

Narrativity in User Action: Emotion and Temporal Configurations of Narrative

Shachindra Nath

Central Saint Martin's College
of Art and Design
University of the Arts London
s.nath@synesis.tv

ABSTRACT

One of the core problems in Narrative Intelligence is maintaining the narrative nature of event sequences that emerge owing to user participation. This paper challenges the common premises and assumptions about the nature of human action and experience that underlie common approaches to finding a solution to the problem of narrative structuration. An in-depth analysis of the temporality of human action and experience provides important indicators on how the problem can be approached. It is argued that user emotion is not just a by-product of narrative structure, but a critical factor in maintaining narrativity. Finally, it is indicated as to how patterning of emotions can regulate user action and the creation of a subjective experience.

Keywords

Narrative Intelligence, Narrativity, Emergence, User Experience, Action, Emotion, Subjectivity, Immersive, Virtual Environment.

1. INTRODUCTION

It has been proposed that narrative experience in IVEs be viewed in analogy to the concept of *direct experience* [60], [18], [30], [49]. A *direct* experience of a particular object is an experience resulting from direct manipulation of the object, while an *indirect* experience is the process of forming an attitude toward an informational contact [22]. A *direct* experience of a story is living it, and an *indirect* experience of the same story is watching it, hearing it or reading it. The *direct-ness* of the experience also implies the emergence of narrative through action rather than passive experiencing. The story doesn't just happen to the user she *makes it happen* to herself. *Narrativity* and the *narrative process* in IVEs and *emergence*, then, need different approach compared to conventional pre-structured media.

A deeper look at the aspects of user experience is necessary while identifying the elements of narrativity relevant to the medium. Since the experience in the medium is fundamentally distinct, the creation of subjectivity or the meaningfulness of narrative experience would not follow the same process as in the representational media. The structuration of a narrative has its purpose in indicating the creation of this meaning.

The medium lends to a user a bi-dimensional position that lies on the continuum of *experience* and *action*. The former is indicative of the 'spectator' mode while the latter assigns an 'actor' position to the user. For the purpose of discussion in this paper, I will adopt the phenomenological distinction offered between the two terms. Experience will be viewed as the more passive, indirect and receiving oriented state while action as the more active, direct and achieving oriented. It needs to be further mentioned that the interaction context of the 'fictional' (world/environment) brings in the aspect of *transportation* [50] to the bi-dimensional position. The user is relocated, as it were, in a different reality (fictional world) with the liminal identity of a character¹. These positionalities of agency and identity, however, may not be clearly identifiable as such and serve more as conceptual abstractions in the understanding of the narrative process of creation of a subjective experience.

Whether it is centralised or distributed, a system would need to incorporate some manner of affinity toward narrative order. This affinity will be driven by an evaluation of narrative state in terms of its narrative value or *narrativity*. Sustaining narrativity through the structuration process despite user participation is one of the core problems in Narrative Intelligence. This paper will look at the temporality of user experience and view it in the context of *narrativity*. The central thesis of this paper is that the affective aspect of the user experience is not just a 'nice to have' by-product, but a critical factor in the creation and sustenance of *narrativity* in emergent sequences in the story world. In support of this thesis, I will outline some of the core aspects of *narrativity* in conjunction with an analysis of user experience and action.

2. NARRATIVITY

The term *narrativity* was used by structuralists to indicate a group of 'properties characteristic of narrative that distinguishes it from the non-narrative'. Narrativity is the orientation of a narrative that makes it narrative. It is the *narrative-ness* of a narrative [26], [45], [58]. Narrativity

¹ The *in character* performative position, is explained by Schechner in terms of identity as a transition to a liminal state 'in the field between a negative and a double negative... Olivier is not Hamlet, but also he is not not Hamlet: his performance is between a denial of being another (= I am me) and a denial of not being another (= I am Hamlet)' [65]. In performance an individual takes on the identity of the character while simultaneously lending her identity to the character. It is not just identifying with the role but embodying and inhabiting it.

becomes a necessary concept when narrative is viewed as a process [5] rather than structure². It is by scope and definition inclusive of audience/user.

“...narrativity of a given narrative is not only related to the constitutive elements of the latter and to their arrangement. It must also be related to the context in which the narrative is received and more particularly, to its receiver.” [58]

Narrativity ‘is involved in the construction of the subject and the conditions of inter-subjective experience’ [45]. The narrative process is more than just creating a logical mechanical structure of events; its purpose is to enable a personally meaningful or subjective experience. For a system to identify an emerging temporal sequence or action as narrative, it has to include an awareness of the user’s experience of that sequence.

In the context of our discussion, narrativity can be viewed as a function, the purpose of which is to direct participative emergence of events into what can be identified as narrative. Furthermore, the narrativity of a narrative is a matter of degrees. In other words, we may feel a particular narrative to be more ‘narrative’ than another. Narrativity thus derives from the experiential valuation and conceptual definition of *narrative* itself. Identifying narrativity then depends on what one would consider the criterion of narrative-ness to be. The parameters of the narrativity function therefore depend on the factors we identify as necessary for qualifying a sequence as narrative. In the process-based view we’ve adopted, the core effects of narrative indicate:

1. the realisation of the core creative intention³ of the author: the communicating of a subjective view of a (humanised) reality [32], [33], [47], [58].
2. the temporal configuration of experience, action and events in a beginning, middle and end structure [5], [8], [10], [15], [32], [47], [61]
3. the creation of a subjective or personally meaningful experience [8], [15], [45], [66]

² Prince proposed his views towards the end of structuralism when it was heavily criticised by post-structuralists for ‘having left out many aspects of the experience of narrative’ [67]. Following the post-structuralist ‘undoing’ of the primacy of structural attributes defining ‘narrative’, the neo-narratology of Chatman and Brooks looks at narrative more as a structuring *process*. The concept of *narrativity* thus gained greater currency and the term became ‘associated with the fluidity of structuration rather than structure’ [45]

³ The issue of *intention* in narrative is a hotly debated one. There are perspectives in literary criticism that argue for the work as being representative of the author’s intention while others that argue that the text has its own intentionality distinct from that of the author’s. For a review on the discussion of intentionality see Richard Kuhn’s “Criticism and the Problem of Intention” in *Journal of Philosophy*, vol. 57. p.p. 5-23, Jan 1960. In our discussion *intention* will be viewed in relation to crafting a constructed (virtual) reality as viewed by Klaus [33] and in terms of “what the work sustains as a certain kind of experience, its focal effect” [35]

From a computing perspective, the biggest challenge derives from the fact that the machine is still largely incapable of apprehending the complexities of human experience and action. The problem of narrative structuration is commonly dealt with by keeping the core basis for the process as a pre-determined ‘narrative logic’. This logic is derived from elemental deconstruction of available story structures, and not the deconstruction of its experience. In the following sections, I will discuss the above aspects of narrativity with a view to support my thesis. This paper will present an analysis of human experience and action with a view to identify parameters of user state that could be used by a system to manage narrativity.

2.1 Narrative Reality

The *dramatic mode* assumed by the narrative embodies the functional parameters of the notion of reality that the author intends to make the user experience [49]. Klaus considers the *dramatic mode* to be a function of essential qualities in the world, and the dominant patterns of human experience [33]. It can be argued that even modern reactions to classical dramatic structure like the theatre of the absurd indicate a view on reality. Action in the narrative occurs within the laws that govern this staged reality in a way that best characterises it. In presenting reality through humanised action and situation, it is made relevant to the user as a humanised reality. Narrative effort is an exercise of selecting events and initiating action that are most appropriate (effective) in presenting this reality while leaving out all extraneous matter. The narrative structure resulting from a storyteller’s craft strives to achieve a certain unity⁴. Unrehearsed and undirected (naïve) user action [49] on the other hand is assumed to result in many events that are not ‘unified’. Since a machine is capable of structuring events through logical processing, computational unity is inherent in the structures that occur in the system. The challenge is achieving a computational unity that enables coherence in human action and experience of the reality construct.

The underlying assumption in this view of the problem of narrativity in interactive systems is that human action is intrinsically non-narrative in its temporal structure. While I do not agree with the view that human experience/action is neither non-deterministic [49] nor non-narrative (see the following section), I do concede that common perspectives on narrativity and narrative structure are inadequate in dealing with the problem. In my view, current computational

⁴ The idea of unity derives from the Aristotelian concept of unity of action “the structural union of the parts being such that, if any one of them is displaced or removed, the whole will be disjointed and disturbed” VIII.1451a [6]. The concept of unity has since followed many diverse views. It has been viewed as an aid to interpretation, i.e. harmony or coherence of disparate parts and not just simple agreement or consistency. Other views indicate ‘equilibrium to express richness and complexity’ [53] or ‘continuity’ [48]. Recent views associated with post-structuralism, revisionism and deconstruction have, however, asserted that complete unity is never achieved by a work of art. R.S. Crane [12] and Walter Davis view unity in terms of purpose and structure: “purpose coincides with structure because it gives birth to it” [14]. Unity derives its occurrence from the human experience of it.

perspectives are ingrained in viewing narrative as structures imposed on the reality of human action by human imagination. Narrative is viewed as an artefact while human action is viewed as a sequence with no inherent narrative structure. Narrative effort of a system is seen as attempting a structural unity and ‘efficiency’ by avoiding or blocking out seemingly “irrelevant” user actions. Under the approach embodied by this paper, the first step proposed in establishing the conditions for inter-subjective experience is defining the dramatic mode of the reality constructed. The narrative reality defined in terms of the essential qualities the world (beautiful/ugly or orderly/chaotic), and the dominant patterns of human experience, (integrative/disintegrative) not only provides a framework for machine response but also for regulating audience expectation/hypothesis (future) and interpretation of past events⁵. The relationship between the experience of reality and emotions is well established:

“Emotion is the human reality assuming itself and ‘emotionally directing’ itself toward the world...Emotion is not an accident, it is a mode of our conscious existence, one of the ways in which consciousness understands (in Heidegger’s sense of *verstehen*) its Being-in-the-World.” [64]

2.2 Temporal configurations in human experience and action

“...narrative is both metaphysical – narrative has a necessary connection to time – and a cognitive process by which the subject constructs meaningful realities.” [45]

Viewing the purpose of narrative action as preparing conditions of a subjective experience of humanised reality necessitates the consideration of temporality. After all, human experience and action occur in time and cannot be viewed dissociated from temporality. The basic premise on which most approaches to solving the problem of narrative structuration in user participation based narrative systems is that user experience is *non-deterministic*. The temporal structure of narrative is seen as a human creation (artefact) that is imposed on sequences in reality. It is therefore assumed that human experience and action is inherently devoid of narrativity. In the discussion that follows, I will argue against such premise and assumptions drawing on David Carr’s perceptive review of phenomenological analyses of temporality of experience and action [8]. I will begin with a discussion on the temporal nature and structure of experience to establish the fundamental concepts that will help us understand the phenomenon of action.

Experience, in phenomenology, is used to denote the more passive temporal phenomenon of sensory perception and observation. The consciousness of a present sensation is connected to a consciousness of the past (memory) and an anticipation of the future. An important consideration in

⁵ For a detailed discussion on dramatic mode see “Story, Plot and Character Action: Narrative Experience as an Emotional Brand” [49]

understanding the flow of experience is that its relation is not as much to a fragment of the distant past (recollection) or the ideation of a future event (expectation), as to the Husserlian concepts of retention and protention. Retention is ‘special sort of memory whose object is the just-past...Present and past function together in the perception of time somewhat as do foreground and background or focus and horizon in spatial perception’ [8]. Retention is the “comet tail” that trails behind the present occurrence. Protention or “primary expectation” is to future what retention is to past. They should, however, not be identified as ‘short-term’ memory or expectation. ‘[W]hat distinguishes retention from recollection, and protention from “secondary expectation,” is not the length of their term but their functioning as horizons from ongoing, present experience.’ [8]. The structure of experience is rooted in the consciousness of the present with a gaze into the retentive past and the openness of the potential future. We continuously *reconfigure* the present import of the past based on whether our potential expectations are met or frustrated.

Carr argues that events (as opposed to sensations)⁶ are the basic unit of experience. Events ‘have temporal thickness, beginning and end’; they stand out as identifiable meaningful set of sensations in a sequence. Events are ‘experienced as phases and elements of other, larger scale events and processes. These [events] make up the temporal configurations, like melodies and other extended occurrences and happenings... we experience them as *configurations* thanks to our protentional and retentive “gaze” which spans future and past.’ [8]. This gaze is what helps us make sense of our current experience in the context of a larger whole. Merleau-Ponty stresses the role of the ‘lived body’ in the temporal continuity of experience. Experience is lived through from the ‘vantage point’ of the embodied self [8] [57].

Action is also subject to this protentional and retentive “gaze”, although with a different emphasis. It is phenomenologically different from passive experience in that the future expected is brought about by the action one is engaged in. Action embodies an intended result. ‘In action the content of my protention is not a state of the world that I *expect*, it is something I *effect*... Since in acting we pretend or intend the future goal, rather than just picturing it, there is a sense in which it occupies the center of our concern in action and reflects back upon and determines the present and the past. There is indeed something quasi-retrospective about action, as if we were located *at* the end and from its point of view arranged and organised present’ [8]. The flow of consciousness in human action is future focussed, and it is not just attention but intention that is focussed there. The success or failure of an action in meeting an intended outcome makes us reconfigure the present import the past and future intentions. Actions have a beginning, middle and an end and more often than not are part of larger intended configurations. In the flow of life, a unit of these configurations is an action that stands out from the sequence as a meaningful part of a configuration. In the case of action, the future is more vulnerable and fragile

⁶ Sensations are considered to be the basic unit of experience in abstract analysis. Carr argues that sensations are by themselves ‘meaningless’ and ‘far from being elements of experience’. Sensations are ‘theoretical entities or constructs’. [8]

since it depends on the success of the action. To the human agent, however, the future is 'more determined, less open to variation than the passively protended future.' [8]. Furthermore, it can be said that since the action is done by me towards an outcome intended by me, action is more strongly personal in its relevance and effects. Action exercises a more 'retroactive control' on the present since it not only affects how we do things but also how we see things.

Narrative in conventional media is primarily for experience. While experiencing narrative in the present we have a residual memory (retention) of what has happened before in the story while having an 'openness' to a set possibilities in the future. In action, however, the future is not as 'open' to variation. Narrative structuration, therefore, needs to be approached differently to accommodate the way in which narrative configuration occurs in the mind of the user.

It is also necessary to point out that event and action configurations must not be viewed as 'mere sequences', they do not combine in a 'merely additive way', they have an inherent role in larger narrative configurations. Events combine to make up larger-scale events of which they become structural elements. Actions having their own means-end structure become means towards the performance of other larger-scale actions. That is not to say that some occurrences of experiences, events or actions do not belong to larger contexts or have 'no "point" beyond themselves.' Such cases 'seem to stand out by their very intrusiveness and prove to be exceptions' rather than the rule. From a subjective point-of-view (as opposed to the observational) the flow of life and reality constitutes various such large or small configurations and 'it is our tendency to expect such larger contexts that the isolated and intrusive stands out by contrast. Complex events, experiences and actions thus "shape" the sequences of sub-actions and other components that make them up and provide them, at this level too, with the closure constituted by their beginnings, middles and ends'. [8]

The above analysis provides a few design pointers towards addressing the problem:

1. It indicates that the retentional and potential 'horizon' influences what a user is doing and the way she sees things. What the user retains is not short-term memory, but elements of the past and the future that are most relevant to the present.
2. The 'foreground' of the user's consciousness is the present and the most relevant are the retentional past and protended future. The main concern of the user in the flow of action and experience is not the overall/larger structure that stretches farther into the past and the future, but what is happening now. The purpose of structuration, then, is not to achieve an ideal interrelationship or trajectory of events, but to enable a sequence of meaningful presents.
3. The larger or extended configurations are continuously modified in her mind based on the current state. In experience, the structure is discovered by the user through reconfiguration. In action, it is created through reconfiguration. Narrative value (narrativity) in action is perhaps not about achieving a structure similar to narratives in conventional media, but in achieving a pattern of

meaningful action units that combine into a meaningful whole.

4. '[T]he temporal span is structured or configured into *events*, in the one case, and *actions*, in the other...The same retentional-protentional grasp which reaches forward and back in time also effects or constitutes a *closure* which articulates time by separating the given temporal configuration from what goes before and after' [8]. Users identify events and actions not based on absolute time, but based on closures or conclusions of a beginning, middle and end structure. It is therefore inappropriate for a system to identify elements or units of a narrative structure based on concepts like 'scenes', 'story beats' or 'moments' [25], [41], [42], [59].
5. There is a narrative structure inherent in human experience and action. The temporal dynamics of this structure, however, is slightly different from the ones obvious in well crafted stories in the way that there is no 'compression' of actual sequences by selecting the most 'interesting' elements. From the design point-of-view, it is necessary to recognise and accommodate this fact. Narrative structuration therefore should not seek to achieve the filtration of action and experience to achieve a unity. Rather it should seek to identify these configurations and allow for subjective differences.

Experience and action are not conceptualised but lived through as parts of a larger whole. In that sense, they have a strong parallel and connection with emotions. Emotions are also lived through and they seem to have similar temporal dynamics and foreground-background configuration [11], [23], [28], [29], [44]. Emotion is a dimension of experience. In fact, it is the first filter through which sensory stimulus passes before it is cognitively processed in the brain [13]. Human emotion is viewed as a thought-action tendency [24].

The above two sections have discussed the first two aspects of narrativity. The reality construct acts as a framework which controls the range of possible action outcomes. The ultimate effect of narrative is the creation of an experience or action that is personally meaningful.

2.3 Subjectivity

"...subjectivity is engaged in the cogs of narrative and indeed constituted in the relation of narrative meaning, and desire; so that the very work of narrativity is the engagement of the subject in certain positionalities of meaning and desire." [15]

Subjectivity is the experiential effect of narrativity. The term denotes an experiential state. It is a state of being engaged in active creation of meaning and desiring. It is 'our conscious sense of self, our emotions and desires' and it is 'always embodied' [7].

“The process of assuming subjectivity invests the individual with a temporary sense of control and sovereignty which evokes a ‘metaphysics of presence’ [Derrida 73] in which s/he becomes the source of meaning.”[54].

“Subjectivity can only be ‘had’, that is to say, experienced and performed (through the performance one has the experience of subjectivity), in the admission and recognition of one’s failure to appear to oneself and within the representational field.” [55]

Narrative experience of subjectivity is the meaningfulness of the action/event sequences derived in relation to a notion of self (*identity*), even if it is a constructed notion that is *performed*⁷. Revisionist accounts of narrative following structuralism suggest that narrativity is involved in the construction of the subject and the conditions of subjective experience. Singer proposes that, at every moment, narrative both ‘determines a position for the subject to inhabit’ and ‘submits to the contingencies of determination’ [66].

It is not just an experience based in the notion of self, but also an experience in the notion of a self-placed within an inter-subjective context⁸. This is what lends the meaningfulness to a sequence of experiences and qualifies it as narrative. It has been convincingly demonstrated that meaning, understanding and rationality (usually understood as cognitive processes) arise from and are conditioned by the nature and pattern of our bodily experience, including our emotional relationship to the world. [31], [36], [62], [71]

The above discussion on aspects of narrativity has indicated a strong relevance of user emotions in dealing with the problem of managing narrativity in systems. It is amply clear that storytellers guide the audience experience in a multitude of ways, and emotional ‘manipulation’ is a strong tool at hand to bottle neck their desires, expectations and the construction of meaning [49]. The occurrence of the type of emotions, the context in which they occur, and their temporal dynamics, can indicate narrativity during the experience [50]. In the following section, I will review the role of emotions in narrative structuration as viewed by theorists in film and literary studies. We will also see how emotions can work and influence the flow of action and experience towards narrative configuration.

⁷ For a detailed discussion on the performative nature of ‘being in a fictional world’ see *Narrativity of User Experience: Presence as Transportation in IVE Based Narrative Systems*, [50]

⁸ The inter-subjective context is what would lend narrativity to, for example, ‘Could you pass the salt?’ It would state, depending on the inter-subjective context, not merely a request but also that ‘the food is tasteless’ or ‘I’m about to conduct an experiment’. Under the appropriate conditions, it can act as ‘flirtation, rebuke, instruction (examples could be multiplied)’ [45] and position the individual in a number of different storylines.

3. EMOTIONS, MOODS AND NARRATIVITY

“...the *style* of emotional behaviour, the *context* within which it occurs, and the manner in which it unfolds through *time*, are all crucial to its meaning and accountability.” [46]

Cognitivist research in the fields of literary and film studies have explained and modelled the role of emotion in narrative structure relevant to their respective media. It should however be noted that most of these studies have approached emotion in what can be called the ‘prototypical view’ of emotion [68]. Emotion in cognitivism is thought of as being an action tendency (fear indicates tendencies of fight or flight), an orientation towards an object (fear is ‘of’ something ‘believed’ to be threatening), and goal directed (fear has a goal of self-preservation)⁹. Bordwell and Branigan’s conceptualisations of narrative indicate a fairly simplistic connection between film comprehension and film emotion based in this action, object and goal framework [2], [4]. Cognitivists tend to link emotion with the character’s actions, motivation and goals. Emotion is viewed as a result of identification [9], [27], [34], [52], [70] or empathy [16], [72], [73] with the protagonist.

The following issues can be isolated while considering the above approaches to understanding the dynamics of emotion in the narrative process:

1. The nature of emotion considered by the above approaches is a ‘witness emotion’ and ‘witnesses cannot participate in events, nor can they command their movements and views. A film’s narration dictates what the viewers see, how they see it and when. Emotion in the film viewer is a response to this predicament’ [69]. Emotion in studies of narrative is approached from an indirect experience perspective.
2. The approaches seem to assume a fairly simplistic prototype of emotion biased toward and derived from research focussed primarily on negative emotions [24]. The models of emotion used in understanding their role in narrativity are incomplete.
3. They have focussed on the analysis of character and plot related situations of emotional intensity, and have excluded the effect of cues of low tonality ‘that do not advance or retard the narrative progress’ [68]. The understanding of emotion dynamics in narrative is restricted since they are viewed in relation to structural elements and not from the perspective of audience experience or action.

It is amply clear that available models of emotion in narrative are inadequate in addressing the problem of narrativity in participative action. Frederickson brings to light the fact that general models of emotions, being based on a large body of research concerning negative emotions, are inadequate in explaining positive emotions [19], [20], [21], [38] [24]. The general models of emotion tend to two presumptions that become questionable when positive emotions are considered - that emotions yield *specific* and *physical* action oriented tendencies. Frederickson points out that certain positive

⁹ For a discussion on Emotion in Cognitivism and Arousal Theory see *Art and Emotion* [43]

emotions spark changes primarily in cognitive activity. She proposes instead to view the effect of emotion in terms of *thought-action tendencies*. Negative emotions are known to “narrow a person’s momentary thought action repertoire. They do so by calling to mind and body the time-tested, ancestrally adaptive actions represented by action tendencies...because positive emotions are not linked to threats requiring quick action [they] *broaden* a person’s momentary thought-action repertoire.” [24]. Negative emotions are linked to survival instincts, and indicate a higher determinacy of human action. The determinacy is directly related to the intensity of emotion. Positive emotions “go beyond making people “feel good” or improving their subjective experiences of life. They also have the potential to broaden people’s habitual modes of thinking and build their physical, intellectual, and social resources...By broadening the thought-action repertoire, positive emotions may loosen the hold of that (no longer relevant) negative emotions gain on an individual’s mind and body by dismantling or *undoing* the narrowed psychological and physiological preparation for specific action... positive emotions create physiological support for pursuing the wider array of thoughts and actions called forth” [24]. Emotions also have a profound effect on storage and access of short-term, long-term memory [3], [13], [37], [39], [40]. Intensity of emotion is related to whether a person accesses general or specific Autobiographical Memory [56].

By influencing memory and thought-action tendencies emotions dictate the composition of the retention-protection horizon. Emotion, thus, becomes a powerful tool for both limiting and expanding the possibilities of user action and narrative configurations in emergent systems. Identification of emotional states of the user can also help a machine predict the range of user action-lines possible.

Emotion is considered both a motivating and guiding force in perception and attention. Emotion and mood are known to lend biases to interpretation of situations [29], [11], [23], [28]. Emotions differ from moods in that they are about some personally meaningful circumstance and are typically short lived and occupy the foreground of consciousness. They are more situated in the present consciousness. Moods are typically free floating or objectless, more lasting, and occupy the background of consciousness [51], [63], [24]. Moods are considered to be low tonic levels of arousal within emotional systems that can be induced or changed through a successive stimulation of similar (negative or positive) emotions and feelings. Moods also indicate the ‘initial condition’ of the dynamic system [44].

By virtue of being embodied, emotion and mood lend subjectivity to an experience and make it undeniably real. They lend meaningfulness to an event or action and influence the process of configuration. Emotion could thus play a critical role in the occurrence and maintenance of narrativity in emergent sequences.

4. CONCLUSIONS

In the above discussion, we have seen a user-centred approach towards solving the narrative structuration problem. Common approaches to defining the problem are based in fundamental misconceptions about the nature of human experience and action. Even though researchers and designers are opening up to a process based view of narrative [1], narrativity is still

largely associated with structures of narrative created for experience. Furthermore, user emotion is viewed as a desirable ‘by-product’ and has not been the subject of much attention. This paper has argued against this paradigm in proposing that narrativity in action can perhaps not be achieved without the manipulation of user emotion.

Indeed, the true value of this proposition would be realised with the presentation of a methodology demonstrating its mechanics in the narrative structuration. While such a presentation is beyond the scope of this paper, it would be worthwhile to conclude the discussion with some indication of its mechanics. Greg Smith’s explanation of how emotions work in the narrative process is insightful in demonstrating their role in narrative structuration. He proposes that filmic narratives are composed of emotion cues:

“Films use emotion cues to prompt us toward mood, a predisposition toward experiencing emotion. Moods are reinforced by coordinated bursts of emotion cues [emotion markers], providing payoffs for the viewer. These payoffs may occur during narratively significant moments (like obstacles) or they may occur in instances that do not advance or retard the plot progress. Cues are the smallest unit [of] a text’s emotional appeal... Emotion cues are the building blocks used to create larger narrational structures to appeal to emotions. Mood is sustained by a succession of cues, some of which are organised into larger structures, some of which are not” [68]

The temporal layout of emotion cues is more indicative of ‘pattern’ [49] rather than ‘structure’. Patterns are more congruent with the fluidity of emotion and structuration. The narrative structuration process can be viewed as the unfolding of a pattern of various positive and negative emotional cues and markers. A narrative’s temporal placement of emotion cues directed at the user serves the following purposes:

1. It helps establish (in the beginning) and maintain (throughout) the overall mood of the experience.
2. It helps prepare the initial conditions for narratively significant coordinated bursts of emotion.
3. In maintaining a particular mood (‘mood congruence’), it lends a predisposition to the construction of the implied reality and inference of the laws governing the narrative world.
4. Emotions and the underlying mood affect the creation of the retention-protection horizon and consequently (re)configurations
5. An orchestration of positive and negative emotion cues thus regulates thought-action, desire and ultimately inter-subjectivity in narrative.

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