

DROPLETS

ON THE IMPORTANCE OF THE WATER DROPLET POSITION AND ORIENTATION FOR EFFECTIVE VISUAL STORYTELLING

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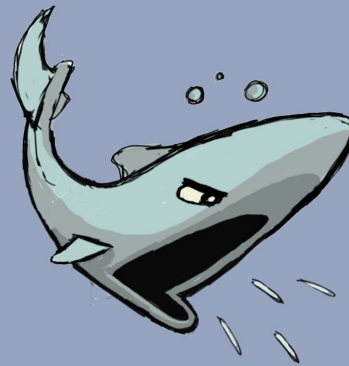
ABSTRACT

THE PROPS ARE AN INTEGRAL PART OF VISUAL STORYTELLING. EVEN A SIMPLE PROP SUCH AS WATER DROPLET CAN BE IMPORTANT FOR EFFECTIVE STORYTELLING. IN THIS PAPER, WE SHOW WITH EXAMPLES A SMALL CHANGE IN THE POSITIONS AND ORIENTATIONS OF THE PROPS CAN CHANGE OUR PERCEPTION OF A CHARACTER'S FACIAL EXPRESSION AND PERSONALITY.

DROPLETS CAN HELP TO MAKE ANY CHARACTER FEARFUL,



SUCH A CHANGE AFFECTS OUR PERCEPTION OF THE CURRENT EMOTIONAL AND PHYSICAL STATE OF THE CHARACTER BY CHANGING THE PLOT OF THE STORY.



SORRY. I DID NOT KNOW THAT



ANGRY, OR SAD.

INTRODUCTION

WHETHER THE CARTOONS AND COMICS IS AN ART OR NOT HAS ALWAYS BEEN AN OPEN QUESTION.

EVEN CARTOONIST OR COMIC BOOK CREATORS DO NOT AGREE ON THIS QUESTION.

WILL EISNER CALLS IT SEQUENTIAL ART [1].

SCOTT MCCLLOUD CLAIMS THAT COMICS CAN BE ART [2].

ON THE OTHER HAND, DON SIMPSON ARGUES THAT COMICS AIN'T ART [3].

WE THINK THAT IT IS BETTER TO AVOID THIS DISCUSSION AND FOCUS ON THE CONTRIBUTIONS OF CARTOONS AND COMICS TO THE BODY OF KNOWLEDGE.

WE CAN, THEN, DEMONSTRATE THAT CARTOONISTS AND COMIC CREATORS HAVE, IN FACT, SIGNIFICANTLY CONTRIBUTED TO THE BODY OF KNOWLEDGE.



IN THIS ARTICLE-COMIC, WE DISCUSS ONE OF THE VERY IMPORTANT AND ANONYMOUS CONTRIBUTIONS OF CARTOONISTS AND COMIC CREATORS TO VISUAL COMMUNICATION AND VISUAL STORYTELLING: WATER DROPLETS.

WE USE ARTICLE-COMICS SINCE IT IS A BETTER FORM TO EXPLAIN IDEAS RELATED TO COMICS!

MOTIVATION

VISUAL STORYTELLING IS AN AREA THAT IS WIDELY NEGLECTED BY RESEARCHERS. ONE CAN FIND A WIDE VARIETY OF LITERATURE ON TELLING OR WRITING STORIES IN ANY LIBRARY, BUT WE DO NOT SEE SUCH A VARIETY IN VISUAL STORYTELLING.

THE PRACTITIONERS OF VISUAL STORYTELLING SUCH AS CARTOONISTS, COMIC BOOK ARTISTS, AND STORYBOARD ARTISTS LEARN THE TOOLS OF THE TRADE FROM EACH OTHER OR FROM EXISTING WORKS.



DISNEY'S NINE OLD MEN WERE EXTREMELY HELPFUL FOR YOUNG ARTISTS [4]. THE LEGENDARY EDITOR OF EDITOR OF BESTSELLER MAGAZINE GIRGIR, OGUZ ARAL, WAS SIMILARLY HELPFUL TEACHING YOUNG PEOPLE. THE BOTH AUTHORS OF THIS PAPER LEARNED THE INITIAL TOOLS OF TRADE DIRECTLY FROM HIM.

THIS TYPE OF INFORMAL, PERSONAL, AND 1-2-1 EDUCATION IS SIMILAR TO PH.D. PROCESS. IT HELPS TO GROW KNOWLEDGE



VISUAL STORYTELLING IS NOT ONLY LIMITED TO COMICS AND CARTOONS. DESPITE THE LACK OF THEORETICAL STUDIES, VISUAL STORYTELLING IS BECOMING MORE AND MORE IMPORTANT. FOR INSTANCE, FOR THE SUCCESS OF MOVIES, IT IS IMPORTANT TO IDENTIFY PROBLEMS IN STORYTELLING. IT IS, THEREFORE, THE PROCESS OF MOVIE-MAKING ALMOST ALWAYS INCLUDES STORYBOARDS NOWADAYS. ALTHOUGH THE MOVIE-MAKING PROCESS FOR LIVE ACTION MOVIES STILL FIRST STARTS FROM WRITTEN SCRIPS, STORYBOARDS ARE WIDELY USED. TO CREATE EFFECTIVE STORYBOARDS, MOVIE DIRECTORS AND STORYBOARD ARTISTS ALSO NEED TO KNOW INVENTIONS OF CARTOONISTS AND COMICS ARTISTS. IN PARTICULAR, FOR EFFECTIVE VISUAL STORYTELLING, IT IS ESSENTIAL TO IDENTIFY INDIVIDUAL ELEMENTS THAT CAN CHANGE OUR PERCEPTION.

IN OTHER WORDS, COMICS AND CARTOONS PROVIDE A STRONG MODEL TO START THE STORYTELLING PROCESS VISUALLY. IT IS IMPORTANT TO IDENTIFY THE EXPERIENCE AND DISCOVERIES OF CARTOONISTS AND COMIC BOOK ARTISTS AND TO DISSEMINATE THESE FINDINGS. SUCH DISSEMINATED FINDINGS WILL HELP MORE PEOPLE TO TELL VISUAL STORIES MORE EFFECTIVELY.

IN PARTICULAR, FOR EFFECTIVE VISUAL STORYTELLING, IT IS ESSENTIAL TO IDENTIFY INDIVIDUAL ELEMENTS THAT CAN CHANGE OUR PERCEPTION. THEREFORE, THERE IS A NEED FOR THE IDENTIFICATION OF EACH INDIVIDUAL ELEMENT THAT CAN DIRECTLY CHANGE THE PERCEPTION. IN THIS ARTICLE-COMIC, WE DEMONSTRATE THAT APPROPRIATELY USED DROPLETS CAN BE USED TO EXPRESS EMOTIONS AND PERSONALITY.



PREVIOUS WORK

THE INSPIRATION FOR THIS PAPER CAME FROM HAKAN ÇELİK FROM HIS PRESENTATION IN DIGITAL DESIGN DAYS 2005. HE LATER PUBLISHED THE IDEA AS A PART OF A NEWSPAPER ARTICLE [6]. ÇELİK CLAIMED THAT WATER DROPLETS WERE ONE OF THE GREATEST INVENTIONS OF CARTOONISTS.

**ONE OF THE
GREATEST
INVENTIONS:
WATER DROPLETS**



**ON THE
FOREHEAD OR
NOSE: TIRED**



**BELOW EYES:
SAD OR CRY**



**BELOW
MOUTH:
DOPEY**



**BELOW
NOSE:
SICK**



**ANGRY:
SCREAMING
WITH SALIVA**



**CONCERNED
CONFUSED**

IN THAT TIME, HAKAN ÇELİK WAS THE EDITORIAL CARTOONIST OF CUMHURİYET NEWSPAPER, WHICH IS CONSIDERED THE NEW YORK TIMES OR LE MONDE OF TURKEY. THE TWO OF HIS CARTOONS DEMONSTRATE HIS EFFICIENCY IN DRAWING.



HAKAN ÇELİK IS ALSO A PORTRAIT CARICATURIST. THESE LITERARY CARICATURES DEMONSTRATES HIS VERSATILITY AS AN ARTIST.



JEAN-PAUL SARTRE



ATTILA İLHAN



SAİT FAİK ABASIYANIK

IN THE LATE 1970S AND IN 1980S CARTOONS WERE VERY POPULAR IN TURKEY. COMICS HAS ALWAYS BEEN CONSIDERED A HIGH ART FORM. HAKAN ÇELİK AND I, ERGUN AKLEMAN, KNOW EACH OTHER SINCE THEN AS CARTOONISTS. HE PUBLISHED HIS FIRST CARTOON WHEN HE WAS 15 YEARS OLD AND I PUBLISHED MINE WHEN I WAS 16 YEARS OLD. WE, BOTH, BECAME PROFESSIONAL WHEN WE WERE JUST 18 YEARS OLD. BOTH OF US WORKED IN GIRGIR, FIRT, SES' ATMACA, MILLIYET'S MAKARA. UNLIKE MOST OF OUR CARTOONIST FRIENDS, WE DID NOT GO TO ART SCHOOL. HAKAN ÇELİK BECAME A CIVIL ENGINEER AND I BECAME AN ELECTRONIC ENGINEER. HAKAN CONTINUED HIS CARTOON CAREER. I, ON THE OTHER HAND, CAME TO UNITED STATES AND GOT A PH.D. IN COMPUTER GRAPHICS FROM GEORGIA TECH & BECAME A FACULY MEMBER IN TEXAS A&M.

WE ARE STILL GOOD FRIENDS AFTER 40 YEARS AND A GREAT DISTANCE.

THIS DRAWING IS A RECREATION OF OUR PORTRAITS BY LEVENT TARHAN FOR HIS "ŞEBNEM" COMIC STRIP IN "ATMACA".



ALTHOUGH MY MAIN RESEARCH IS IN SHAPE MODELING, I HAVE ALSO WORKED ON VISUAL STORYTELLING [7,8]. AS FAR AS I KNOW, HAKAN ÇELİK IS THE FIRST WHO FORMALLY DEMONSTRATED THAT THE POSITION AND ORIENTATION OF DROPLETS CAN CHANGE FACIAL EXPRESSIONS.

METHODOLOGY

HIS VERY ECONOMICALLY DRAWN EXAMPLES OF CARTOON FACE CLEARLY SHOW THE IMPORTANCE OF THE WATER DROPLET POSITIONS IN A FACE FOR VISUAL STORYTELLING. HOWEVER, IN SOME OF HIS EXAMPLES, ÇELİK INCLUDED FACIAL EXPRESSION. I HAVE WONDERED WHAT WILL HAPPEN IF WE USE EXACTLY THE SAME EXPRESSION OR USE MORE REPRESENTATIONAL OR SYMBOLIC FACES? TO TEST HIS HYPOTHESIS I DECIDED TO SYSTEMATICALLY STUDY ALL CASES FOR SAME EXPRESSIONS.

REPRESENTATIONAL ILLUSTRATIONS

TO TEST THE HYPOTHESIS, I HAVE CREATED AN ILLUSTRATION OF A FACE IN A REPRESENTATIONAL STYLE WITH A NEUTRAL EXPRESSION. THEN I ADDED WATER DROPLETS IN SIX DIFFERENT POSITIONS THAT CAN WORK WITH SUCH REPRESENTATIONAL ILLUSTRATIONS.



ORIGINAL



SAD



TIRED



SICK



SAD



TIRED



DOPEY

AS SHOWN IN THESE EXAMPLES, THIS STUDY CONFIRMS THAT WATER DROPLETS CAN, IN FACT, OVERRULE NEUTRAL EMOTIONS. ALTHOUGH ACTUAL FACIAL EXPRESSION DOES NOT CHANGE, OUR PERCEPTION OF THE EXPRESSION CHANGES WITH THE POSITION OF THE DROPLET. THERE ARE ALSO MORE THAN ONE LOCATIONS THAT CAN PRODUCE THE SAME PERCEPTION.

CARTOON FACES

IN THIS CASE, FACES ARE NOT REALISTIC. THEY INCLUDE ONLY BASIC DETAILS SUCH AS NOSE, EYES, MOUTH, HAIR, EAR, AND NECK. I HAVE CREATED FOUR BASIC EXPRESSIONS AND ADDED WATER DROPLETS IN SIX "TOPOLOGICALLY" DIFFERENT POSITIONS. THIS EXAMPLE FURTHER DEMONSTRATES THAT ADDING DROPLETS CAN, IN FACT, CHANGE EXPRESSION OR ADD A SECONDARY EXPRESSION.

NEUTRAL

SAD

ANGRY

AFRAID

NO
DROPLET



ON THE
FOREHEAD



BELOW
EYE



BELOW
NOSE



BELOW
MOUTH



OUT OF
MOUTH



OUT OF
FOREHEAD



CARTOON FACES - DETAILS

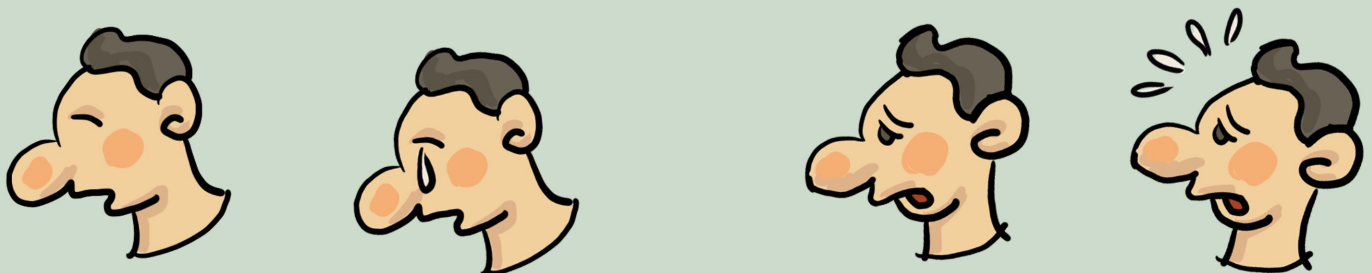
SOME OF THE CARTOON FACES NEED FURTHER DISCUSSION:



ANGRY WITH A WATER DROPLET COMING OUT OF MOUTH LOOKS MORE LIKE A RABID, WHICH IS AN ANIMAL AFFECTED WITH RABIES. THIS PERCEPTION IS ACTUALLY LOGICAL IN THE SENSE THAT A SILLY EXPRESSION COMBINED WITH ANGER CREATES MEANINGLESS ANGER.



ALL THESE EXTREME ANGER EXPRESSIONS DO NOT WORK SINCE WE EXPECT TO SEE SOMETHING COMING OUT OF THE MOUTH. WATER DROPLETS SERVE THIS PURPOSE BY CLARIFYING THAT THIS IS ACTUALLY SHOUTING.



SUBTLE SAD AND AFRAID EXPRESSIONS DO NOT REALLY WORK UNTIL WE INCLUDE SOME APPROPRIATE WATER DROPLETS. IN OTHER WORDS, WATER DROPLETS CAN HELP TO IMPROVE OUR MISTAKES IN DRAWING.

ICONIC FACES - EMOJIS

IN THIS CASE, FACES DO NOT EVEN HAVE BASIC DETAILS SUCH AS EAR, NOSE, HAIR, OR NECK. THIS MAKES IT DIFFICULT TO IDENTIFY SOME TOPOLOGICALLY DISTINCT POSITIONS SUCH AS BELOW THE NOSE. WE OBSERVED THAT THE EFFECT SOMEWHAT WORKS EVEN IN THAT CASE. ON THE OTHER HAND DROPLETS OUTSIDE OF THE CIRCLE THAT DEFINES THE FACE DO NOT WORK WELL.

	NEUTRAL	HAPPY	SAD	ANGRY	AFRAID
NO DROPLET					
ON THE FOREHEAD					
BELOW EYE					
BELOW NOSE					
BELOW MOUTH					
OUT OF FOREHEAD					
OUT OF MOUTH					

CONCLUSION

DROPLETS ARE GOOD METAPHORS TO EXPLAIN SCIENTIFIC PROCESS AND PROGRESS. WE ALWAYS ADD A SMALL DROPLET TO THE BODY OF KNOWLEDGE. THEN, IT BECOMES A LAKE, A SEA, AND AN OCEAN. THE KEY PART IS TO ARTICULATE AND SHARE ALL FINDINGS BIG OR SMALL.



FUTURE WORK

WE HAVE A SIGNIFICANT AMOUNT OF SUCH FINDINGS THAT CAN BE USEFUL TO SHARE. COMICS AS A MEDIUM IS VERY USEFUL TO DISSEMINATE SIMILAR FINDINGS WITHOUT TOO MUCH RIGOR. THIS IS CRUCIAL TO CONTINUE TO MAKE PROGRESS WITH SMALL STEPS. HOPEFULLY, WE WILL CONTINUE TO ADD WATER TO OUR COMMON BODY OF KNOWLEDGE.



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