

Sound Symbolic words in Indian comic books

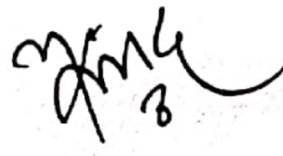
A study on textual representation of sounds in comic books

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1. Abstract

Sound symbolic words(SSW) are the visual representation of the sounds in comic books. It helps the reader to imagine the ambience of a particular panel in the comic and hence plays an important role in enhancing the mood of the panel. For example; CRASH, DHADAM, BOOOMM etc. An SSW is designed by two elements, (a) the form, i.e. the visual representation of the SSW and, (b) the word itself that represents the sound. This paper focuses on the following topics:

- 1) The determination of a suitable SSW for some common sounds through a survey.
- 2) An individual study of SSWs in the comedy genre of Indian comic books.

For the first topic, forms were created for the survey and were distributed online and offline to take inputs of participants. The forms were then analysed based on the data received.

For the second topic, a bunch of Indian comic books (mostly Raj comics) of comedy genre were studied and observations were recorded.

2. Keywords

Indian comics, SSW, Sounds, Textual representation, Sequential, Comedy

3. Determination of suitable SSW for some common sounds through survey.

3.1 Introduction

The expressive words in comic books are used to visually represent the sound that is generated through the source. These words are known as Sound Symbolic words (SSW). A well designed SSW helps the reader to imagine the kind of sound that's being generated in the visual (both in time and space) and allows the reader to connect more with the narrative. While the form of the SSW plays an important role here, its the word itself that gives meaning to the SSW. So the choice of a correct word to represent a particular sound is vital to the design of SSW. The generation framework of an SSW is shown in the Image below.

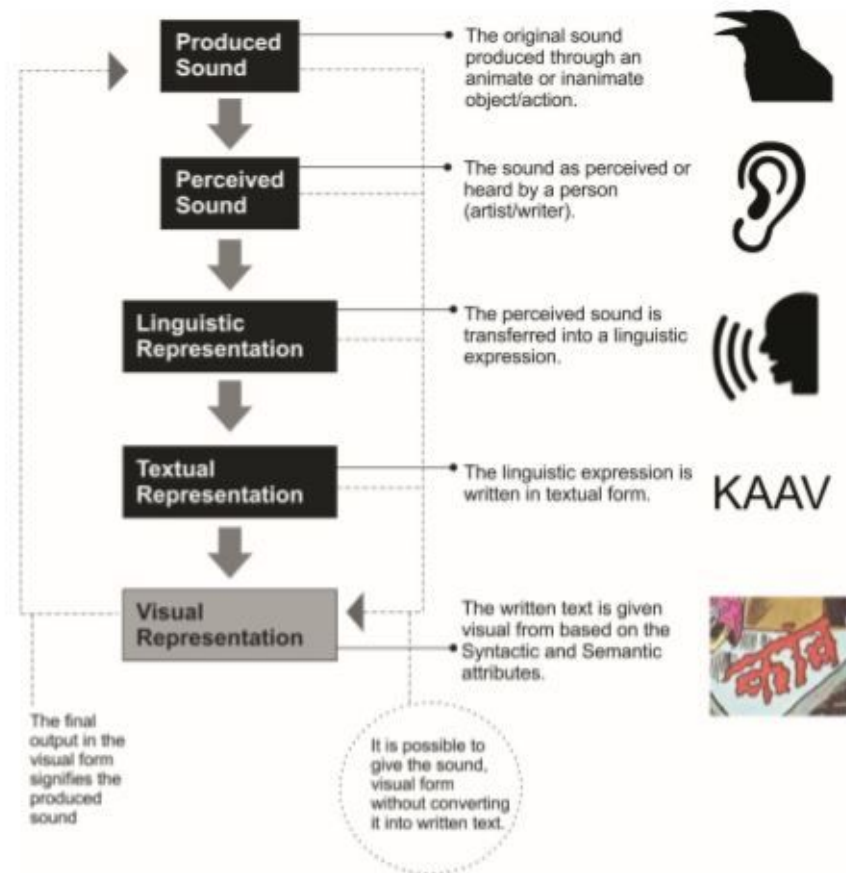


Image Courtesy: Dey, Bokil: Look at that Sound!—Visual, Representation of Sound in Indian Comics, IJOCA_2016, pp. 821-831

Now, these words differ if we compare two comic books from different regions. For example, the SSW for a punch is usually the word “POW” in an English comic book, but when it comes to an Indian comic book, the word “DHAAD” is used for the same.



Image : Different SSW for same action depending on the language

This paper mainly focuses on the perception of the reader towards a particular set of SSWs to find out the most suitable SSW for a sound.

3.2 Methodology

The research was done in the following steps:

- Around 150 comic books were taken for the study, mainly Raj comics for Hindi language and DC comics for the English language were chosen.
- A bunch of SSWs that commonly appear in the comics were taken and were made into a list.
- Two survey forms were created:
 - (i) The first form(Form 1) was created in which the SSWs were written and people were asked to fill in according to their perception, what could be the source of the particular SSW.
 - (ii) In the second form(Form 2), a set of sound sources (like a glass breaking, water dripping etc.) were given and participants were asked to imagine what kind of sound would be generated by these sources.
- Basic information about an SSW was provided in both forms.
- The first form was created to understand a reader's perception towards an SSW and also to give the participant a general idea of how the SSWs are used in comic books.
- The second form was created to track out most favourable SSW for a particular sound. This was done by grouping out similar responses and pointing out the most common response.
- In the forms, some details of the participants were taken to understand the nature of the participant. These factors could affect the participants choice of a particular SSW. These are as follows:
 - (i) Mother tongue: It was required to know the mother tongue of the participant because the meaning of words differ in different languages and even in dialects, so the perception of a particular word could differ from person to person.
 - (ii) Familiarity with comic books: It was also an important factor on which the response of the reader could depend.
 - (iii) Language in which comic books are read by the participant: As stated earlier, SSWs differ in comic books of different language, also, this factor could help in finding out the influence of a particular comic (be it Hindi or English) on the reader.
- A total of 122 people (83 male, 39 female) were given the forms online and offline. Their responses were recorded and analysis was done on the basis of that.

3.3 Results

- **Data statistics:**
 - (i) Majority of responses came from Marathi(43%) and Hindi(27%) speakers.
 - (ii) In terms of familiarity, approx. 68% of participants were those who occasionally read comics, 15% were frequent readers and approx. 12% were the ones who have never read comic books.

(iii) However, when it came to the language in which the frequent and moderate readers have read comic books, approx. 78% of participants have read English comic books, while 27.8% have read Hindi comic books and 13% of participants have read comic in the Marathi language.

- **Key findings:**

(i) In case of moderate comic book readers, it was observed that their idea of a sound was heavily influenced by the sound effects from movies rather than comics. For example, in Form 2, the sound of a gunshot was mostly interpreted as “Dhishkiyaon” which is a typical gunshot sound in Bollywood movies. The word “Dhai Dhai”, which is a common SSW for gunshot in comic books, was a minor response. Similarly, “Dhishum” was the first choice for the punch sound which is rarely used in comic books.

(ii) In some cases, even real-life experiences were predominated by movie experiences. For example, mostly the alarm clocks sound “Ti Ti Ti Ti”, but in movies, the continuous and irritating sound of old mechanical clocks (Trrriiinnnnngggg) is used to create a feeling of frustration. Surprisingly, 48% of participants chose the latter as best suitable SSW instead of the former one which had only 13% response.

(iii) The same thing was observed in Form 1, the word “Chanak” which is widely used as an SSW for glass breaking was interpreted as the sound of anklets (Ghungroo or Payal) by the majority of the participants(46%), while the response for the actual meaning was only 7%.

(iv) The participants who have read English comics were found to be using phenomymetic words(words that depict non-auditory senses) at some places. Ex. The roar of the lion was literally written as “ROAR” by the participants, the majority of which were English comic book readers. Hindi comic book readers mostly used phonomymetic words (the words that mimic actual sounds) to explain the sound.

(v) During the studying phase, it was also observed that the use of phenomymetic words is negligible in Indian comic books which could also explain the unfamiliarity of Hindi comic readers with the type.

4. SSWs in the Comedy genre of Indian comic books.

4.1 Introduction

The SSWs help to create sounds inside the reader’s mind, and how sound reflects the nature of comics genre with visuals, To find how SSW’s changes and reshape with different genres, a number of Indian comic books (mostly Raj comics) of ‘Comedy/Humour’ genre were studied and compared with actions comics and observations were recorded.

4.2 Methodology

- Around 40 comics from comedy genre were taken for the study; mostly 'Bankelal' from Raj comics, so to compare with action comics from the same comic brand.
- A bunch of SSWs that commonly appear in the comics were taken with their signified meaning.
- Comparing the meaning and SSWs with action comics and analysing the meaningful relation with frames.
- Comparing the visual representation based on syntactic and semantic attributes, aligning with sounds.
- Analyzing the composition of SSWs in frames, continuation of SSWs from one to another frames.
- Relation of SSWs with comedy genre is adapted from films and shows, so readers can establish a relationship in his mind.

4.3 Results

- **Key findings:**
 - (i) It is observed that the idea of enhancing message with SSWs completely changes with 'Comedy' genre in comparison to other comics genres. For eg: In Action comics, SSWs are more inspired and mimic from real life, it reflect the seriousness of scenes, with detailing out visuals with sounds.
 - (ii) The SSWs were more twisted, crunchy and doesn't related to real life most of the time.



- (iii) Repeating small sounds multiple times, or directly writing the actions instead of possible sounds. (intended not to stress the reader's brain).



(iv) Although the whole genre is established more on cultural exposure and language of comic but still some SSWs generated have no relation with actual sounds.

(v) SSW generation framework follows the same methodology for visual representation, but with more smooth and smooth typefaces, so to align with sounds.

(vi) It concludes that comedy genre is more dramatic than actions which invite more opportunities for different sounds explorations.

5. Discussion and conclusion

Though the formation of an SSW involves many steps, this study draws resolution towards the first step, i.e. conversion of a sound in textual format. The results of the first form showed how a moderate comic book reader perceives the textual format of an SSW without any specific form. This form was created with the objective that if the text itself is representing close to the actual sound, then adding the visual form to the SSW will enhance its meaning and when put towards the visual of the panel, it will fulfil its purpose. The second form allowed the participants themselves to attempt to textualize the sound. It provided with the general perception of comic book readers towards the particular sounds. It also revealed the influence of film media on the participants as the responses were lying in line with that of the sound effects from movies. The challenges that stood in front of the study was less availability of Indian comic books. Though the study was limited to lesser no. of participants, the responses of form 2 point towards the general idea for conversion of a sound to text. The challenges faced during the data collection was less availability of Indian comic books. As the comic book industry in India is small, the study was restricted to Raj comics. Also, mostly the comics that are being published nowadays are in the English language.

6. Titles used for study

Dhruva titles : Vampire #28/ Match #655/ Champion killer #285/ Black cat #450/ Fast forward #2311/ Specials #2516/ Ruhon ka shikanja #146/ Pratishodh ki jwala #74/ Robo ka pratishodh #460/ Aawaz ki tabahi #06/ Mahamanav #179/ Lahu ke pyase #47/ Video villain #385

Nagraj titles : Narak nashak #2534/ Saudangi #515/ Sapera #120/ Nagraj aur nagina #20/ Operation surgery #2305/ Aatankharta nagraj #2285/ Nagraj aur bugaku #8/ Funkar #2240/ Panchva Shikar #2370/ Nagraj aur adrishya hatyara #31/ Khuni jung #65/ Nagraj #01

Doga titles : Dugdugi doge #685/ I love you #72/ Khoon ka khatra #131/ Lakshya purush #2454/ Express way #2363/ Doga tere kaaran #2261

Bankelal titles : Anguliman #229/ Ata bata #834/ Chalis chore/ Chamatkari Murtiyaan #1154/ Chatkari Vriksha #449/ Chor khopadi/ Dil ka chor #686/ Dandak van #1142/ Devputra/ Dustyanti #1066/ Jadugar Karara #869/ Jawaab #696/ Kabada #1080/ Kalp variks #2467/ Kamal #89/ Kamal #205/ Khatre ka avatar #191/ Kumb ka mela #1175/ Chatni swavwar #2199/ Mukadar ka dhani #144/ Murda setan #1087/ Paramsuk mantra #2244/ Patal Rakshas / Rajmukt #257/ Rajsi talwar #1154/ Rakchaso ki Kheti #257/ Sadyantra ki aatma #218/ Sarplok me #322/ Tees Maar Kha #889/ Vardan banke #298/ Vikram Chale Sasural #824.

DC comics series: Batman Hush - The ransom #608/ Batman Hush - The dead # 615/ Batman black & white #2/ Superman The dark side/ Superman and Batman generations/ Injustice crisis/ JLA/ Gotham by Gaslight(1989)/ Injustice-Gods among us

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8. Responses of Form 1

Sound symbolic words	Actual use in comics	No. of responses	Major response (%)	Minor response (%)
तडाक	Kick, slap	27	Slap (11.1%)	Glass break (7.4%)
थड़	punch on jaw	26	Slap (15.4%)	Something light falling on ground (3%)
जिंग जिंग	Heavy guns	22	Motor, Electric Appliance (18%)	Some kind of bell (18%)
धड़ाम	Falling	28	Falling (71.4%)	Blast (28.5%)
टिप टिप	Water drops	31	Water drops (74.19%)	Rain (25.9%)
व्हीइइइइइइइ	Whistle	27	Speeding Vehicle (37%)	Swinging (11.11%)
छनाक	Glass breaks	26	Ghungroo or Payal (46.15%)	Glass break (7.6%)
खनाक	Glass breaks	27	Bangles clicking, Ghungroo or payal (37%)	Glass break (16%)
भड़ाम	Falling	26	Falling (46.1%)	Blast or collision (19%)
ऊउउउउउउउउउउउउउ	Dog, wolf howl	24	Amazement (29.16%)	Dog howl (20%)
वुऊऊऊऊऊऊऊऊऊऊ	Dog, wolf howl	21	Dog/wolf howl (19%)	Cheering (14.2%), Wind (14.2%)
क्रियांssssssss	Kite, eagle	16	Baby cry (25%)	Metal Rubbing on some hard surface (25%)
चियांssssssssss	Kite, eagle	17	Rubbing on hard surface(23.5%)	Bird (17.6%)
टर्रर्र टर्रर्र	Frog	27	Frog (40.7%)	Tearing of cloth/ paper (29.6%)
क्रिक क्रिक क्रिक क्रिक	Cricket	22	Cricket (77%)	
ट्रि ट्रि ट्रि ट्रि ट्रि	Cricket	20	Horn, bell, alarm, siren(55%)	Insect (25%)
ट्रिंग ट्रिंग	Telephone, Doorbell	29	Telephone / Bell (100%)	
श्यूम श्यूम	Gun with silencer	20	Gun/missile(30%)	Wind / Breeze (15%)

9. Responses of Form 2

S. no.	Action / Situation / Animal	Total Responses	Major response (%)	Minor response (%)	Other Responses
1	A punch on face	71	Dhishum (18)	Dhoosh (5)	Dhoop,POW, Thak
2	Bomb exploded	79	Boom / Ka Boom (42)	Dhadam / Dhudum (14)	Dhoom / Bang
3	A body falls on ground	74	Thud / Dhudd (16)	Dhapp (14.8)	Dhadakk, Thapak, Thasshhh
4	Water splash on a wall	66	Chapak / Chap (19.6)	Splash (12)	Pichikk, fssshh, Pachhhhhh
5	Glass breaks	61	Chanak, khanak (9.8)	Tadak / Kadak (9.8)	Talang, Thliinnchhhhh, tinncheded
6	Gas coming out from a hole	76	Phuss, fuss (38.15)	Shhushhh, sssiii, sssshh (35.5)	Hfff, pooo
7	Walking while wearing shoes	71	Tak-tak (36.6)	Tap-tap / Tup-Tup (18.3)	Dupk-Dupk, Cludd-cludd, Chap-chapp
8	Wall breaking	56	Dhadam / Dhudum (19.6)	Dhadd (17.85)	Dhhhooooopp, Dhammmm
9	A gunshot	71	Dhiskiyao (50.7)	Thai-thai (21.12)	Dhissh, thok, bam
10	Alarm	66	Triingg- tringg (48.48)	Ti Ti Ti Ti / Pi Pi Pi Pi (13.6)	Coo - coo, Bleep-Bleep
11	Arrow moving very fast	67	zoop/swoop (24)	saii / swii (10)	vhu-vhu / khish
12	Strong wind	69	gush/whoosh (12)	wooo / whoo (9)	saii/shoo
13	Engine starts	64	vrooom/bruum (13)	khrr/ghrr(10)	khat-khat/khikhi
14	Slap	70	chat/chatak (20)	thad/thaadak (13)	patt/fstt/fatak
15	Kick	49	khat (9)	thap (7)	thud/raap
16	A sword colliding with another sword	65	thang/thing (17)	cling/clang (12)	tun/tan/tin
17	Clapping	51	clap-clap (11)	tap-tap/tep-tep (11)	zak-zak/pat-pat
18	Metal rubbing on floor	50	kirr-kirr (14)	grrr-ghugg (5)	chak-chak,khannn
19	Panting	49	huh-huh (17)	Ahu-ahu (8)	hump/fwhoo-fwhoo
20	Police siren	62	vaa-oo-vau (19)	tyav-tyav,teu-tew (14)	pooe/neue-ne...nu

	Animals				
1	Lion	56	Roaaar (20)	Graawwwwwwuu (16)	Aarrgh, Khgggaaaaa, Khaaooooo, Vaho
2	Dog	64	Bhoww bhoww (48)	WOOF-WOOF (9)	Slruppp-slrupp, Kau-kau
3	A sparrow	60	Chew chew (40)	Chirpp chirpp (8)	Koo-Koo, Peeeeh-peeeh,
4	An eagle	32	Eeeeeeeaaaay (8)	Cheeeeeiiiiinnnn (5)	Chrip, Piiiii, Kyauuu, Screee
5	A wolf howling	58	Awoooonnnnn (19)	Whooo-Whoo (17)	Hau-hau, Ohoooonn
6	A cat	64	Meow-Meow (58)	Prrrrr (2)	Guerr.
7	A cow	59	Hambbaaaaaaa (23)	Moossoowwww (21)	Bein-Bein, Byaaa , Amaao
8	Horse	52	Eeehiheeeeee (12)	Henhehehehheh (14) Neighhh (6)	Neeeeaw, Togda-togda, Uhmhhh, Tuk-tuk
9	Dinasour	36	Ghrrrhaa (9)	Waaahhhh (3)	Roarrrrrr, Mrraaaggahhhhh
10	Crow	61	Caaw-Caaw (46)	Kraaa kraa (5)	Crow, Ka-ka
11	Pig	43	Ghroont -Ghroont (8)	Oink oink oink (6)	Snort-snort, Growl, Buu-buuu
12	A cricket	51	Crrikkk Crrikkk (32)	Trrr...trrr (6)	Jhiii, Trrrr, Shaayeein,Eerii,dhaap
13	A goat	53	Meehheehnnnn (26)	Baahaha (5)	Bahhahahheheheh, Nehh

10. Signified sounds collected from in Comedy genre comics.

S. No.	Signified sound	Signifier word (written here in Latin script instead of Devanagari)
1	सुड़क -सुड़क	Snorting
2	शुsssशIsss	Pulling something with pressure
3	खचाक	Stabbing
4	हिन्न -हिन्न	Horse
5	सड़ाक	Hunter
6	तिगड़ -तिगड़	Tonga
7	बहुउउउउऊ	Moaning
8	गड़ -गड़ -गड़	Roalling of stone or other massive objects
9	ई ई ई ई	Screaming
10	चिर्ररर	Cloth tearing
11	रगड़ -रगड़	Scrubbing something on harder surface (eg. sword on stone)
12	चर -चर	Door opening
13	घुस्स - घुस्स - घुस्स	Firing/ Throwing something (multiple) with great speed
14	उssम्म पुच	kissing