

Dynamic Formulation of Media-Induced Event Schemas in Relation to Shaping Public Knowledge and Collective Memory: A Critical Review

Chen Li

Department of Journalism, School of Culture & Communication, Beijing International Studies University,
Beijing, China

kirbychenli@163.com

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Abstract: This paper aims to review, both theoretically and empirically, the ways in which media-induced event schemas can contribute to the formation of public knowledge as well as collective memory about specific events/issues. By tracing the trajectory of conceptual development, it reiterates the role played by the news media in informing people of “what is happening” and contextualising how and why such events/issues can appear. On this basis, dynamics of memory retrieval in relation to information-processing are shown with reference to varied empirical studies.

1. Introduction

With the development of related concepts and theories, the social-cognitive approach has undoubtedly become one of the most effective analytical frameworks to understand the crowd psychology of contemporary societies, whereby numerous empirical studies have also been generated. Of those core, influential concepts, “schema” can date back to Walter Lippmann’s description of “pictures in our heads” ^[1]. On the basis of this, the concept of “event schema” (or “script” by some academics) has been introduced to better understand how collective memory about specific events as well as public knowledge can be formed ^[2]. In this process, the influence of the media cannot be ignored as one of the most vital information sources, in particular relation to the way in which cognitive and/or emotional elements of events/actors are absorbed and stored in the memory nodes for future retrieval and further processing.

2. Theoretical Review with Conceptual Development

Consistent attempts have been made from interdisciplinary perspectives to assess how such cognitive mechanisms can work. With its academic roots deeply in psychology, many scholars from other social science fields especially communication studies have also contributed a lot theoretically.

2.1. Event Schema as the Social-Cognitive Approach

In psychological terms, Fiske and Taylor define the schema as “a cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes” ^[2]. That is to say, schemas can contain both abstract, general elements and more concrete specific examples, as well as affective evaluations that could be positive or negative – or described as “inner representations of experience that can be emotionally loaded” ^[3]. As also explained, those concepts could be around persons (a specific person, a personality type, a group, a role, etc.), objects (such as a place), events and issues.

When it comes to “how sequences and/or procedures of events are assumed”, the concept of “event schema” (or “script” in a vivid sense) has been proposed ^[2]. For instance, van Dijk refers to it as a “mental model of the event”, which means the representation of an event in personal memory ^[4]. In other words, its diagram occupies a small part of an individual’s knowledge network, within which evaluative beliefs about events/actors are featured and emotions are associated. It should be noted that such schema as the “event” one is not only an individual psychological phenomenon, as they can be socially and culturally constructed in a way that allows knowledge and experience to be

shared. Thus event schemas can be grouped as shared beliefs, images/impressions, attitudes/evaluations and feelings/emotions about certain events/actors/places – which undoubtedly contribute to the ultimate formation of collective memory ^[5].

2.2. The Influence of Media upon the Formation of Event Schemas

Besides interpersonal communication, various forms of the media have exerted great influence psychologically upon people, both at individual and (sub) group levels (see Step ① in Figure 1). This can be exemplified by recurring claims among people that “it is from the media” that they often get references to items, characters or experiences, which – with the help of memory retrieval – they can then automatically and/or frequently associate with other things. As Curran also notes, “It was assumed that the media were influential in terms of mapping society and furnishing conceptual categories and frames of reference through which people made sense of society” ^[6]. Indeed, the news media play a vital role in forming “the structure of public-available information” – as Entman points to “concrete data for cognitive processing” and “symbols that may engage emotional needs” – which de facto shapes the formation of event schemas ^[7]. In this sense, the term of “media-induced event schema” can be coined.

It is widely recognised that the production of meaning by the media is treated as “a process which is contextualised and inextricably integrated with wider social and cultural practices” ^[8]. With reference to the phrase “media-event”, it undoubtedly emphasises such role of the news media in informing people of “what is happening in other places” and allowing them to “have common topics to discuss with others in their everyday lives” ^[9] – whereby they can, for instance, maintain their existing values and also gain new insights. In other words, it helps to collect information beyond what can be experienced physically around themselves. In this way, cognitive/emotional elements of events/actors from the media coverage can be absorbed and stored in the memory nodes that can be used for future retrieval. For instance, attention-grabbing events can be immediately and intensively covered by the news media, from which cognitive/emotional elements are subsequently delivered; audio-visual stories that can generate strong emotions are more likely to be embedded and retained with ease in long-term memory ^[10].

Moreover, Iyengar furthers this by pointing out that the news media can contextualise how events and issues can appear ^[11]. This has also been called as “contextualisation of the items” ^[12], in which historical background, for instance, can be used to define the debate within the historical dimension. Morley reiterates this by pointing to those specific ways news programmes can be constructed, i.e. “how topics are articulated; how background and explanatory frameworks are mobilised, visually and verbally...” ^[13]. Meanwhile, Nelson, Clawson and Oxley echo this by pointing to the role of the frame in “defin[ing] the underlying causes and likely consequences of a problem and establish[ing] criteria for evaluating potential remedies for the problem” ^[14]. Similarly, Entman summarises four basic functions that frames can perform in covering events/issues/actors: 1) defining effects/conditions as problematic; 2) identifying causes; 3) conveying a moral judgement; and 4) endorsing remedies or improvements ^[15]. Notably, Fairclough summarises this as “ideological work” by media which can even make “contentious, positioned and interested representations” become reality or “general common sense” ^[16].

2.3. Media-Induced Memory Dynamics in Relation to Information-Processing

The social-cognitive approach, as McGraw notes, provides frameworks for “describing and understanding several different types of internal memory structures and [information] processing stages” ^[17]. It should be noted that, with the help of such media-induced event schemas, people can recognise and retrieve relevant cognitive and/or emotional elements from memory when event-related information is encountered ^[18]. To be specific, certain items of information/knowledge, associated with evaluations and feelings – which have been stored in long-term memory – can be retrieved through the “mechanism of spreading activation” when a stimulus such as a phrase or an image is given ^[19] (see Step②&③ in Figure 1).. Van Dijk also states that “presupposed information can be derived from scripts/common-perception/belief that are culturally shared, conventional

knowledge representations about well-known episodes of social life – which for instance can be prejudiced about certain social actors/events” [20].

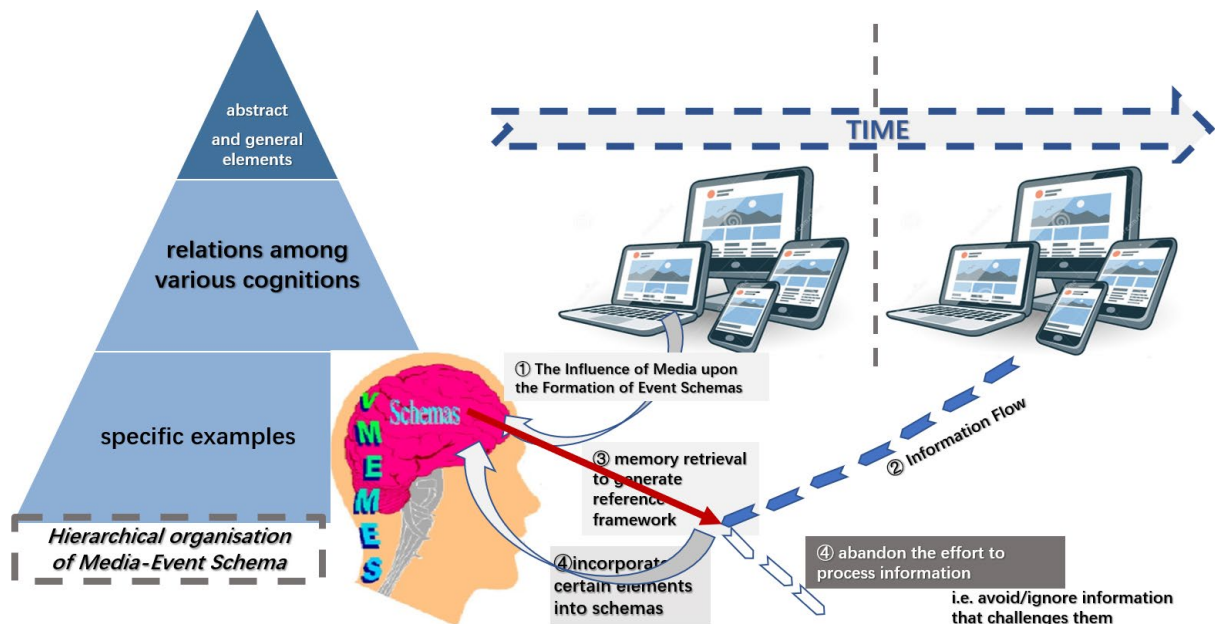


Figure 1 Memory dynamics in relation to information-processing

Besides memory retrieval, Graber points out that people may abandon the effort to process the information if they cannot easily “relate [it] to familiar concepts [in their existing schemas]” [21] (see Step ④ in dark-colour box, Figure 1). In particular, Noelle-Neumann notes a group of people (labelled as “hard core” by her) who stick to their schemas so strongly as to become immune to any information that contradicts theirs [22], whereas others could just avoid information that seemed as “challenging” them [23]. Such behavioural tendencies of “selective exposure” are well elaborated by Festinger in his cognitive dissonance theory wherein the necessity of maintaining the “relative comfort of the status quo” has been prioritised – clearly any idea/information incompatible with their existing (event) schemas could cause discomfort and even distress.

Furthermore, people who have read and/or watched the news (or interact with those who did) can also incorporate certain cognitive/emotional elements into their pre-existing event schemas, either in an abstract way or in the form of details (see Step ④ in light-colour box, Figure 1).. That is to say, it is a dynamic process in which memory structure can be further constructed or reformulated. On the one side, “impression-consistent” elements can easily reinforce the existing event schemas. On the other side, those items that are considered as “impression-inconsistent” may need to find a way to “accommodate” themselves to the existing event schemas. For instance, with reference to the “decoding” dimension of Hall’s “Encoding/Decoding” model, Morley points to people’s prior abilities to recognise the relevance/irrelevance trait of the information encountered (i.e. “has the information been recognised as relevant to their concerns?”) [24]. Curran further this by extending the “decoding” process into “attention, comprehension, acceptance and retention” [6], which insightfully summarises the information-processing in relation to memory (re)formulation. Corner echoes this by pointing to the role played by the media in constructing public knowledge [25].

3. Review of Empirical Studies and Further Implications

With accumulations of empirical studies on various topics for decades, such cognitive processes have been continuously explored in relation to the construction of public knowledge and collective memory about specific (category of) social events as well as related issues.

3.1. Empirical Evidence for Media-Induced Event Schemas in relation to Collective Memory

As explained earlier, the concept of “media-induced event schema” has been raised, for instance,

in terms of how sequences and/or procedures of events portrayed by the media can be absorbed. One pioneering study, carried out by the Centre for Mass Communications Research at Leicester University, has made attempts to trace how TV viewers' recalled TV footages ^[26]. The “news game” exercise, introduced by Glasgow University Media Group, aims primarily to investigate to what extent similarities can occur between memory retrievals about specific events and those coverage from media outlets, with the help of selected news photos as reminder/activation. Of those GUMG influential studies that employ this “exercise”, Philo’s study on perceptions of violence in relation to the rally ^[27] and Kitzinger’s study on perceptions of AIDS ^[28] overwhelmingly reveal that participants’ versions largely parallel those of media such as BBC reports. Similarly, based on empirical studies of U.S. presidential elections, McCombs notes there is “a high degree of correspondence between the media and the public” insofar as people can easily “describe the candidates in a manner very similar to the news media” ^[29]. In contrast, Philo and Berry find – from their study of the Israeli-Palestine conflict – that “these absences in public knowledge very closely parallel the absence of such information on the TV news” ^[30].

Table 1 Selected empirical studies on memory retrieval influenced by media-induced event schemas

Authors	Evidence in Details
Morley, 1980 – Centre for Contemporary Cultural Studies	Statements from <i>the Nationwide</i> programme about public spending cuts logics are accepted by some groups as “common sense”.
Philo, 1990 – Glasgow University Media Group	Most violence and origins (e.g. who initiated it) were largely attributed by participants to just one side in dispute as told by the news media.
Kitzinger, 1993– Glasgow University Media Group	Participants were able to reproduce specific associations related to AIDS by using concepts/languages/rhetoric from the news.
Nelson, Clawson and Oxley, 1997	Certain values were rated more importantly – by those who have watched corresponding framed news – over others.
Li, 2021	Reports about car emission not causing the smog were acknowledged.

Moreover, many empirical studies have shown that people attach more weight to the elements stressed by the news media – they watched or read around the period when the events occurred – than to those that are not. This, in essence, relates to the role played by the media in defining the nature and magnitude of what happened. In a study by Nelson, Clawson and Oxley, participants who had watched the news programme that emphasised public order tended to show little tolerance for public rallies of notorious hate groups ^[14]. Notably, media-claimed magnitude of those logical sequences underlying those events could be easily grasped and echoed, also shown by those studies mentioned earlier. Our work also shows almost half participants trace their attributions of smog formation by pointing to the explanatory viewpoints highlighted by experts in media coverage ^[31].

3.2. Empirical Evidence for Processing Media-Induced Info with Pre-Existing Event Schema

It is also worthwhile exploring empirically, once media-induced event schema become firmly subscribed to, the dynamics of “accommodating” information afterwards – esp. when seemingly persuasive but oppositional/contradicted description and/or viewpoints about events (or similar ones) are presented by the media. For instance, my interviews with British students who tend to believe Buddhist monks as peaceful showed that they made attempts to accommodate footages of violence committed by some monks as “forced action against oppression” (see similar discussion from Bertrand and Pelletier ^[32]). Morley’s findings of “negotiated” position in the decoding process also point to those group discussions such as apprentice ones wherein an affirmative attitude have been expressed in a general sense with oppositional viewpoints prioritised in their own specific situations ^[13]. Similar scenarios arise with the belief of “national interest” accompanied by his/her own wage demands as Philo indicates ^[33]. Our recent research shows the polarity of cognitive dissonance emerged whereby solutions about how to tackle the smog became inconsistent with their attributions of the cause – e.g. interviewees who put the blame on surrounding industries pollutions shifted their policy position towards car emission reduction as the news of laid-off was given ^[34].

4. Conclusion

As a critical review, this paper provides a systematic analysis into the cognitive dynamics related to the media-induced event schemas with everyday information-processing. Throughout this, the role played by the news media has been emphasised, not only on its priming effect upon the formulation of event schemas that become firmly subscribed to, but also on its relation to the supplement of information flow that could elicit further cognitive processing afterwards. With the emergence and development of various forms of new media, it requires more empirical investigations of its contributions into the “structure of public-available information” about specific (category of) events and/or related issues, as the society itself evolves.

For further empirical studies in this strand, research paradigms could also highlight the enquires into other factors such as emotions in relation to the cognitive-processing. On the one hand, emotions associated with specific actors and/or “course of actions” in social events could be easily evoked which could, in turn, intervene the supposed cognitive processes. For example, our previous research points to vicious circle wherein accumulations of negative emotions exacerbate disapproval^[31]. On the other hand, with the deepening sense of congruent communities promoted by networked media, the perceived nature and magnitude of what happened could become more divided with confirmation bias and illusory correlation developed from pre-existing event schema -- this calls for an extension of bias/stereotyping studies with such social-cognitive approach^[28].

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