

# Catalysts and Regulators of Psychological Change in the Context of Immigration Ruptures

**Irini Kadianaki and Tania Zittoun**

In this chapter our aim is to show how the concept of catalysis, as taken from chemistry, can be used to understand psychological experiences and specifically how individuals cope with situations of psychological ruptures in their lives, such as that of immigrating.

Moving and living to a country other than one's own brings individuals into contact with different meanings about the social world they inhabit and about themselves, and changes their habitual ways of relating with other people. Immigrants often encounter stigmatizing meanings with regards to their identities (ethnic, migrant), which they strive to negotiate (Deaux 2006; Timotijevic and Breakwell 2000; Verkuyten 2005). As they deal with these meanings about themselves they engage in redefinition of their identity (Chrysochoou 2004) and in self-transformation (Gillespie et al. 2012; Kadianaki 2013). The change of the sociocultural environment often demands acquisition of cognitive and social skills and redefinition of cultural ethics and routines as well (Knafo and Schwartz 2001; Kwak 2010).

In this chapter we will examine how people experience the ruptures of immigrating and how they sustain themselves psychologically to deal with these ruptures. How can the concept of catalysis be relevant to our examination then? As we will demonstrate, a catalytic framework enables the understanding of both the conditions that bring change and support the emergence of new psychological phenomena as those induced by psychological ruptures.

Catalysis, as understood in chemistry, is a process that provides the conditions necessary for a chemical reaction to occur; it sets the conditions for a qualitative change to occur in an organism, a system (Cabell 2011). Witzemann (1943, p. 179) defines a catalyst in chemistry as an "extraneous substance that somehow causes

---

I. Kadianaki (✉)

Department of Psychology, University of Cyprus, Kallipoleos 65, P.O. Box 20537,  
1678 Nicosia, Cyprus  
e-mail: kadianaki.irini@ucy.ac.cy

T. Zittoun

Institut de psychologie et éducation, University of Neuchâtel, Espace Louis-Agassiz 1,  
2000 Neuchâtel, Switzerland  
e-mail: Tania.zittoun@unine.ch

a reaction to take place that would not take place in the same way or to the same extent in its absence in finite terms, and which is usually not permanently changed in the events in which it takes such a part". Catalysis thus describes those conditions that support, constrain or direct reactions to take place, through the activation of regulators, namely, promoters or inhibitors, leading to certain chemical outcomes.

In transferring the concept into psychology, Cabell (2010) has talked about semi-otic catalysts and regulators, relating thus the concept to semiotic mediation: the idea that "human existence is organized by socially constructed and personally internalized semiotic means-signs of different kinds" (Valsiner 1998, p. 234). We build on the concepts of catalysts and regulators and connect them, as the following section will show, to the notions of rupture and symbolic resources used to understand psychological transitions and development (Zittoun 2006). Studying the uses of symbolic resources intends, precisely, to examine processes by which meaning-making is facilitated, accelerated and oriented thanks to peoples' uses of complex semiotic mediators in forms of regulators (Cabell 2011; Zittoun et al. 2003). Here, we go further in the analysis of ruptures and uses of symbolic resources as catalytic processes. Doing so, we hope to enrich both the understanding of catalytic processes and the study of uses of symbolic resources.

As we will argue, a catalytic framework provides a contextualized and systemic understanding of the conditions under which psychological phenomena occur and the processes (and not solely the outcomes) of qualitative change of the psychological system, which in our case, are induced by immigration.

## **Ruptures and Semiotic Elements as Catalysts, Symbolic Resources as Regulators**

In this project a rupture is conceptualized as a perceived change, a breach in the continuity of the individual's life course, which invites a renegotiation of taken-for-granted meanings and routine situations. A rupture triggers a period of transition, during which the person finds himself in a process of uncertainty and imbalance that needs to be reorganized and dealt with (Zittoun et al. 2003; Zittoun 2004, 2006).

Ruptures can emerge from different types of change in the lives of individuals (Zittoun 2006): from large-scale changes in the social context for a person (e.g. war), changes of and within the immediate environment of the person (e.g. immigration; new family member), changes in the relationship of a person with other people (e.g. divorce) or with objects (e.g. fear of flying), and intrapersonal changes (e.g. identity changes). Ruptures caused by different types of change can be interconnected: for example, the event of a war is likely to trigger intrapersonal ruptures. Ruptures can also be differentiated by their time extension (i.e. sudden, slow and recurrent) and their different degrees of generality in affecting the individual experience (i.e. whole affective experience, isolated aspects of experience). In this project we will discuss the rupturing experiences caused by immigration.

Events experienced as ruptures are, thus, synonymous to the destruction of existing meanings, of ways of defining oneself, and of acting, until they are treated as meaningful. As a consequence, ruptures are followed by periods of transition, which can involve: (1) a redefinition and repositioning of the self, for example, in the case of immigration, the movement to a new social milieu confronts people with new social others who perceive them in different ways than their home communities; (2) the mobilisation of social, practical, and theoretical skills to permit new ways of conduct, for example, moving to a new country invites new language skills and actions, which will permit people to deal with the non-habitual demands of everyday life; and (3) construction with symbolic elaboration of events, experiences, emotions to allow self-continuity and consistency (Zittoun 2006). Thus ruptures invite the activation of mechanisms that will regulate psychological processes of transition. Consequently, we suggest that ruptures introduce new meanings in the system constituted by the person and the immediate spheres of experience; it is the introduction of such meaning which might induce the destruction of the sense a person previously conferred to a situation. Hence, a situation of war introduces new meaning—about the importance of enrolling, sacrificing one’s life for one’s nation, the beauty of battles—in people’s environment, which in turn can disrupt the sense people were conferring to their daily lives. In that sense, experienced ruptures can be seen as catalysts.

“When ruptures occur, and meaning systems “bottom-out”, some process must be activated in order to start re-building and re-producing the meaning system. It is the semiotic catalyzers function to activate re-producing and synthesizing mechanisms to rebuild the meaning system. The catalyst, then, coordinates the mechanisms in the system to re-frame the mind and re-build its meaningful system” (Cabell 2011, p. 10).

Drawing on chemistry, Cabell (2010, p. 27) differentiates two types of semiotic mediators: semiotic catalysts and semiotic regulators. Semiotic catalysts are processes induced by a rupture, which “provide the directional flavoring that support—but do not act directly on—the enablement or disablement of ongoing psychological processes (. . .) and providing the support for the direct and active operation and employment of semiotic regulators (and other mediating devices)”. Semiotic regulators are “intra-mental devices that are actively and directly used on the ongoing psychological processes” or “extra-mental devices that are actively and directly used to cultivate the personal-cultural or the collective-cultural field” (Cabell 2010, p. 37).

We will be focusing here on these extra-mental devices that can act as semiotic regulators. These can be cultural elements such as a song, a movie, a book, which are abundant in the lives of individuals. Provided that people have the mastery of some of the semiotic systems and conventions by which these objects are built, they can experience them: they can read fiction, dance traditional dances or enjoy listening to a song. When these experiences acquire a particular, personal sense, these can be seen as becoming symbolic—they touch the person—the person “resonates” with the character, is “moved” by the melody, is “transported” by the colors of a painting, etc. Finally, when the person is using the cultural elements or some of its semiotic components in relationship to something else, with a form of intentionality—a novel

to remember a place, a song to regulate one's mood, a thought about visiting some place—then, he uses it as a *symbolic resource* (Zittoun 2006).

We can thus distinguish different degrees of mediation offered by cultural elements: as semiotic elements, they allow the person to experience a general meaning that is socially shared—e.g. the 2012 James Bond movie by Mendes is constructed on a plot showing the fidelity and bravery of the special agent to his country, supported by a choice of colors, certain type of music etc.; as symbolic resources, they actually resonate with specific aspects of a person's experience—e.g. one can be moved by James Bond's fight to recover his physical strength after an accident—and can guide and transform that personal experience.

Consequently, we first propose that cultural elements, together with their associated social representations and values, e.g. “James Bond always wins against all odds”, can act as semiotic mediators, and can be considered as another form of catalyst. They can, as ruptures do, introduce meanings into the psychological system. Second, we suggest that symbolic resources can be used as semiotic regulators to facilitate the process of dealing with the rupture by mediating the relationship of individuals with: (1) one's self and inner feelings; (2) social others by creating, understanding, and transforming social relationships; and (3) social reality by facilitating understanding of the social world and positioning of the self in it. Resources can provide time orientation (allowing for self-continuity between past and future) and also mediate at different levels of the experience of an individual: from immediate embodied perceptions to a higher level of commitments and ideologies (Valsiner 2001, 2003) as our case study will show. We discuss how this aspect of multidimensionality of the function of semiotic regulators contributes to the development of the concept of catalysis when used to theorize psychological phenomena as opposed to chemical phenomena.

Thus, as occasions for development, the processes triggered by people's experienced rupture and their subsequent uses of symbolic resources can be seen as a catalytic process: A rupture creates conditions for change as a first form of catalyst, cultural elements create the condition for certain directions of change as second form of catalyst, and symbolic resources function as regulators in the elaboration of the new meaning.

Through our analysis we first suggest that a catalytic framework can enrich our understanding of the emergence of ruptures through theorizing the antagonistic relations of meanings introduced into the psychological system. Second, we explain how new meanings found or synthesized in symbolic resources/regulators are built in opposition to the meanings introduced by ruptures/catalysts. Finally, we suggest that our approach contributes to the catalytic framework by adding to its conceptualization, the ideas of mediators comprising complexes of different types of signs (hypergeneralized, field like, point like), and by showing the transformative qualities of semiotic mediators in discussing the ways in which regulators may become catalysts for further change.

To illustrate our approach we will use the case of Sabar, a 34-year-old Kurd from Turkey, who arrived in Greece in 1994 as a political refugee.

## Context and Methods of Research

Sabar's case study uses the data of a research project conducted by Irini Kadianaki (IK) between August 2007 and April 2008 in Athens, Greece. The project investigated the experiences of 32 immigrants living in Greece for the past 2–30 years, coming from a variety of countries (South American and African countries, Turkey, Iran, and Albania). Specifically, part of the project aimed at understanding the immigrants' use of cultural elements as symbolic resources for coping with the psychological demands of relocation (Kadianaki 2010). The methodological approach was qualitative, involving interviews, focus groups and ethnographic observation in three immigrant communities.

We have chosen a case study to illustrate the theoretical concepts proposed in the previous section. A case study offers extended knowledge about the particularities of an individual's life story (Yin 2003) and in this case, it can permit an in-depth understanding of experiences of immigration, the catalytic meanings introduced by the context, and the regulatory processes involved in coping with the ruptures (Kadianaki in press).

Sabar's case was chosen because of the amount of material gathered by IK about his case through repeated interviews and meetings at informal gatherings. This information permits increased familiarity and in-depth analysis. Sabar is also an eloquent and highly reflexive individual, a fact that has facilitated the analysis presented here. Interviews with Sabar were conducted in Greek. Analysis of the material was conducted in the original language and the data used from the presentations were translated in English for presentations purposes. Transcription conventions can be found in the footnote below<sup>1</sup>.

## The Case Study: Sabar's Life Story

Sabar, 33 years old when IK met him in 2006, arrived in Greece in 1994, fleeing illegally from Turkey after being persecuted by the police. Since childhood, Sabar's life was formed by the rupture of being a Kurd in Turkey: a member of a persecuted minority. From his childhood memories, he remembered the intrusive and aggressive presence of soldiers in his house, destroying personal belongings and food supplies. He described school memories of having to conform to an imposed Turkish ethnic identity. Sabar grew up realising that he belonged to an oppressed and unrecognised minority as opposed to the dominant majority. During his university studies in Turkey,

---

<sup>1</sup> Transcription conventions: *IK* indicates the first author and interviewer. *S* stands for the initial of Sabar, the pseudonym of the participant. “( )” indicates information about paraverbal, nonverbal behavior. (*inaudible*) indicates phrases or words that could not be heard in the audio file. “[ ]” indicates an addition from the author for explanation purposes. “!” indicates raised voice/shouting or generally added emphasis by the speaker in the discourse. “{ . . .}” indicates missing text, usually irrelevant to the analysis. ‘ ’ indicates an idiomatic phrase used, usually in another language or a switch in language by the participant.

he decided to get politically active in unions and organisations that promoted Kurdish culture and organised the “Kurdish struggle”, as he named it.

Sabar presented his political activism as an inevitable outcome of his everyday experiences, the violent suppression of his Kurdish identity, and the torture against his fellow Kurdish nationals. He presented collective action as a defence mechanism to the rupture of being a Kurd. However, the government followed his actions and soon he was persecuted. In the face of expected violence and imprisonment towards those involved in the Kurdish affair, Sabar managed to flee to Greece, while his companions were put in prison for 12 years.

Thus, Sabar’s arrival to Greece was a result of a chain of ruptures that began long before his flight: for him, being a Kurd meant living the life of intrusion, violation of human rights, and violent suppression of identity, language, and culture. At his arrival, Sabar had to stay in a refugee camp, where he lived in what he described as dehumanising conditions. During this time, which he perceived as analogous to being imprisoned in Turkey, he felt that his political ideas which led him to flee were foregrounded, as he was in a situation similar to that of the immigrants who fled for economic reasons.

One of the rupturing experiences that Sabar reports in his life in Greece relates to the disillusion he felt with the Greek state. His representations prior to arrival were formed based on an image of a democratic ancient Greece and on a long history of war that Greece shared with Turks, which, in his mind, implied a friendly attitude towards the Kurdish struggle. In other words, he expected to live in a democratic country where he could freely express his political ideals. Certain events,<sup>2</sup> however, made him realize that Greece was not the place he had imagined. The Greek state was seen to have betrayed the ideas of Kurdish refugees, and after these events, changed its attitude by closing its borders to the incoming Kurdish refugees. The suspicion Sabar had perceived about the Greek state and society affected him personally in terms of acquiring asylum, a process which lasted 6 years and involved many instances of being treated as an inferior by the authorities. Even when formal recognition as a political refugee was acquired, this was not accompanied by any actual benefits, for example, language education or assistance in finding employment.

Sabar has been politically active since his arrival in Greece. Soon after his arrival he became an active member of the Greek-Kurdish Friendship Union, an organization with the aim of informing the Greek public about the Kurdish affair and also connecting Kurdish refugees through a cultural centre, providing help with practical matters. Sabar presented his involvement in this union as a continuation of his collective political actions in Kurdistan. He felt he contributed to the conservation of the Kurdish culture and the protection the human rights of displaced people.

---

<sup>2</sup> In 1999, Abdullah Öcalan, the leader of the Kurdish Workers Party (PKK) in Turkey was persecuted by the Turkish police with the charge of being a terrorist. Öcalan ran away from Turkey and found refuge in Kenya, hiding at the Greek embassy. After leaving the Greek embassy, he was arrested by Kenyan police. He was then handed over to Turkish security agents and was imprisoned in February 1999. It was widely believed that the Greek government gave him away to the Kenyan and then Turkish authorities. As expected, this event affected the ways in which Kurdish political refugees perceived the Greek state and thought they were perceived by the Greek state and nation.

Having left his university studies incomplete for agricultural practice due to prosecution in Turkey, Sabar decided to study politics in Greece. He was motivated, as he explained, by his need to become knowledgeable on political matters and understand the dynamics of the Kurdish affair. It was, as he described it, a period of disappointment with the Kurdish fight going international (breakup of Kurdish parties, organizations weakened in Greece) and a period of suspicion towards the Kurds in Greece, as mentioned above. His political activism was going through a crisis and his university studies facilitated new meaning-making and orientation.

Sabar has now been staying in Greece for 18 years. Despite being granted asylum in Greece, he has thought of leaving for another European country many times but has not so far realized it.

Thus, for Sabar, being a Kurd has been causing an ongoing series of ruptures in his life, of which the main three appear to be: (1) being discriminated as a Kurd in Turkey, which questioned his identity as citizen and disrupted the daily meaning of his life; (2) having the experience of migrating to Greece and being turned into a refugee, which again questioned his identity, possible actions, and projects (i.e. feeling the suspicion and rejection from the Greek state, feeling that the Kurdish fight cannot be sustained), and (3) realizing that Greece was not what he had expected and that threatened his system of representations. These ruptures are semiotic catalysts that introduced new meanings in Sabar's psychological system which opposed Sabar's existing meaning system. Through a series of events, they deployed the catalytic generalized meaning of "being a Kurd minority", which had different meanings in different contexts that Sabar found himself in. Thus, connecting to the theory, we suggest that a catalyst takes the form of a rupture when opposing meanings permeate the meaning system of the individual and call for change and redefinition of self, which is achieved through diverse means. We will focus on the means he used in the Greek context, where his change was enabled by his use and creation of semiotic regulators.

## **Sabar's Semiotic Catalysts and Regulators to Cope with Rupture**

In this section we will present the semiotic catalysts that provide Sabar with meanings, which lead him to use already existing semiotic regulators or create new ones to respond to the ruptures explained above. The semiotic catalysts or so to speak, semiotic environments that are presented here refer to meanings and qualities contained in music, film, and a website. These are different from catalysts described as ruptures above. They are particular songs and films and a website used to rebuild the meaning system, to provide Sabar with time orientation and to mediate his experiences at different levels. So the meanings contained do not, as in rupture-catalysts, oppose to the meanings of Sabar's psychological system. They are used to overcome the meanings of the rupture-catalyst. As it will become evident subsequently, the meanings presented in these extra-mental devices in the form of artifacts are largely political.

## *Using Music and Film as Semiotic Regulators*

Regarding his favorite music, Sabar explained that he connected Kurdish music to his personal memories. As he explained: “Kurdish music is very strong because it succeeds in reflecting the everyday life of Kurdish people directly, and you experience this immediacy”. He referred to a song that described in its lyrics a massacre of Kurds and noted:

Sabar: “When you listen to it, it is very direct, like you are watching it as it happens. That’s why I think that music is not far from reality. It helps you realize better some things, because there is the emotional part in it. At some point, music also functioned like propaganda, like a political vehicle”.

With regards to music that he listened when he arrived to Greece, he explained:

Sabar: When I came [to Greece] I bought, I ordered from abroad as well and I downloaded from the internet and I have almost all the Kurdish songs.

IK: Is there any time of the day particularly that you want to listen to something specific?

Sabar: Yes, when I work at home or read, I put on quality Kurdish music or classical. But I am a melancholic person, meaning that we come from a certain entity and we have certain roots that we cannot forget. And when I have problems, I try not to avoid them, on the contrary I try to face them, I will put on some melancholic music (pause) I like that and it keeps me alive with the past and with the fight.

Sabar listens to his favorite music and reads when he is at home. The Kurdish or classical music creates a general feeling of melancholy and connection to his roots. It orients Sabar’s experiences in some general way; it functions as a semiotic mediator, a catalyst. Then, more precisely, the music is used as symbolic resource in troubling times and as such, functions as a semiotic regulator that draws thematically on the meanings of the war and the Kurdish fight. It is music that either through its direct embodied instrumental effect or through its explicit narration describes a social reality that Sabar connects to. Sabar’s understanding of the Kurdish struggle was influenced directly by music when the Kurdish affair was still politically amorphous, as he noted. The semiotic quality of music thus, not only mediates his understanding of the *social reality* of war and struggle but also positions him in this fight as a politically active Kurd. These can be described as *semiotic* (i.e. providing understanding) and *performative* (i.e. enabling positioning) uses of symbolic regulators (Zittoun 2006) with regards to the social reality of the individual. Music also regulates Sabar’s *intra-psychological domain*: It responds to his emotional needs to face his problems and connects to his feelings of melancholy. Music thus assists emotional needs and also a self-understanding of who he is and how he deals with his problems.

Another function of music as a semiotic regulator is that it provides Sabar with *time orientation*: Through this music, he is not only connected to his past but also keeps his past struggles alive in his present. Finally, semiotic mediation enabled by these regulators can refer to different levels of generality, different levels of semiotic hierarchy within a person’s experience (Valsiner 2001; Zittoun 2006). For Sabar,

music relates to an *immediate embodied perception (1st level)* relating to emotions and experiences of the here and now, usually undefined and fuzzy (e.g. feeling melancholic). Music also enables Sabar to label his feelings and identify his state of mind, according to which, he decides how to act (e.g. stay connected with Kurdish affairs), he plans his *local conduct (2nd level)*. Finally, music facilitates the formation of *stable categories or self-categories or rule (3rd level)*. Sabar comes to see himself as a politically active Kurd: as a person with a past in the Kurdish struggle.

With regard to the forms that catalysts take when introducing meanings into the psychological system, Cabell (2010) recognized three forms: point-like, field-like, and hypergeneralized. Point-like catalysts can take the form of a representation of a particular concrete thing and can be, for example, a particular word. In Sabar's case, a point-like catalyst is a word or a sentence contained in the lyrics of the song describing a massacre. Field-like catalysts "are mental conceptions/representations structured in space and time and represent through the embeddedness of something its relationship to its (spatio-temporal) environment (Cabell 2010, p. 30)", as for example, the concept of identity. In Sabar's case, a field-like catalyst takes the form of a generalized melancholic feeling emerging from the melody. Finally, hypergeneralized signs permit a "symbolic generalization", a description of a life-experience on the whole, such as the concept of faith (Cabell 2010, p. 31). This happens when Sabar connects to ideas of the Kurdish fight through the music. All forms of signs are present in the music Sabar listens to, synthesizing in combination the catalyzing meanings.

IK continued the discussion by asking Sabar about films he liked and considered personal:

Sabar: I can say that one of the films that influenced me very much was "Braveheart".

It is about the fight of the Scottish, and when I saw it, it was like I placed on one side the Turkish and on the other the Kurdish, it was like it was talking about us. You can see the colonialist perception. How the colonialists behave. It shows of course the contradictions within the front and how the colonialists can take advantage of these. But the fight of the Scottish nation reminded me of the fight of the Kurdish, I mean the images of war, betrayal, heroism are universal and we experience them ourselves.

Sabar's film interests also draw on the wider semiotic theme of politics. "Braveheart" is his favorite film, which he used symbolically: He places the Kurds and the Turks in the place of the Scottish and the English and explains the colonialist attitude and the dynamics within the Kurdish front through the movie. As he says, war, heroism, and betrayal are all notions that the movie deals with and thus, connect to his personal experience of the Kurdish fight. Thus, as with music, film mediates Sabar's relationship with the social reality semiotically (i.e. understanding the Kurdish struggle) and performatively (i.e. positioning self as a fighting Kurd).

The film also seems to regulate higher levels of semiotic mediation: through its meanings, Sabar forms *higher level principles and commitments (4th level)*, namely, more crystallized political ideas and principles about the way the world functions.

Interpreting Sabar's contact with catalysts and his use of regulators, we can make the following observations. First, artifacts do not introduce meaning through singular forms of signs, but they do so in complex arrangements of signs. Music and film are complex sign syntheses which contain all forms of point, field and hypergeneralized signs that in combination introduce meanings: A hypergeneralized sign introduces meanings in the movie about "war, betrayal and heroism" in international relations; a melody introduces feelings of melancholy through its tune, as a field-like sign, and the lyrics, as a point-like sign talk about the Kurdish massacre. Second, Sabar's regulators are used to respond to meanings introduced by catalysts described above as ruptures. They are regulators containing meanings about the Kurdish reality and the fight and give meaning about the position of the fight in the wider arena of international relations. Thus, Sabar's artefacts used to build meaning are responding to meanings introduced and disrupted by the rupture catalysts.

In describing his life, Sabar mentioned living in a constant displacement, living in Greece but thinking and feeling like being in Kurdistan. This displacement is central throughout his life: He lives in Turkey but is a part of a minority; he lives in Greece but is an active member of another nation. Music and film are semiotic catalysts which are used as semiotic regulators induced by the semiotic conditions of the ruptures of constant displacement: They are used to bring the past into the present, to understand the social reality of the fight of the oppressed, and the struggle for freedom and autonomy and to position himself within this reality as a politically active Kurd who has fought and continues to fight for the rights of his nation.

### ***Creating a Semiotic Regulator: a Political Website***

In 2005, Sabar decided to create a website together with other Kurdish political refugees who lived abroad. He presented the website as an online newspaper written in four languages, Greek, English, Turkish, and Kurdish that had to do with topics such as "democratization, the Kurdish affair, human rights and academic matters". He explained:

Sabar: In 2005, when we started (pause) our new site, there was a bunch of people that we said [. . .] we are abroad I mean, eh not because we have this mission at a diplomatic level, not that we are diplomats, but de facto, whether you want it or not, things make you to (pause) to function as a diplomat { . . . } the reason why we created [the website] in 4 languages and in Greek and English was to inform our friends or the world, about what's happening in Kurdistan, but the thing is that, eh, we might be abroad, but eh but eh, our thought, our face (pause) is turned to our country, so { . . . } we might be abroad, disconnected from our countries, and basically we are here as a result of this war, the thing is that for us, we want to save the historical values and the cultural heritage of our countries { . . . } so if we can preserve or even develop the Kurdish language and our culture, it is of primary importance for us and this is another dimension of the fight {IK:

yes, I understand, yes, yes, yes}with this sense, so (pause) confronting ferocity, barbarity and nationalism that has been imposed by the enemy, or anyway, the Turkish, the Arab and etc {...} so we were saying that despite the fact that they have destructed our skeleton into four states, realistically, they have destructed they have divided in 4 states, but we while we use this new technology, we can unite at another level, you see what I mean? {IK: yes, I see it has a symbolic character} yes, right, it has a symbolic character, so (pause) our hopes and our visions eh can unite in eh (pause) at the end of the telephone line through fiber optics let's say, of the cable, at the other end of the cable our hopes can unite, our fight anyway.

Sabar noted that all the columnists that take part were, but no longer are, active members of political organizations and are educated, thus, characterizing the website as an intellectual community, producing high-class writings. They also represent a variety of opinions, in terms of their political and ideological orientations, but what unites them is the fact that they “try to save and to raise the morals of our nation”. For Sabar, this objective was fulfilled: “65 % of the visits to the site are from Kurdistan of Turkey and then Iran, Iraq, Syria and then Europe”.

Sabar recognized that the continuation of resistance and the fight towards the Turks through the Internet was a technological war—a modern dimension of an older conflict and struggle, and he explained how it functioned for him personally:

Sabar: It is that, until now they were trying to subordinate us with the guns and their bombs and they are trying now to subordinate us, anyway, they can't but this conflict is continued now at this technological level {...} this dimension of technology with regards to internet, there are no fixed positions of power. It might be that today they “drop” our site, but from this loss we learn better and the next day we create something technologically even better that they can't drop {...} and this knowledge that we acquire as we correct our mistakes, maybe we will be in a position that they will feel threatened because we know, we learn a lot of things with technology and they feel threatened

IK: {...} do you feel that at a personal level you continue a fight with other means, you, personally?

Sabar: Sure, Sure, because you are not detached from your fight, with other means you continue your fight, but with this, you can imagine, psychologically what it can create for a person who is away from his country. Basically, it makes you relax, to feel that you do something {IK: yes, I understand} you mobilize something, a positive ambience, you raise the morals of the nation.

Therefore, it has become clear that this website is perceived to have a threefold function: (1) to provide information about the Kurdish issue in Greece and abroad; (2) to preserve the Kurdish values and culture and safeguard Kurdish language and (3) to sustain the fight towards the Turks, both by maintaining Kurdish national identity and morals and by reversing the power and threatening the Turks through acquiring technologically advanced knowledge. All these are interlinked objectives carried out by Sabar and other like-minded refugees who, as he says are positioned “de facto”

as diplomats. Being abroad because of conflict and war they now see themselves as representatives of their nations, responsible for its preservation and continuation.

Through this website, Sabar maintains a time orientation: he connects to his past and sustains the fight into his present, which makes him feel relaxed. He sees this fight continuing into the future, in a transformed way through technological means. The website has various functions that regulate different levels of his experience: his *immediate embodied perception (1st level)*, by making him feel relaxed and his *local conduct (2nd level)*, by regulating his everyday actions (e.g. producing writings, updating the material). Through the website, he also forms *stable categories or self-categories (3rd level)* by recognizing himself as a “diplomat” or a fighter. Finally, *higher level principles and commitments (4th level)* are formed in terms of political ideals with regard to his nation and the fight.

Further, the website is used by Sabar in ways that it regulates his relationship with his *inner feelings and his self-understanding*: He feels he is connected to his Kurdish identity and that he continues to fight for his nation’s rights. It also regulates his *relationships with others* (i.e. his fellow fighters/diplomats, the enemy/Turks) and his *understanding and positioning of the social reality*: what needs to be made with regards to his nation and the fight and what his position with this realm is. Thus, Sabar, drawing on cultural and political semiotic material, which acts as a catalyst, creates a website that sustains him psychologically through the rupture.

Sabar has aided the creation of a new cultural element, which remains highly transformable—a website is in that sense a “ductile symbolic resource”: it is a malleable resource, or a resource that can be created or completes itself as it is used (Greco and Zittoun in press). This creation is also a self-generated semiotic regulator, a website which can respond to the catalyzing meanings of being a political refugee. Also, as a new cultural element released into the social world, it can itself turn into a catalyst for Sabar or for other users who visit it. Sabar, while interacting with his own creation may come to realize new things about himself as a person, about the social world and about his relationships with other people. Further, for others who are reading this website, the meanings contained may act as catalysts for change in diverse domains of their psychological reality. We will discuss these issues further in the following section.

## Conclusion

The catalytic analysis outlined here contributes to a conditional systemic understanding of psychological phenomena, as that advocated by Kurt Lewin (1935, 1936) and developed recently in the introduction of a catalytic framework in psychology (Beckstead et al. 2009). According to this approach, in order to understand human behavior one needs to understand the environment in which it happens and the conditions under which it emerges. Through this approach, following the legacy of Lewin, we pay tribute to both the uniqueness of human experience and to the construction of basic knowledge. The former is achieved by a case-study analysis highlighting the

complexities and uniqueness of Sabar's individual experience. The latter is achieved by demonstrating the catalytic process under which phenomena unfold, leading to theory construction and development. In other words, our approach contributes to a development of a general epistemological and methodological approach that does not lead to a reduction of psychological knowledge in terms of isolated variables, but highlights the complexity and dynamicity of psychological phenomena (Beckstead et al. 2009).

Following Cabell's proposition (2010), we have examined catalytic processes in a period of a life course during which a person went through a series of ruptures. Here, we wish to highlight the possible contributions of this analysis both for the theorization of catalytic processes, and for the understanding of uses of symbolic resources.

First, catalytic processes have been so far studied through their smaller units— as point-like, field-like or hypergeneralized signs (Cabell 2010). Introducing the perspective developed in the study of symbolic resources invites one to see complex cultural artifacts as made out of complex arrangements of signs: for example, many words, images, melodies, and so on, combined in unique fashions. Thus, it extends our understanding to the function of elements that are formed by all three types of signs. Different parts of a cultural object, different semiotic qualities of that object, synthesize in combination particular meanings that may support meaning construction for individuals, as we previously explained. For example, the music Sabar listens to is formed by a melancholic melody/tune, which takes the form of a field like sign and lyrics that introduce, in the form of point-like signs, meanings about the hardships and struggles of the Kurdish people. These semiotic qualities forming the cultural element are making up a complex sign system, the parts of which interactively produce meanings.

Further, our analysis suggests that catalytic processes conceptualized within a semiotic domain can lead to dynamic and generative transformations. In the case study analyzed here, we suggested that regulators used to respond to meanings introduced by catalysts (i.e. as ruptures) can themselves act as catalysts. People create new cultural forms and externalize them into a semiotic language, which can be conserved and transmitted to others: they can write poems or create choreographies (Kadianaki in press). Here, Sabar, following a rupture, created a website out of cultural-political material relating to the Kurdish issue. Celia, an immigrant from Colombia (whose case study is described in Kadianaki in press) created poems about her country or about immigration, which she read aloud in her ethnic association. These cultural forms acted as regulators for their creators, but they can also act as catalysts for the same people or for others. Sabar externalized to the world, a website with meanings which can be catalyzing for other people (e.g. introduce meanings about the Kurdish struggle). Similarly, Celia externalized proud national feelings about Colombia, and described the loneliness of immigration, meanings that may have acted as catalysts for her audience. However, they may have acted as catalysts for their creators as well: both Sabar and Celia may come to realize new aspects

about themselves, others or the social world through their own creations. The creation of a cultural element brings to the creator a form of reflexivity: a third person perspective (Martin and Gillespie 2010), which can act as a catalyst upon the self (e.g. realizing oneself is an immigrant or a representative of his/her country). Thus the transference of a catalytic framework into the realm of semiotic mediation can contribute to the theorization of the generativity of psychological change processes and of the conditions for the production of novel semiotic forms.

These ideas resonate with ideas related to autocatalysis (Cabell 2011). Autocatalysis describes processes of mutual generativity of a system “hypothetically, all that would be needed is, at the very least, three molecules that react in a way to mutually generate each other” to observe autocatalysis (Cabell 2011, p. 5). In the case described here, Sabar meets the catalyst that is “war against the Kurds” (let us consider it molecule 1), creates the regulator that is website (molecule 2), which in turn leads to a new catalyst, namely, meanings about “preservation of the Kurdish culture” and “sustenance of Kurdish fight” (consider it molecule 3). Hence there is an autocatalytic process in the sense that the meaning generates meaning here. It is not, strictly speaking, that the new meaning corresponds to the initial state as in some chemical reactions. However, it should be noted that the meaning-field “sustenance of Kurdish fight” or “preservation of Kurdish culture” is not so far semantically from “war against the Kurds”. Hence, autocatalytic processes help us understand the creation of novel phenomena, novel cultural forms, such as the ones described here. In these new forms, as Lotman (2000) argues, we can always trace other semiotic forms that existed prior to them and triggered their creation.

In addition, using the concept of catalysis to study psychological systems leads, unlike in chemistry, to more complex outcomes. Rather than leading to the production of one product (i.e. a chemical substance), semiotic regulators can produce different outcomes at different levels of the experience (different levels of mediation as shown in Sabar’s case), in different time levels (time orientation towards past, present and future) and with regards to different realms (self-other-social world) of the individual experience. Our chapter thus contributes to the psychology of catalytic process by inviting to consider the mutual dependency of interrelated semiotic regulations when using symbolic resources, and to consider the complexity of the semiotic outputs of these processes.

A catalytic framework, on the other hand, has enriched our understanding of ruptures and uses of symbolic resources by leading to the theorization of the antagonistic relation between different meanings embedded within catalysts and between catalysts and regulators and by suggesting a multilevel (i.e. onto, micro, sociogenetic) study of psychological phenomena.

Using a catalytic framework, we have highlighted the antagonistic relation between different meanings in the psychological realm of the individual, which lead to a rupture. For example, Sabar experienced a rupture when he realized he was an unwanted Kurdish refugee in Greece, seen with suspicion by the Greek state. These meanings were introduced into his psychological reality and disrupted the ways he wanted to see himself as a fighter for the wellbeing for his persecuted nation. Thus,

ruptures are new meanings that act antagonistically to the existing meanings that the individual has taken for granted. Since individuals come into contact with meanings antagonistic to their habitual ones, we can suggest that a rupture occurs when these opposing meanings permeate the meaning systems of individuals.

To deal with these, we have focused here on strategies that involve the use of cultural elements. Elsewhere, we discussed the ways in which individuals cope with an encounter with threatening introduction of meanings by focusing on the semantic level of their discourse (Gillespie et al. 2012; Kadianaki 2013), thus providing another view of how meanings introduce catalyzing meanings and set the conditions necessary for the employment of semantic structures as regulators.

Further, in this chapter we have suggested that semiotic elements are catalysts setting the grounds for symbolic resources to be used. Thus an antagonistic relationship also exists between rupture catalysts and semiotic catalysts (i.e. as cultural elements) or regulators (i.e. as symbolic resources). For example, Sabar's website contains meanings that are employed to deal with the rupture of not being able to sustain the Kurdish fight. Sabar uses the website to build up the identity of a diplomat and a fighter. In other words, it is the meanings about the loss of the Kurdish fight internationally (i.e. a rupture) that Sabar perceives are "battling" with meanings about the sustenance of the Kurdish fight through new technological means (i.e. website used as resource). Thus, efforts to rebuild meaning should be understood within a context of alternative, often contradictory, meanings (Gillespie 2008; Billig 1987).

A catalytic framework enables understanding of the antagonistic conditions that individuals find themselves into and the ways that they manage to cope with them. In this chapter, by focusing on semiotic regulators in the form of cultural elements, we examined the ontogenetic level of experience, namely, the "relatively stable meaning structures that guide the person within one's life course" (Valsiner 2007, p. 302). In Gillespie et al. (2012), by focusing on semantic structures used in the discourse of individuals to deal with threatening alterity, we examined the microgenetic level of experience, i.e. the ongoing flow of thought and talk. We suggest that a catalytic framework can be used to study the sociogenetic level of experience as well, that is, the "visible transindividual patterns of meaning which are not available in the analysis of a single individual" (Gillespie 2004: 85). Typically, sociogenetic processes take place when individual actions and meaning-making participate in the creation of new cultural elements, which will then durably transform the semiosphere and guide collective action. Here, when Sabar participates in the creation of a webpage for other people who are in the same situation as he is, he provides them with "visible transindividual patterns of meaning". From a catalytic perspective, individual catalysis generates collective catalytic dynamics.

A three-level examination can provide a holistic understanding of the conditions under which psychological experiences unfold and the processes through which they are constantly and actively negotiated and reconstructed within the individual, between individuals and at a social level.

## References

- Billig, M. (1987). *Arguing and thinking: A rhetorical approach to social psychology*. Cambridge: Cambridge University Press.
- Beckstead, Z., Cabell, K., & Valsiner, J. (2009). Generalizing through conditional analysis: Causality in the world of eternal becoming. *Humana Mente, 11*, 65–80.
- Cabell, K. (2010). Mediators, regulators and catalysers: A context-inclusive model of trajectory development. *Psychology and Society, 3*(1), 26–41.
- Cabell, K. (2011). The systemic conditions of catalysis. What psychology can (and cannot) learn from chemistry? Paper presented at 14th Biennial Conference of the International Society for Theoretical Psychology. Thessaloniki: Greece.
- Chrysochoou, X. (2000). Multicultural societies: Making sense of new environments and identities. *Journal of Community and Applied Social Psychology, 10*, 343–354.
- Chrysochoou, X. (2004). *Cultural diversity: Its social psychology*. Oxford: Blackwell.
- Deaux, K. (2006). *To be an immigrant*. New York: Russel Sage Foundation.
- Gillespie, A. (2004). Returning surplus: Constructing the architecture of intersubjectivity. Unpublished Doctoral dissertation, University of Cambridge, UK.
- Gillespie, A. (2008). Social representations, alternative representations and semantic barriers. *Journal for the Theory of Social Behaviour, 38*, 375–391.
- Gillespie, A., Kadianaki, I., & O' Sullivan-Lago, R. (2012). Encountering alterity: Geographic and semantic movements. In J. Valsiner (Ed.), *The Oxford handbook of culture and psychology*. Oxford: Oxford University Press.
- Greco Morasso, S., & Zittoun, T. (in press). The trajectory of food as symbolic resource for international migrants, Outlines.
- Kadianaki, I. (2010). Negotiating immigration through symbolic resources: The case of immigrants living in Greece. Unpublished doctoral dissertation, University of Cambridge, UK.
- Kadianaki, I. (in press). Sustaining identity change through the use of symbolic resources: The case of an immigrant living in Greece. In S. Salvatore, J. Valsiner & A. Gennaro (Eds.), *Multicentric identities in globalizing world*. Charlotte: Information Age Publishing.
- Kadianaki, I. (2013). The transformative effects of stigma: Coping strategies as meaning-making efforts for immigrants living in Greece. *Journal of Community and Applied Social Psychology, 17*, 387–406.
- Knafo, A., & Schwartz, S. (2001). Value socialization in families of Israeli-born and Soviet-born adolescents in Israel. *Journal of Cross-Cultural Psychology, 32*(2), 213–228.
- Kwak, K. (2010). Self-development and relationships through acculturation. *Culture & Psychology, 16*(3), 365–381.
- Lewin, K. (1935). *A field theory of personality*. New York: McGraw-Hill.
- Lewin, K. (1936). *Principles of topological psychology*. New York: McGraw-Hill.
- Lotman, J. (2000). *Universe of the mind*. Indianapolis: Indiana University Press.
- Martin, J., & Gillespie, A. (2010). A neo-Meadian approach to human agency: Relating the social and the psychological in the ontogenesis of perspective-coordinating persons. *Integrative Psychological and Behavioral Science, 44*(3), 252–272.
- Timotijevic, L., & Breakwell, G. M. (2000). Migration and threat to identity. *Journal of Community and Applied Social Psychology, 10*, 355–372.
- Valsiner, J. (1998). *The guided mind*. Cambridge: Harvard University Press.
- Valsiner, J. (2001). Process structure of semiotic mediation in human development. *Human Development, 44*, 84–97.
- Valsiner, J. (2003). *Beyond social representations: A theory of enablement*. Papers on Social Representations, 12, 7.1–7.16. (<http://www.psr.jku.at/>).
- Valsiner, J. (2007). *Culture in minds and societies: Foundations of cultural psychology*. New Delhi: Sage.
- Verkuyten, M. (2005). *The social psychology of Ethnic identity*. New York: Psychology Press.

- Witzemann, E. J. (1943). The role of catalysis in biological causation. *Philosophy of Science*, 10(3), 176–183.
- Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks: Sage.
- Zittoun, T. (2004). Symbolic competencies for developmental transitions: The case of the choice of first names. *Culture & Psychology*, 10, 131–161.
- Zittoun, T. (2006). *Transitions: Development through symbolic resources*. Greenwich: Information Age Publishing Inc.
- Zittoun, T. (2013). On the use of a film: Cultural experiences as symbolic resources. In A. Kuhn (Ed.), *Little Madnesses: Winnicott, Transitional Phenomenon and Cultural Experience* (pp. 135–147). London: Tauris.
- Zittoun, T., Duveen, G., Gillespie, A., Ivinson, G., & Psaltis, C. (2003). The use of symbolic resources in developmental transitions. *Culture & Psychology*, 9, 415–448.