic and communicative dimensions aimed to create and sustain social worlds by securing the cooperation of others;
- iv. accepting that any given field is embedded in a broader environment consisting of countless proximate or distal fields as well as *State(s)*;
- v. accepting that a field can be subjected to exogenous shocks, to the mobilization and the onset of contention, both possibly as a consequence of the interdependence among fields;
- vi. Assuming that episodes of contention will occur where framing and re-framing become ubiquitous forms of action by those in the field;
- vii. That the field will seek settlements, when a generalized sense of order returns with some certainty on the relative positions of incumbents and challengers.

In this perspective of fields, change is thus episodic and regular if not constant and ongoing; while actors seek to fashion and maintain different forms of ‘order’ and their relevant material and status rewards.

Thus, we find that Fligstein and McAdam’s views on strategic action fields enriches Emery and Trist (1965) understanding of the transactional environment relations by providing an account of change

dynamics, of the changing roles of internal governance units, and of the ongoing contention among incumbents and challengers. It thus both extends field theory and opens a way to relate the influences they are subjected to by the macro-level issues which scenario planning investigates. Fligstein and McAdam's views on strategic action fields are thus of help to understand how a field is configured at any point in time, while acknowledging the possibility explored in CTT that contextual environment (exogenous) shocks can also disrupt the field as would occur in Emery and Trist's 'turbulent' causal texture .

According to Fligstein and McAdam (2012), three principal contextual sources of destabilization for a field are a) invasion by outside groups; b) changes in fields upon which the strategic action field in question is dependent, and c) rare macro events that destabilize the broader social/political context. The former is currently exemplified by 'digitisation' and 'uberisation', where invaders are often tech start-ups external to the field. This does not preclude reconfiguration from incumbents and challengers (Normann, 2001), but this source of discontinuity is often favoured by turbulence because it undermines the linkages in the field and make it difficult for established actors to reproduce their power. In their own terms, Fligstein and McAdam noted that in times of dramatic change, new ways of organizing "cultural frames" or "logics of action" come into existence (99-100).

It is not surprising that a meso-level theory such as that of Fligstein and McAdam would acknowledge macro-level issues but not take it as a central concern. Yet it is this link between macro-level and meso-level that arises in unpredicted ways in turbulent causal textures and that Ramirez and Selsky (2015) argued can be productively engaged with the help of scenario planning. This is what we intend this paper to address.

2.3. Strategizing in a turbulent environment

Ramirez and Selsky (2014) suggested that neoclassical based strategic planning processes (e.g. Porter 1985) are better suited to non-turbulent causal textures than to turbulent conditions. Selsky et al. (2007) previously had established that effective strategizing in a turbulent environment looks first to decrease this turbulence, demanding that strategy focuses at the level of the field instead of on the single organisation. They saw this as best accomplished through collaboration among functionally

dissimilar types of organisations. This is consistent with CTT holding that this inter-organisational cross-sectoral collaboration aims to create enough combined capacity to cope with the macro forces emanating from the contextual environment, helping the field as a whole to become less turbulent while also securing adaptive capacity for each organisation.

Ramirez and Selsky (2014) argued that collaboration in this socio-ecological mode of strategizing does not replace industry competition in firms' transactional environments constitutive of the neoclassical approach. Instead they suggested that it complements competition with new, field-level kinds of strategic initiatives. Thus, stances in relation to turbulence are often complicated blends of competition and cooperation, including cooptation (Brandenburger and Nalebuff, 1996); but also combining each as separate forms of interaction occurring synchronously. One can compete with some actors and collaborate with others. Fligstein and McAdam (2012) proposed that internal governance units (IGUs) are often the locus of such collaborations.

As stated above, Ramirez and Selsky (2014) rendered explicit three principles in CTT that had remained implicit; and associated them with three corresponding strategic stances for turbulent environments.

<i>CTT Principle</i>	<i>Description</i>	<i>Strategic Stance</i>	<i>Description</i>	<i>Field effects</i>
Transition principle	Turbulence is not a stable state of a field, but a state that manifests itself in strong moments and which can then dissipate - or accelerate further	Preparation: Stocking up resources	Building reserves of resources in times of no or low turbulence, enabling these organizations to invest those resources to strengthen themselves or to sit out or hide away when turbulence increases.	System can reinforce an existing region with additional capacity
Heterogeneity principle	Turbulence is not necessarily homogenous across a whole field, it may be more salient in some parts of a field than in others.	Relocating: escaping via migration or defence	It involves organizations migrating to locations in the field that are shielded from the worst impacts of turbulence	System can escape to a less turbulent region
Subjectivity principle	While turbulence may be an objective condition ('texture') of a field, it is experienced differently by particular organizations in the field, depending on their 'perceived adaptive capacity' to cope.	Reinventing collaboration	It involves enriching organizations and their counterparts with relevant knowledge about the possible unfolding of the turbulence they expect or are beginning to experience so they can negotiate and invent new roles and relationships	System can create a higher-capacity region with others

Table I: CTT Principles and Strategic Stances (source: adapted from Ramirez and Selsky, 2014)

Fligstein and McAdam (2012) suggested that incumbents are better endowed to undertake these strategic stances than challengers, because of their resources and privileged links with Internal Governance Units and the State/Government. In socio-ecological strategy, collaborative interactions enjoy a higher profile as integral components of corporate and business strategic planning than in the neoclassical approach. But as opposed to Brandenburger and Nalebuff (1996), for Ramirez and Selsky (2014), the emphasis of collaboration is not within one's 'industry', nor focused on horizontal partnering with competitors, nor on vertical integration ventures with value-chain partners. Instead, here collaboration involves a much more diverse set of actors and stakeholders comprising the broader transactional environments and thus jointly composed fields in which organizations operate. The collaboration seeks to together engage contextual level factors that affect or may affect all actors in a field (Ramirez and van der Heijden, 2007).

Socio-ecological strategic planning acknowledges commercial and competitive challenges, but is more sensitized to the macro level disruptions and the unpredictable uncertainties that arise in turbulence. It suggests that, when turbulent causal textures become a more central concern of strategic planners, the strategic situation calls for a different mode of strategic planning.

2.4. Scenario Planning in Turbulent Environments

Ramirez and Selsky (2014) found that in turbulent conditions scenario planning both complements competitive strategy by "framing strategic choices in multiple plausible imagined contexts" (p. 9) and can challenge and even change strategies. They proposed that scenario planning contributes to strategic planning in turbulent environments in four ways:

- (a) "recognizing that the causal texture of a field might become turbulent before it actually does so, and imagining the possibilities and challenges this might pose for one's strategy;
- (b) assessing whether the context is beginning to become or has already become turbulent if (a) has not been possible, and imagining different possibilities and challenges this might pose for one's strategy;

- (c) given (a) and/or (b), helping to prepare for turbulence by identifying experiments, prototypes, research, and actions to arrest the development of turbulence by engaging in active-adaptive behaviour and avoiding maladaptive behaviour;
- (d) giving guidance and hope to those already in a turbulent environment by proposing collaborative strategic options and/or designing in authentic collaborative activities that stabilize and/or develop the field (p.10)”.

They then identified aspects of scenario planning informed by the strategic stances of preparation, relocation and reinventing collaboration. We now describe the current (mid 2016) turbulent context in Swiss watchmaking before using this description to assess the relevance of the propositions made by Ramirez and Selsky (2014).

3. Data and Method

Data collection entailed a triangulation of multiple sources. Over a 26-month period in 2014-2016, we conducted 57 open and semi-structured interviews with actors involved in the Swiss watchmaking field which lasted in average 90 minutes. Among the interviewees were CEOs in watchmaking companies¹ and creative agencies, opinion leaders and clients. We also conducted visits at watches distributors in 5 countries and attended the two major professional gatherings of the field: SIHH (*Salon International de la Haute Horlogerie*) in Geneva and BaselWorld in Basel in the 2014-2016 period. Last, we compiled secondary data from internal company reports, consulting and banking reports, the relevant specialized press and the web as a whole². Table I succinctly describes these sources of information.

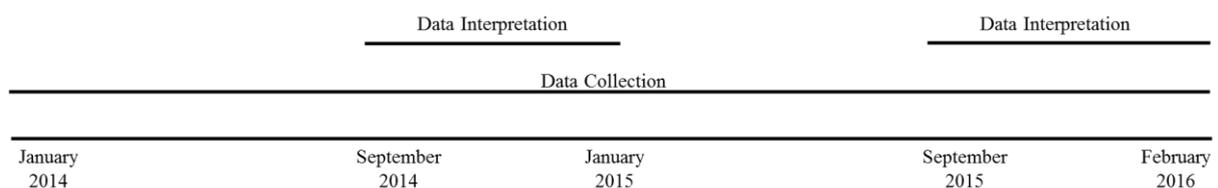


Figure I: Iterative process of data collection and interpretation

¹ This data collection is part of a larger research project on independent companies in the creative industries; therefore the selected companies were independent watchmakers that could be defined as challengers in Fligstein and McAdam (2012) terms. They are among the most exposed to the current turbulent context (Gomelsky, 2016).

² Two of the co-authors also have managerial and consulting roles in the industry, being able to take a reflective stance on their roles that have supported the learning reported here (Schön, 1984).

Data Source	Role	Entity
Interviews ³	Watchmaking company CEO	HYT, Louis Moinet, Cyrus, Carl F. Bucherer, MB&F, Urwerk, Slyde, Michel Jordi
	Creative Agency CEO	Holition, Digital Luxury Group, BETC Design
	Press / Opinion leader	The Economist, worldtempus.com, Shanghai Morning Post, businessmontres.com, 1.618 Sustainable Luxury, Only Watch
	Clients	35 interviews with collectors of high-end watches brands
	Retail	Temps & Passion Monaco, E'Collezione Singapore, Bucherer Switzerland, Noble Styling Tokyo
Site visits	Professional Gatherings	SIHH Geneva (2014, 2015, 2016) BaselWorld Basel (2014, 2015)
	Retail	Temps & Passion Monaco, E'Collezione Singapore, Bucherer Switzerland, Noble Styling Tokyo, Bucherer France.

Table II: Sources of information

To analyse this diverse and rich data, we utilized an ‘abudctive analysis’ research strategy (Timmermans and Tavory, 2012), in an iterative process of data collection and interpretation. The following part describes our findings, where we describe turbulence in the Swiss watchmaking field, how a social ecology approach fares in this context and the framing failures that scenario planning could have prevented.

4. Results

4.1. Turbulence in the Swiss watchmaking field

Swiss watchmakers are a leading force in the European Creative Industries, being the world leader’s exporter of watches in terms of value with exports of 21 billion CHF (Swiss franc) in 2014, representing 7% of Swiss exports (FHS, 2015). The field is composed of the watchmakers, their ‘value chain’ partners, plus actors and stakeholders in the creative industries; plus organisations in the media, banking, insurance, real estate, non-governmental, education, regulators, export-support agencies, canton governments, etc.

The field is dominated by large companies with many divisions to which most of the major watch brands belong. The most important ones are: Swatch Group, owner of 18 brands (e.g. Swatch, Breguet, Blancpain, Longines, Tissot) and a large part of the manufacture of watch ‘movements (e.g. ‘ébauches’ and ‘assortments’); Richemont, owner of 13 watch brands (e.g. Piaget, Cartier, IWC); and Rolex (owner of Rolex and Tudor). These first three single-handedly contributed 47% of the total

³ Several (seven) of these informants were interviewed more than once to expose our interpretations and get feedback.

turnover of the Swiss watchmaking industry in 2014 (Vontobel Equity Research, 2015). The fourth major group is the French group LVMH (owner of brands such as Hublot, Zenith and TAG Heuer). Alongside these four main groups there are several independent and influential family-controlled companies such as Patek Philippe, Audemars Piguet, Chopard, Breitling, and Bucherer.

Hoffmann and Lecamp (2015) showed that the environment made up by these companies was at that time becoming increasingly complex for new entrants given the control of the manufacture of watch movements (a central component) by the four large groups. This situation is explained by the actions that the large watchmaker companies undertook to vertically integrate external suppliers and subcontractors, bringing them in-house. Swatch Group started this process in the late 1980s and the trend gained pace during the 1990s with other groups following in this manner, namely Rolex, Richemont and LVMH.

That wave of acquisitions enhanced the value of those suppliers who possessed strategic expertise in the production of cases, dials, hands and hairsprings. The acquisition of these specialist workshops by the large groups made it much more difficult for smaller companies to obtain supplies, forcing them to find alternative sources which became increasingly expensive.

Particularly, the decision in 2006 and 2009 by the Swatch Group to cut the delivery of certain parts and mechanical movements to third-party brands had a profound effect on Swiss watchmaking as a whole.

An automatic movement is basically made up of the 'ébauche' (the unassembled basis of the movement with all its components) and the 'assortment' (the associated regulating components of the movement). Since its creation, the Swatch Group enjoyed a largely commanding position in the mechanical movement market of 'ébauches' and assortments because it manufactured large quantities. In 2002, ETA, the biggest company that manufactured 'ébauches' and complete movements was bought up by Swatch Group which in 2006 decided to reduce, and then to permanently stop the delivery of 'ébauches' to clients outside the group. Given that nearly 80 per cent of all watch movements produced in Switzerland at that time included the ETA 'ébauche', this decision had severe consequences on many independent watch manufacturers. In the same year the Swiss Competition Commission ('ComCo' henceforth) was called in to investigate and an amicable settlement was

reached; allowing deliveries to be phased out more gradually until 2010. Since 2011, ETA 'ébauches' have no longer been delivered to companies outside the Swatch Group – which in effect was a fatal, if delayed, blow for many independent brands (Hoffmann and Lecamp, 2015).

Furthermore, at the end of 2009, Swatch Group indicated that it would stop delivering all complete watch movements and assortments to clients external to its group. In 2010, the ComCo was once again called upon by independent watchmaking companies and an investigation to determine whether Swatch Group's decision constituted abuse of its commanding position was conducted the following year. The ComCo's provisional measures stipulated that Swatch Group should continue to ensure delivery of movements and assortments to companies outside its group for the duration of the proceedings; with deliveries being officially reduced from 2012 onward (Hoffmann and Lecamp, 2015).

Moreover, the planned hardening of conditions to obtain the label *Swiss Made* has been putting extra pressure on watchmaking independents, particularly those offering low and mid-range price level products. The legislation known as *Swissness* states that by January 2017 the *Swiss Made* label would only be awarded if at least 60 per cent of production costs are to be incurred in Switzerland, compared to 50% before the legislation was to be enacted (IGE, 2016).

These developments within the field were matched up by three important changes in the field's contextual environment. The Swiss National Bank decided early in 2015 to unpeg the Swiss Franc to the Euro, resulting in a 10% revaluation of the Swiss Franc, directly reducing the sale levels and profitability of Swiss companies. Secondly, the anti-graft campaign in China following Xi Jinping's ascension to office in 2012 had a strong impact on purchases from Chinese clients of the products of Swiss watch-making firms both in Hong Kong and abroad. Chinese consumers represent nearly 30% of the luxury market since 2013 and Hong Kong had been the main export destination of Swiss watches (Bain and Altagamma, 2015). Figures from October 2015 indicated a 39% slump in shipments to Hong Kong on a year-on-year basis, the biggest decline in six years – since the financial crisis. Thirdly, the appearance of 'connected' devices, like the Apple Watch, came to be seen as a major threat to the established 'disconnected' offerings of the Swiss manufacturers – according to

some (businessmontres.com, 2015) as consequential as the entry of the quartz mechanism in the past century.

These changes combined with each other to characterize the transition of the Swiss watch-making field (particularly for the independent watchmakers) into a turbulent causal texture, where several actors felt they may become insufficiently resilient to maintain their position and/or viability.

4.2. A social-ecology strategy approach in the Swiss Watchmaking field

In this section, we assess the presence of the transition, heterogeneity and subjectivity principles and how socio-ecological strategy fares in the turbulent context of the Swiss watchmaking field.

4.2.1. The 'transition' principle

We find evidence of the CTT transition principle. Turbulence was felt to be acute by key players in the historical period following the development by a Swiss consortium of the electronic quartz in the late 1960's and 1970's. Recall that quartz-based electronic watches offered a number of advantages in terms of precision, power reserve capabilities, sensitiveness to jolts and impacts, and cost. The quartz watch soon became a commodity, and this transformed mechanical watches into a niche category. Consequences were significant for most Swiss watchmakers: between 1975 and 1983, their share of the worldwide watch market dropped from 30 to 10 per cent. Swiss watchmakers eventually repositioned their mechanical watches as premium products and Swatch became famous when it managed to integrate quartz into what became fashionable pieces, enabling the field as a whole to resist and strengthen against Asian watchmakers like Seiko and Casio (Hayek, 2014).

4.2.2. The 'heterogeneity' principle

The turbulent conditions as we write in 2016 appear to affect low and mid-range watch companies more strongly than high-end companies, particularly the independent watchmakers (Gomelsky, 2016). This we take as evidence of the heterogeneity principle in CTT in this field. For example, HYT and MB&F are two watchmakers that have developed an innovative value constellation (see Appendix) resulting in more resilient capabilities where they, at least, do not feel the field's development as turbulent, whereas other smaller players evidently do.

4.2.3. The ‘subjectivity’ principle

Several independent watchmaking companies are particularly constrained in the current configuration, with diminished adaptive capacities to cope, which is evidence of the ‘subjectivity principle’.

Examples of firms affected in this manner include watchmakers Raymond Weil, Victorinox, Montaine and Oris (Hoffmann and Lecamp, 2015).

As regards to the strategic stances defined by Ramirez and Selsky (2014), our assessment is as follows.

4.2.4. The ‘preparation’ strategic stance

The acquisition of manufacturing companies and independent watchmakers by the large groups (e.g. Swatch Group; LVMH acquisition of Bulgari; Kering acquisition of Ulysse Nardin) can certainly be read as evidence of the preparation strategic stance, as is the joint lobbying for the *Swissness* legislation.

4.2.5. The ‘relocation’ strategic stance

The *Swissness* legislation is an interesting collaboration example where influential actors in the field jointly and successfully lobbied the Swiss government to change established rules in favour of those within their ‘protected adaptive-capability’ enclave (McCann and Selsky, 1984), who could then jointly preclude being adversely affected by turbulence because they became better able to meet the stricter regulations; whereas it made the field more turbulent for those external to that enclave. This we take as manifesting the relocating strategic stance.

4.2.6. The ‘reinventing collaboration’ strategic stance

Finally, the ‘reinventing collaboration’ strategic stance seems particularly relevant to describe the radical innovation possibilities that the connected devices represent. We explore it in the following section.

<i>Strategic Stance</i>	<i>Example in the Swiss Watchmaking Field</i>
Preparation	Acquisition of manufacturing companies by the large groups (e.g. Swatch Group); joint lobbying for the <i>Swissness</i> legislation
Relocating	Responses to the <i>Swissness</i> legislation
Reinventing collaboration	The TAG Heuer Connected Watch developed with Intel and Google; MB&F Mechanical Art Devices (M.A.D.) Galleries; HYT and Helbling Technik

Table III: Strategic Stances in the Swiss Watchmaking Field

4.3. Redesigning collaborative innovation

If the meaning of the ‘wristwatch’ gets reframed as a platform for a connected ecosystem of applications, big parts of what was ‘the Swiss watchmaking field’ until the early 2010’s are poised to face a profound existential question.

Connected watches, or smartwatches, were at first launched in 2013, by electronic companies like Sony, LG and Samsung, receiving a harsh reception (Pogue, 2013). An important ‘tipping point’ (Gladwell, 2000) was Apple’s smartwatch launch in 2015 that was at first observed with intriguing eyes by Swiss watchmakers. Current smartwatch sales leave little doubt of the possible magnitude of its impact: in the fourth quarter of 2015, more connected watches (8.1 million) have been sold than Swiss mechanical watches (7.9 million), and in its first fiscal year, the Appel Watch is expected to make Apple become the 3rd biggest watchmaker of the world by value, with a projected turnover of more than US\$ 5 billion (Vontobel Equity Research, 2015; StrategyAnalytics, 2016).

Several Swiss companies had decided to act like Slyde, Montblanc, Frédérique Constant, Tissot, or Swatch Zero, by creating locally connected watches but in a closed platform with only in-house developed applications. This strategy now appears to be of limited interest given consumer expectations of links to smartphones and their large ecosystem of applications. As of November 2015, the only Swiss watchmaker who decided to break with that strategy and with convention to engage in an innovative collaboration was TAG Heuer, part of LVMH. The company partnered with Intel and Google to co-develop and launch ‘TAG Heuer Connected’. It integrated an Intel processor that connects the watch to the internet and runs applications via Google’s Android Wear Platform. The watch has been manufactured in the United States, and does not benefit from the *Swiss Made* label, but instead shows a *Swiss Engineered* sign. The company announced the watch at a retail price of US\$ 1500 with a two-year warranty, giving clients an option to pay an extra US\$ 1500 at the end of that period to get a hand-crafted *Swiss Made* TAG Heuer watch (Le Point Montres, 2015).

In the United States, Fossil, the 4th biggest watchmaker in the world, launched the ‘Fossil Q’ line of smartwatches, also collaborating with Intel and Google. Its hope is that this collaboration will be the

engine of substantial growth in the years to come; its acquisition of Misfit, a maker of wearable activity trackers, is a sign in this direction (Wired, 2015).

Meanwhile, Apple, the only player in the smartwatch field to control both the hardware and the software, announced in September 2015 a partnership with Hermès, the French leather goods company, to launch the ‘Apple Watch Hermès’ with Hermès leather straps. Since Hermès also has its own watch product line, this collaboration has Apple seeking to strengthen its ‘luxury’ credentials, and Hermès to raise awareness among a younger connected clientele.

As we saw above, the social-ecology strategic approach emphasis on collaboration is not limited to the ‘industry’, nor on horizontal partnering with competitors, nor on vertical integration ventures with value-chain partners. Instead, socio-ecological strategic collaboration involves a much more diverse set of actors and stakeholders in different ‘industries’, comprising the broader fields in which these organizations operate. These collaborations help each to together engage contextual level factors that affect or may affect all actors in more than one field. As shown in the appendix, this has been part of the historical development of the Swiss watchmaking field.

For the purposes of this research, it is worth remembering that Swiss watchmakers are part of the larger field of creative endeavours (eccia.eu, 2016), where the larger and more prestigious players have entered into, and in so doing, changed other fields. Thus, Alain-Dominique Perrier, a leading force behind Cartier, has long ago set the ‘Fondation Cartier pour l’Art Contemporain’ in Paris as a fruitful bridge between the industry and the arts fields, as are also the cases with the creation of the ‘Fondazione Prada’ and the ‘Fondation Louis Vuitton’.

In the turbulent field conditions, the challenge is most acute for companies with offerings in the entry and mid-range segments. If the field leading incumbent, Swatch Group, possessing the resources to take a leading position in this emergent field has failed to reconfigure a new collaborative strategy to counter Apple and Fossil’s new offerings and is now busy figuring out how to catch up; smaller watchmakers (i.e. challengers) will find it harder, other things being equal, to escape the innovative collaboration socio-ecological strategy calls for to endure and thrive in the turbulence they are facing.

At the time of this writing (Spring 2016), there is good reason to consider that the *TAG Heuer Connected* and *Fossil Q line* offerings may succeed in consolidating their role as frontrunners in a

wave of new collaborations with actors in other industries. This is for a simple reason: they recognized that the Swiss and non-Swiss watch *industry* has been morphed in turbulence into a *field* of connected business ecosystems. As pointed by Iansiti and Levien (2004), performance in such contexts derives from “something that is much larger than the companies themselves: the success of their respective business ecosystems” (Iansiti and Levien, 2004). The breadth of the iOS and Android platforms comes from their openness to third party developers and that matters here, for the success required to collaborate involves being part of or becoming a platform (Gawer and Cusumano, 2008). Given the impossibility to use actively Apple’s iOS, Google’s Android Wear is at the time of this writing the best alternative platform for connected watches that smaller watchmakers can collaborate with. Paradoxically, perhaps, we find that opportunities for collaboration abound. Electronic companies such as LG (G Watch), Samsung (Gear), Lenovo (Moto 360) have joined the connected devices field along (American) start-up firms such as Chronos, Jawbone, Pebble or Nymi. Opportunities seem also to exist in applications conceived with the connected watch; a source of certain frustration at this stage is that most apps are replications of the ones conceived for smartphones (Comtesse, 2015). Wearable technology is a particularly hot topic in the fashion field where many opportunities for innovative collaboration may yet be devised or found.

5. Scenario planning in the watchmaking field: on framing failures

Whereas ‘black swans’ in the macro-environment can deeply impact a field, the emergence of the connected watch has been foreseen and several voices ringed alarm bells about their irruption. For example, by mid-2013, most electronics companies had engaged in smartwatch projects (AFP, 2013). A framing failure (Normann, 2001; Ramirez and Wilkinson, 2016) is the most plausible explanation for this collective misperception. Framing *mechanical watches* as a manifestation of noble Swiss craft and refinement led Swiss watchmakers to downplay the threat of connected watches. This framing was strong as it had been a central part of the survival recipe in the previous upheaval generated in the

development by a Swiss consortium of the electronic quartz calibre Beta 21 in the late 1960's and 1970's⁴.

So when connected watches appeared on the horizon, keeping one's strategy as defined with the mechanical watch framing offered far less protection than it had been expected to provide. With the emergence of the new *connected watchmaking field* both incumbents and challengers from the existing watchmaking field (both makers of mechanical and electronic watches) found the need to contend with unprecedented and novel (and for them ambiguous) environments badly defined by their existing frames; and with invaders from the electronics and IT fields (Fligstein and McAdam, 2012) with whom their frame disallowed them to compare.

Internal Governance Units of the field, like the Federation of the Swiss Watch Industry, were of little help in such a context, particularly in relating to and comparing themselves with very powerful and rich invaders (Apple's 2015 turnover of \$ 233 billion is more than 20 times that of the field leader Swatch Group).

At the time of this writing, it remains unclear whether the smartwatch is going to 'grow the pie for' or 'divide the existing pie against' established watchmakers. Unlike the last battle, where the quartz electronic mechanism did not challenge the meaning of the wristwatch, the connected watch may well do so.

From a (multifunctional) object, the watch appears set to become a support for a connected ecosystem of applications which can connect what is worn on the wrist with, for example, health in unprecedented ways. More fundamentally paradoxical for the 'garde temps' (time-keeping) function that defined Swiss watchmakers, time perception is also being brutally transformed by the real-time information the invaders bring about (The Economist, 2015).

⁴ In 1982, a young entrepreneur named Jean-Claude Biver bought a brand that has been dormant for two decades and devised a slogan that would make him enter the pantheon of admen along the likes of De Beers ("A diamond is forever") and Patek Philippe ("You never actually own a Patek Philippe. You merely look after it for the next generation"): "Since 1735, there has never been a quartz Blancpain watch and there never will be". If it is impossible to assess how deep ingrained in the collective unconscious this statement came to be, facts from recent decades came to confirm this framing: Swiss mechanical watches capture close to half of world's export sales in value, despite its modest volumes.

A further possible effect of the framing failure is that in the current turbulent causal texture ‘business as usual’ appears unviable, and if that stance remains prevalent in terms of strategies such as ‘back to the core’, it can make the field even more turbulent (Selsky et al. 2007).

In the current turbulent context, two uses of scenario planning appear most relevant (Ramirez and Selsky, 2014, p.10):

- Scenario planning would help field members (incumbents and challengers alike) to identify experiments, prototypes, research, and actions to arrest the development of turbulence by engaging in active-adaptive behaviour and avoiding maladaptive behaviour;
- Scenario planning would provide guidance and hope through exploring, defining, piloting and even proposing collaborative strategic options and/or designing authentic collaborative activities that stabilize and/or develop the field.

Our analysis of the principles and stances above suggests that the latter looks as the most promising path; where scenario planning can play a crucially role in federating actors from disjointed fields to take a collaborative stance to jointly reduce the turbulence for those who participate in it.

6. Conclusion

Ramirez and Selsky (2014) proposed a social-ecology strategy approach as relevant in situations of: “(...) unpredictable uncertainty as 1) a contextual-level phenomenon, produced in a field of tightly coupled interactions which can produce unexpected bifurcations and field-level unintended consequences; and 2) as a distinguishing property of a distinct ‘texture’ of the environment”. We have integrated insights from Fligstein and McAdam’s (2012) ‘theory of fields’ and shown these to be relevant for actors in the Swiss watchmaking field. To our knowledge this is the first empirical examination of these principles and the strategic stances socio-ecological strategy offers helped by scenario planning and this exploration, in our view, invites further empirical research in other settings. As the Swiss watchmaking field becomes turbulent, some of our analysis must remain incomplete and tentative; they are based on partial evidence and fragmented information. This is both a characteristic of, and a limitation of this study.

This research joins a growing body of literature addressing the creative industries in management and organisation studies (Esposito, 2011; Godart et al. 2015; Khaire 2014; Rao, Monin and Durand, 2003; Sgourev, 2013) which is very much part of the research published at *Technological Forecasting and Social Change* where 8 papers mentioned the creative industries in the 2014-2015 period (e.g. Bae and Yoo, 2015; Sung, 2015).

Nevertheless, scenario planning scholars and practitioners have paid so far scarce attention to the creative industries (see Kamprath and Mietzner, 2015; Roubelat et al. 2015; Brassett and O'Reilly, 2015, for exceptions).

This situation reflects Bradfield et al. (2005) findings that scenario planning use has historically been related to the size of the company, the length of its planning horizons (more than > 10 years) and its capital intensiveness (e.g. aerospace, chemicals, petroleum, vehicle, electricity suppliers, transport). Yet, in our view the rising importance of fields and their displacement of industries as the dominant meso-level construct may have begun to change that pattern. The above analysis suggests that watchmaking incumbents and challengers would be well served by scenario planning.

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Appendix

Collaboration in the Swiss watchmaking field

Collaboration is not new to the Swiss watchmaking field. Its roots can be traced back to the innovative collaborations in the 16th century between the evolved craft of Geneva based jewellers, banned from developing their trade by Calvinism, and the horological know-how of French Huguenots, refugees in Geneva to escape Catholic persecutions in France.

Collaborative innovation also gave birth to some of the most remarkable watch companies of this century. Richard Mille became involved with the automotive and aviation industries, observing their high-tech mechanical objects, to develop his own watch. Back in the late 1990's, when the majority of the players were using today's materials to build watches inspired by the 19th century, Richard Mille

used today's materials (albeit different ones) to build the 21st century watch'. This led to the integration of materials like carbon nanofiber, ALUSIC, Aluminium-Lithium, ANTICORODAL and Phynox, to name a few, in the watch making industry. Moreover, he set the stage for innovators like MB&F and HYT in the 2010's.

HYT collaboratively also innovated by creating time pieces that tell the time using a fluid at the very heart of the watch movement. While the oldest water clock ever found dates back to the time of the Pharaohs, it was not until 3400 years later that it became possible to overcome the force of gravity and to tell the time with fluid in a mechanical wristwatch. The basic idea was relatively simple: two flexible reservoirs welded together and fixed to each end of a capillary tube. In one reservoir, an aqueous liquid containing fluorescein, and in the other, a clear viscous liquid. The two liquids are kept apart by the repulsive force of the molecules of each fluid, with the meniscus between the two. Its implementation was a way more complex and required the collaboration between Chronode on the watchmaking side and Preciflex, the company holding the patents created by the founders of HYT, on the fluids side. Supporting Preciflex: Helbling Technik, from the medical field, where fluid motion is used in certain treatments. An interesting journey were two fields collaborate to a place where a unique technology destabilizes not only the field of watchmaking but also that of medical technology (med-tech), as the pump system opens the way for new applications in the field.

MB&F carries in its own name the importance of collaborative innovation: MB are the initials of founder Maximilian Büsser, and F stands for Friends, in recognition of all those who have contributed, directly or indirectly, to the development and success of its 'horological machines'. These collaborations span the creative side but find particular resonance in its distribution channel. Aware of the difficulties for a brand to be profitable by selling in a mono-brand store, MB&F decided to join forces with artists and creators outside the field of watchmaking. Thus, the concept of the M.A.D. Gallery (M.A.D for 'Mechanical Art Devices') was born, bringing together the creations from independent artists and creators around the world (such as Chicara Nagata, Frank Buchwald, Marc Ninghetto, and others). The three galleries that have opened so far (one in Geneva in 2011, a second in Taipei in 2014 and a third in Dubai in 2015) are concept stores in the true sense of the term, and specialize in the 'incredible, the extravagant and the exclusive'.

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